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2020 Catalogue

Driving New Medical Innovation





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# About Onyx

**Onyx** Healthcare Inc. is a professional medical IT company in providing trusted, innovative products, customer-centric design services and medical pc solutions. Onyx cooperates closely with our partners to provide comprehensive medical products such as Smart View Medical Stations, Fanless Slim Panel PC, Medical Display, Healthcare Infotainment, Mobile Tablet PC, Medical PC and Mobile Computing Cart in the professional Hospital / Clinical IT market. Our products offer the advantages of filmless and paperless interaction in the hospital environment and all product solutions guarantee reliable quality (EN-60601-1 and UL-60601-1). In 2018/ 2019, Onyx has received notable awards such as the "Taiwan Excellence Award 2018 / 2019" in Venus series and ACCEL series and Mobile Tablet Assistant.



## Product application focus: Hospital IT

### » High-Acuity Task Area

The emergency department, Intensive care, labor and delivery units, neonatal ICUs, operating rooms, post-anesthesia care units, and the radiology department.

### » Clinic/Nursing Station Area

PACs processing and daily hospital tasks.

### » Outpatient Area

Patient monitoring and patient home care.

## Feature Products :

### » Medical IT

Advanced Medical Stations, Medical Grade Slim Panel PCs, Medical Grade Fanless Panel PCs.

### » Medical Platform

Mobile Nursing Cart, Bedside Infotainment Terminal.

### » Medical IT & Platform Accessory

Medical Grade Monitors, Medical Mounting Accessories.



# OEM/ ODM Service

## Full Experience of Medical Certifications:

No need to worry about the problem of getting documents. With internal and external test laboratories, our experienced LAB engineers with more 10 years make sure your product certified. Onyx can help you bring your market to USA, Europe and China quickly.

- » ISO 9001: 2008
- » ISO 13485: 2003
- » ISO 14001: 2004
- » FCC Class A and Class B
- » EMC: EN60601-1-2: 2015
- » Safety: IEC 60601-1: 2012
- » FDA Class II
- » CCC: GB 4943 1-2011 / GB 9254-2008 / GB 17625 1-2012
- » UL: ANSI / AAMI ES 60601-1: 2015



## Onyx Healthcare is the first company with EMC 4.0 / Safe 3.1 ready products

In the European Union, the Date of Withdrawal (DoW) of EN 60601-1:2006 (Safety Edition 3.0) is published as Dec. 31st 2017 and DoW of EN 60601-1-2:2007(EMC Edition 3.0) is published as Dec. 31st 2018. **All devices manufactured and imported into the EU are required to comply with EN 60601-1:2006/A1:2013 (Safety Edition 3.1) after year 2018 and EN 60601-1-2:2015 (EMC Edition 4.0) after year 2019.**

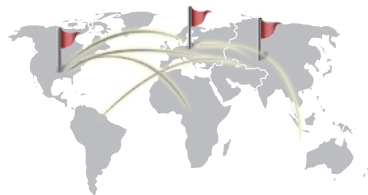
All Onyx products in mass production are compliant to Safety Edition 3.1 and EMC Edition 4.0 and please refer to the following product list.



## Cost Effective Global Supply Chain Choice:

With our strong SMT production line, procurement sources, assembly and after sales technical team capabilities, Onyx helps you increase competitiveness and get more market share. Extreme flexible initial NRE charge let you strategically easy to move on your projects without too much investment.

- » 4 SMT production lines
- » Taiwan and China dual assembly line
- » 2 RMA facilities in USA. 2 RMA facilities in Europe.
- » 2 RMA facilities in Asia.





## Mobile Cart Computer

The ONYX Venus series has developed a dual hot-swap batteries feature to enable the nurse to easily replace(change) a battery while the system is operating without having to turn the power off. Dual battery design are able to achieve very long running time.

Lightweight design with Magnesium alloy rear cover provides high strength and great heat dissipation. The front bezel is completely sealed and has a rating of IP65 waterproof with edge-to-edge glass. And it also has an IPX1 rating with back cover that provide the great protection.

### Key Features:

- Highest level of medical safety protection, EMC4.0 / Safety3.1
- Built-in dual battery to provide Max 260W power for standing 18 hours operating.
- Support running as 24/7 by swapping batteries.
- With magnesium alloy rear cover provides high strength , light weight ,and great heat dissipation.
- ORION, Hospital IT Management software Package
- Hi-speed recharge, flexible mounting type as cart mount, wall mount, table stand



Dual hot-swap batteries



EMC 4.0 / Safety 3.1



24/7 fully running



ORION



Battery charger



**Venus-243**  
24" 24/7 Self-Power  
Cart Computer



**Venus-243-AMD**  
24" 24/7 Self-Power  
Cart Computer

## System

|                        |                                                                                                                            |                                                                                                       |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Processor              | Intel® Skylake Dual-Core i5 / i7                                                                                           | AMD Ryzen™ V1202B / V1605B                                                                            |
| System Memory          | DDR4 up to 32GB                                                                                                            | Up to DDR4 32GB                                                                                       |
| OS support             | Microsoft® Windows 7<br>Microsoft® Windows 8.1<br>Microsoft® Windows 10<br>Ubuntu 18.04 LTS<br>IGEL (thin client solution) | Microsoft® Windows 10 pro (64bit)<br>Microsoft® Windows 10 IOT Enterprise (64bit)<br>Ubuntu 18.04 LTS |
| Security               | TPM 2.0 (Trusted Platform Module),<br>Smart Card Reader,<br>RFID ISO 15693/14443A (optional)                               | TPM2.0<br>SmartCard Reader<br>RFID ISO 15693 / 14443A (optional)                                      |
| Wireless Communication | 802.11 a/b/g/n + BT (optional)                                                                                             | 802.11 ac/a/b/g/n + BT 4.0 (optional)                                                                 |

## Display

|              |                |                |
|--------------|----------------|----------------|
| Size         | 23.8" VA panel | 23.8" VA panel |
| Resolution   | 1920 x 1080    | 1920 x 1080    |
| Brightness   | 250 nits       | 250 nits       |
| Touch Screen | PCT            | PCT            |
| Sensor       | Light Sensor   | Light Sensor   |

## I/O

|           |                                                             |                                                            |
|-----------|-------------------------------------------------------------|------------------------------------------------------------|
| USB       | Rear I/O: USB 3.0 x 2, USB 2.0 x 2<br>Side I/O : USB 3.0 x2 | Rear I/O : USB 3.0 x2, USB 2.0 x2<br>Side I/O : USB 3.0 x2 |
| Video Out | HDMI out x1                                                 | HDMI                                                       |
| COM       | COM port x1                                                 | COM port x2 (isolated optional)                            |
| Audio     | Combo Audio port x 1                                        | Combo Audio port x1                                        |
| Security  | Kensington slot                                             | Kensington slot                                            |
| Ethernet  | Gigabit LAN x 1                                             | Gigabit LAN x 2                                            |
| DC-in     | 24V DC-in x 1                                               | 24V DC-in x1                                               |

## Mechanical and Environmental

|                |                                                                                                                                                                             |                                                                                                                                                                             |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension      | 607(L) x 78(W) x 404(H) mm                                                                                                                                                  | 607(L) x 78(W) x 404(H) mm                                                                                                                                                  |
| Net Weight     | 8kg (17.6lbs)                                                                                                                                                               | 8kg (17.6lbs)                                                                                                                                                               |
| Packing Size   | 730(L) x 240(W) x 550(H) mm                                                                                                                                                 | 730(L) x 240(W) x 550(H) mm                                                                                                                                                 |
| Gross Weight   | 12kg (26.5lbs)                                                                                                                                                              | 12kg (26.5lbs)                                                                                                                                                              |
| Certifications | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |



**Venus-223**  
22" 24/7 Self-Power  
Cart Computer



**Venus-223-AMD**  
22" 24/7 Self-Power  
Cart Computer



**Venus-222**  
22" 24/7 Self-Power  
Cart Computer

## System

|                        |                                                                                                                            |                                                                                                       |                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Processor              | Intel® Skylake Dual-Core i5 / i7                                                                                           | AMD Ryzen™ V1202B / V1605B                                                                            | Intel® quad-core J1900 (2M Cache, up to 2.42 GHz)                          |
| System Memory          | DDR4 up to 32GB                                                                                                            | Up to DDR4 32GB                                                                                       | DDR3L up to 8GB                                                            |
| OS support             | Microsoft® Windows 7<br>Microsoft® Windows 8.1<br>Microsoft® Windows 10<br>Ubuntu 18.04 LTS<br>IGEL (thin client solution) | Microsoft® Windows 10 pro (64bit)<br>Microsoft® Windows 10 IOT Enterprise (64bit)<br>Ubuntu 18.04 LTS | Microsoft® Windows® 7<br>Microsoft® Windows® 8.1<br>Microsoft® Windows® 10 |
| Security               | TPM 2.0 (Trusted Platform Module),<br>Smart Card Reader, RFID ISO 15693/14443A (optional)                                  | TPM2.0<br>SmartCard Reader<br>RFID (optional)                                                         | TPM1.2, Smart Card Reader, RFID (optional)                                 |
| Wireless Communication | 802.11 a/b/g/n + BT (optional)                                                                                             | 802.11 ac/a/b/g/n + BT 4.0 (optional)                                                                 | 802.11 a/b/g/n + BT (optional)                                             |

## Display

|              |                                |                                |                               |
|--------------|--------------------------------|--------------------------------|-------------------------------|
| Size         | 22" VA panel                   | 22" VA panel                   | 22" VA panel                  |
| Resolution   | 1920 x 1080                    | 1920 x 1080                    | 1920 x 1080                   |
| Brightness   | 250 nits                       | 250 nits                       | 250 nits                      |
| Touch Screen | Resistive Touch ,PCT(optional) | Resistive Touch ,PCT(optional) | Resistive Touch,PCT(optional) |
| Sensor       | Light Sensor                   | Light Sensor                   | Light Sensor                  |

## I/O

|           |                                                             |                                                            |                                                                                   |
|-----------|-------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------|
| USB       | Rear I/O: USB 3.0 x 2, USB 2.0 x 2<br>Side I/O: USB 3.0 x 2 | Rear I/O : USB 3.0 x2, USB 2.0 x2<br>Side I/O : USB 3.0 x2 | Rear I/O :<br>USB 3.0 x2, USB 2.0 x2,<br>Isolated USB x1<br>Side I/O : USB 3.0 x2 |
| Video Out | HDMI 1.4 x1                                                 | HDMI                                                       | DP x1                                                                             |
| COM       | COM port x1                                                 | COM port x2 (isolated optional)                            | Isolated COM port x2                                                              |
| Audio     | Combo Audio port x 1                                        | Combo Audio port x1                                        | Mic-in x1, Audio-out x1                                                           |
| Security  | Kensington slot                                             | Kensington slot                                            | N/A                                                                               |
| Ethernet  | Gigabit LAN x 1                                             | Gigabit LAN x 2                                            | Gigabit LAN x 1                                                                   |
| DC-in     | 24V DC-in x 1                                               | 24V 2.5mm DC-in x1                                         | 24V DC-in x 1                                                                     |

## Mechanical and Environmental

|                |                                                                                                                                                                                |                                                                                                                                                                                |                                                                                                                                                                                |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension      | 542(L) x 78(W) x 362(H) mm                                                                                                                                                     | 542(L) x 78(W) x 362(H) mm                                                                                                                                                     | 542(L) x 78(W) x 362(H) mm                                                                                                                                                     |
| Net Weight     | 7kg (15.4lbs)                                                                                                                                                                  | 7kg (15.4lbs)                                                                                                                                                                  | 7kg (15.4lbs)                                                                                                                                                                  |
| Packing Size   | 645(L) x 210(W) x 513(H) mm                                                                                                                                                    | 645(L) x 210(W) x 513(H) mm                                                                                                                                                    | 645(L) x 210(W) x 513(H) mm                                                                                                                                                    |
| Gross Weight   | 11kg (24.3lbs)                                                                                                                                                                 | 11kg (24.3lbs)                                                                                                                                                                 | 11kg (24.3lbs)                                                                                                                                                                 |
| Certifications | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/<br>A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/<br>A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/<br>A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |



**Venus-193**  
19" 24/7 Self-Power  
Cart Computer

## System

|                        |                                                                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Processor              | Intel® Skylake Dual-Core i5/i7 / Celeron 3955U                                                                             |
| System Memory          | DDR4 up to 32G                                                                                                             |
| OS support             | Microsoft® Windows 7<br>Microsoft® Windows 8.1<br>Microsoft® Windows 10<br>Ubuntu 18.04 LTS<br>IGEL (thin client solution) |
| Security               | TPM2.0, Smart Card Reader, RFID ISO 15693/14443A (optional)                                                                |
| Wireless Communication | 802.11 ac/a/b/g/n + BT 4.0 (optional)                                                                                      |

## Display

|              |                 |
|--------------|-----------------|
| Size         | 19" panel       |
| Resolution   | 1280 x 1024     |
| Brightness   | 250 nits        |
| Touch Screen | Resistive Touch |
| Sensor       | Light Sensor    |

## I/O

|           |                                                           |
|-----------|-----------------------------------------------------------|
| USB       | Rear I/O :USB 3.0 x2, USB 2.0 x2<br>Side I/O : USB 3.0 x2 |
| Video Out | HDMI 1.4 x1                                               |
| COM       | COM port x2                                               |
| Audio     | Combo audio port x1                                       |
| Ethernet  | Gigabit LAN x2                                            |
| DC-in     | 24V DC-in x1                                              |

## Mechanical and Environmental

|                |                                                                                                                                                                          |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension      | 429(L) x 78(W) x 384(H) mm                                                                                                                                               |
| Net Weight     | 5.5kg (12.13lbs)                                                                                                                                                         |
| Packing Size   | 540(L) x 205(W) x 503(H) mm                                                                                                                                              |
| Gross Weight   | 9kg (19.84lbs)                                                                                                                                                           |
| Certifications | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |

## Self-Power Cart Computer Accessory Selection



**UP-P22**  
2-slot battery charger

|               |                                                                                                                                                                          |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Charge Time   | 3hrs for standard battery; 3.5hrs for XL battery                                                                                                                         |
| Input Power   | 24V Medical adaptor                                                                                                                                                      |
| IO interface  | Mini-din 4pin x1; USB Type A x1 (Power output only);<br>USB micro-B x1(Data transport only); DC-in                                                                       |
| Certification | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |

## Mechanical and Environmental

|                |                             |
|----------------|-----------------------------|
| Color          | White                       |
| Dimension      | 191(L) x 64(W) x 117(H) mm  |
| Net Weight     | 0.67kg (1.47 lbs)           |
| Packing Size   | 390(L) x 290(W) x 110(H) mm |
| Gross Weight   | 2kg (4.41 lbs)              |
| Operating Temp | 0°C ~ 35°C(32°F ~ 95°F)     |
| Storage Temp   | -20°C ~ 60°C(-4°F ~ 140°F)  |



**UP-L62**  
6-slot battery charger

|               |                                               |
|---------------|-----------------------------------------------|
| Charge Time   | 2.5 hrs for 85%, 3.5 hrs for 100%             |
| Input Power   | 24V adaptor                                   |
| IO interface  | USB TypeA x 1(Data transport only), DC-in x 1 |
| Certification | CE, FCC                                       |

## Mechanical and Environmental

|                |                             |
|----------------|-----------------------------|
| Color          | White                       |
| Dimension      | 304(L) x 154(W) x 41(H) mm  |
| Net Weight     | 1.16kg (2.56 lbs)           |
| Packing Size   | 470(L) x 380(W) x 100(H) mm |
| Gross Weight   | 3kg (6.61 lbs)              |
| Operating Temp | 0°C ~ 40°C(32°F ~ 104°F)    |
| Storage Temp   | -20°C ~ 60°C(-4°F ~ 140°F)  |



**OPM-P03T**  
2 XXL Battery Kit. Li-ion.  
10.8V. 12060mAh



**OPM-P02T**  
2 XL Battery Kit. Li-ion.  
10.95V. 8550mAh



**OPM-P01T**  
2 Battery Kit. Li-ion.  
10.8V. 5700mAh

## Main Specification

|                  |                                                                                                                                                                                          |                                                                                                                                                                                          |                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Battery Type     | 3S4P / 12 Cell Li-ion battery                                                                                                                                                            | 3S3P / 9 Cell Li-ion battery                                                                                                                                                             | 3S2P / 6 Cell Li-ion battery                                                                                                                                                             |
| Battery Voltage  | 10.8V                                                                                                                                                                                    | 10.95V                                                                                                                                                                                   | 10.8V                                                                                                                                                                                    |
| Battery Capacity | 12060mAh / 130.2Wh                                                                                                                                                                       | 8550mAh / 93.62Wh                                                                                                                                                                        | 5700mAh / 61.56Wh                                                                                                                                                                        |
| Warranty         | 2 year                                                                                                                                                                                   | 1 year                                                                                                                                                                                   | 1 year                                                                                                                                                                                   |
| Charging time    | 4.5hrs with UPower Pro-series                                                                                                                                                            | 3.5hrs with UPower Pro-series                                                                                                                                                            | 3hrs with UPower Pro-series                                                                                                                                                              |
| Safety           | Supports protection from over-voltage (input and output), over-current (input and output), short circuit, over-charge, over-discharge, and battery Positive Temperature Coefficient(PTC) | Supports protection from over-voltage (input and output), over-current (input and output), short circuit, over-charge, over-discharge, and battery Positive Temperature Coefficient(PTC) | Supports protection from over-voltage (input and output), over-current (input and output), short circuit, over-charge, over-discharge, and battery Positive Temperature Coefficient(PTC) |
| Compatible       | Venus all series, UPower all series                                                                                                                                                      | Venus all series, UPower all series                                                                                                                                                      | Venus all series, UPower all series                                                                                                                                                      |
| Certification    | UL-2054, IEC-62133-1                                                                                                                                                                     | UL-2054, IEC-62133-1                                                                                                                                                                     | UL-2054, IEC-62133-1                                                                                                                                                                     |

## Mechanical and Environmental

|                |                            |                            |                            |
|----------------|----------------------------|----------------------------|----------------------------|
| Architecture   | ABS + PC                   | ABS + PC                   | ABS + PC                   |
| Color          | White                      | White                      | White                      |
| Dimension      | 137(L) x 79(W) x 46 (H) mm | 122(L) x 79(W) x 50 (H) mm | 84(L) x 79(W) x 48 (H) mm  |
| Net Weight     | 690g (1.52 lbs)            | 504g (1.11 lbs)            | 350g(0.77lbs)              |
| Packing Size   | 234(L) x 180(W) x 76(H) mm | 220(L) x 180(W) x 80(H) mm | 230(L) x 150(W) x 90(H) mm |
| Gross Weight   | 1.7kg (3.75 lbs)           | 1.3kg (2.87 lbs)           | 0.9kg (1.98 lbs)           |
| Operating Temp | 0°C ~ 40°C(32°F ~ 104°F)   | 0°C ~ 40°C(32°F ~ 104°F)   | 0°C ~ 40°C(32°F ~ 104°F)   |
| Storage Temp   | -20°C ~ 60°C(-4°F ~ 140°F) | -20°C ~ 60°C(-4°F ~ 140°F) | -20°C ~ 60°C(-4°F ~ 140°F) |

## Battery LED Indicator

|                    |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|
| One LED Flashing   | 0%~5% capacity    | 0%~5% capacity    | 0%~5% capacity    |
| One LED Lighting   | 5%~20% capacity   | 5%~20% capacity   | 5%~20% capacity   |
| Two LED Lighting   | 20%~40% capacity  | 20%~40% capacity  | 20%~40% capacity  |
| Three LED Lighting | 40%~60% capacity  | 40%~60% capacity  | 40%~60% capacity  |
| Four LED Lighting  | 60%~80% capacity  | 60%~80% capacity  | 60%~80% capacity  |
| Five LED Lighting  | 80%~100% capacity | 80%~100% capacity | 80%~100% capacity |

\*Please see the user guide for more details.



**Venus-173**  
17" 24/7  
Mobile Computer



**Venus-153**  
15" 24/7  
Mobile Computer

## System

|                        |                                                                                                                            |                                                                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Processor              | Intel® Skylake Dual-Core i5                                                                                                | Intel® Skylake Dual-Core i5 /Celeron 3955U                                                                                 |
| System Memory          | DDR4 up to 16GB                                                                                                            | DDR4 up to 16GB                                                                                                            |
| OS support             | Microsoft® Windows 7<br>Microsoft® Windows 8.1<br>Microsoft® Windows 10<br>Ubuntu 18.04 LTS<br>IGEL (thin client solution) | Microsoft® Windows 7<br>Microsoft® Windows 8.1<br>Microsoft® Windows 10<br>Ubuntu 18.04 LTS<br>IGEL (thin client solution) |
| Security               | TPM 2.0 (Trusted Platform Module),<br>RFID ISO 15693/14443A (optional)                                                     | TPM 2.0 (Trusted Platform Module), RFID<br>ISO 15693/14443A (optional)                                                     |
| Wireless Communication | 802.11 ac/a/b/g/n + BT (optional)                                                                                          | 802.11 ac/a/b/g/n + BT (optional)                                                                                          |

## Display

|              |                 |                                           |
|--------------|-----------------|-------------------------------------------|
| Size         | 17"             | 15.6"                                     |
| Resolution   | 1280 x 1024     | 1920 x 1080                               |
| Brightness   | 250 nits        | 220 nits                                  |
| Touch Screen | Resistive Touch | Project Capacitive Touch /Resistive Touch |

## IO

|           |                         |                         |
|-----------|-------------------------|-------------------------|
| USB       | USB 3.0 x2 , USB 2.0 x2 | USB 3.0 x2 , USB 2.0 x2 |
| Video Out | HDMI 1.4 x1             | HDMI x1                 |
| COM       | COM port x 1            | COM port x 1            |
| Ethernet  | Gigabit LAN x 2         | Gigabit LAN x 2         |
| DC-in     | 12V DC-in x1            | 12V DC-in x1            |

## Mechanical and Environmental

|                |                                                                                                                                                                             |                                                                                                                                                                             |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension      | 384(L) x 68(W) x 345(H) mm                                                                                                                                                  | 392(L) x 43(W) x 265(H) mm                                                                                                                                                  |
| Net Weight     | 4.5kg                                                                                                                                                                       | 2.7kg                                                                                                                                                                       |
| Packing Size   | 510(L) x 200(W) x 480(H) mm                                                                                                                                                 | 520(L) x 190(W) x 400(H) mm                                                                                                                                                 |
| Gross Weight   | 5.6kg                                                                                                                                                                       | 4.7kg                                                                                                                                                                       |
| Certifications | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |

If you need more details, please contact to [sales@onyx-healthcare.com](mailto:sales@onyx-healthcare.com)

## Mobile Computer Accessory Selection



**Venus-123**  
12" 24/7  
Mobile Computer



**OPM-P05T**  
Battery Packs (2x)

### System

|                        |                                                                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor              | Intel® Skylake Dual-Core i5 / Celeron 3955U                                                                                                           |
| System Memory          | DDR4 up to 16GB                                                                                                                                       |
| OS support             | Microsoft® Windows 7 (32/64bit)<br>Microsoft® Windows 8.1 (64bit)<br>Microsoft® Windows 10 (64bit)<br>Ubuntu 18.04 LTS<br>IGEL (thin client solution) |
| Security               | TPM 2.0 (Trusted Platform Module), RFID ISO 15693/14443A (optional)                                                                                   |
| Wireless Communication | 802.11 ac/a/b/g/n + BT (optional)                                                                                                                     |

### Display

|              |                                            |
|--------------|--------------------------------------------|
| Size         | 11.6"                                      |
| Resolution   | 1366 x 768                                 |
| Brightness   | 250 nits                                   |
| Touch Screen | Project Capacitive Touch / Resistive Touch |

### IO

|           |                         |
|-----------|-------------------------|
| USB       | USB 3.0 x2 , USB 2.0 x2 |
| Video Out | HDMI out x 1            |
| COM       | COM port x 1            |
| Ethernet  | Gigabit LAN x 2         |
| DC-in     | 12V DC-in x1            |

### Mechanical and Environmental

|                |                                                                                                                                                                            |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension      | 300(L) x 43(W) x 205(H) mm                                                                                                                                                 |
| Net Weight     | 1.9kg                                                                                                                                                                      |
| Packing Size   | 420(L) x 185(W) x 345(H) mm                                                                                                                                                |
| Gross Weight   | 2.6kg                                                                                                                                                                      |
| Certifications | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |

### Battery Pack

|                        |                                                   |
|------------------------|---------------------------------------------------|
| Battery Type           | 6 Cell Lithium Battery                            |
| Battery Capacity       | 4545 mAh / 33.6 Wh                                |
| Battery Output Voltage | 7.4V                                              |
| Battery Charge Time    | 3 hrs for 85%, 3.5hrs for 100%                    |
| Battery Run Time       | 3hrs *For more details, please see the user guide |

### Order information

- OPM-P05T-A4  
Battery Kits (2x) 2S3P/7.2V for Venus-123/153/173



**UP-M62**  
Venus-123/153/173  
6-slots Charger

### Order information

- UP-M62-A1-1010  
6-slots Charger for Venus-123/153/173

# Ubiquitous Power Solution

The genius of the UPower system is in its unique, groundbreaking design. UPower gives you the capability of providing endless power with an innovative dual hot swappable battery architecture that ensures your device remains powered even while you are replacing a battery.

## UPower



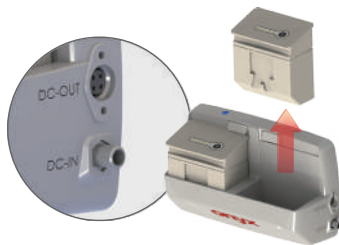
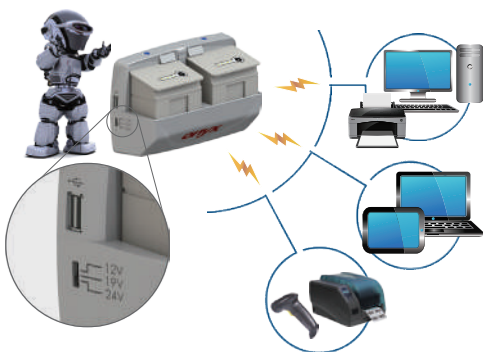
### Key Features:

- External DC output (2 slot only)
- Selected voltage (12V / 19V / 24V) (2 slot only)
- Non-stop, Dual hot swappable batteries architecture
- Software (ORION) remote monitor
- Capable of charging 2/6 batteries simultaneously.
- 2/6 Independent LED indicators, clearly reveal recharge status
- High-speed recharge and over charge protection

# UPower

## Dual Swappable Batteries

Our UPower give you the capability of providing endless power with its unique swappable battery architecture. You will never again be in danger of losing power when it is most critically needed.



## User Selected Voltage

Since electronic devices operate with varying voltage requirements, we created a multi-voltage power bank that allows users to personally select the proper voltage setting. Users can select from 12, 19, or 24 volts based on their needs.

## ORION Management

These “smart” power banks can be managed with our new ORION device management software solution that intelligently monitors the status of all the batteries connected to the system.



## Vital Sign Application

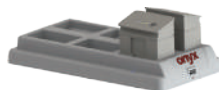
Hospital intensive care units (ICU) specialize in providing intensive care for patients suffering from severe injuries and life-threatening illness. Patients in intensive care units must be monitored constantly not only by highly trained hospital staff, but also with specialized medical equipment to make sure they remain in stable condition while recovering from serious medical emergencies, or surgery.

With UPower, battery powered medical devices will never again be in danger of losing power when it is most critically needed—and that's a thought that doctors, patients, and all ICU staff can find reassuring and comforting.





UPower Pro-22  
2-slot Charger with 90W DC output



UPower Lite-62  
6-slot Charger + Support ORION

## Main Specification

|                     |                                                                                                                                                                             |                                                      |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| DC Output Power     | 12/19/24V 90W<br>*Check user manual for more detail info                                                                                                                    | N/A                                                  |
| Battery Charge Time | 2.5 hrs for 85%, 3 hrs for 100%<br>for std battery                                                                                                                          | 2.5 hrs for 85%, 3.5 hrs for 100%<br>for std battery |
| Input Power         | 24V/150W adapter                                                                                                                                                            | 24V/250W adapter                                     |
| Certification       | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/<br>A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE, FCC                                              |

## Mechanical and Environmental

|                       |                              |                              |
|-----------------------|------------------------------|------------------------------|
| Architecture          | ABS + PC                     | ABS + PC                     |
| Color                 | White                        | White                        |
| Dimension             | 191(L) x 64(W) x 117(H) mm   | 304(L) x 154(W) x 41(H) mm   |
| Net Weight            | 0.67kg (1.47 lbs)            | 1.16kg (2.56 lbs)            |
| Packing Size          | 390(L) x 290(W) x 110(H) mm  | 470(L) x 380(W) x 100(H) mm  |
| Gross Weight          | 2kg (4.41 lbs)               | 3kg (6.61 lbs)               |
| Operating Temperature | 0°C ~ 35°C(32°F ~ 95°F)      | 0°C ~ 40°C(32°F ~ 104°F)     |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)   | -20°C ~ 60°C(-4°F ~ 140°F)   |
| Storage Humidity      | 10%~95%@35°C, non-condensing | 10%~95%@35°C, non-condensing |

## Battery LED Indicator

|                       |                                  |                       |
|-----------------------|----------------------------------|-----------------------|
| Blue Lighting         | Full Charge (AC mode)            | Full Charge (AC mode) |
| Blue Flashing         | Charging (AC mode)               | Charging (AC mode)    |
| Green Lighting        | Capacity 40%~100% (Battery Mode) | N/A                   |
| Orange Lighting       | Capacity 21%~39% (Battery Mode)  | N/A                   |
| Purple Lighting       | Capacity 0%~20% (Battery Mode)   | N/A                   |
| Green-Purple Flashing | Charging error                   | N/A                   |

## Power Supply Specification

|               |                       |                        |
|---------------|-----------------------|------------------------|
| Input Voltage | 100-240V AC @50-60 Hz | 100-240V AC @50-60 Hz  |
| Output Power  | 24V / 6.25A, 150W max | 24V / 10.41A, 250W max |

## Battery Pack (optional)

|                  |                                  |                                 |
|------------------|----------------------------------|---------------------------------|
| Battery Type     | 6 /9/12 Cell Lithium-ion battery | 6/9/12 Cell Lithium-ion battery |
| Battery Capacity | 5700 / 8550 / 12060 mAh          | 5700 / 8550 / 12060 mAh         |
| Output Voltage   | 10.8V / 10.95V / 10.8V           | 10.8V / 10.95V / 10.8V          |



**OPM-P03T**  
2 XXL Battery Kit. Li-ion.  
10.8V. 12060mAh



**OPM-P02T**  
2 XL Battery Kit. Li-ion.  
10.95V. 8550mAh



**OPM-P01T**  
2 Battery Kit. Li-ion.  
10.8V. 5700mAh

## Main Specification

|                  |                                                                                                                                                                                          |                                                                                                                                                                                          |                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Battery Type     | 3S4P / 12 Cell Li-ion battery                                                                                                                                                            | 3S4P / 9 Cell Li-ion battery                                                                                                                                                             | 3S4P / 6 Cell Li-ion battery                                                                                                                                                             |
| Battery Voltage  | 10.8V                                                                                                                                                                                    | 10.95V                                                                                                                                                                                   | 10.8V                                                                                                                                                                                    |
| Battery Capacity | 12060mAh                                                                                                                                                                                 | 8550mAh                                                                                                                                                                                  | 5700mAh                                                                                                                                                                                  |
| Warranty         | 2 year                                                                                                                                                                                   | 1 year                                                                                                                                                                                   | 1 year                                                                                                                                                                                   |
| Charging time    | 4.5hrs with UPower Pro-series                                                                                                                                                            | 3.5hrs with UPower Pro-series                                                                                                                                                            | 3hrs with UPower Pro-series                                                                                                                                                              |
| Safety           | Supports protection from over-voltage (input and output), over-current (input and output), short circuit, over-charge, over-discharge, and battery Positive Temperature Coefficient(PTC) | Supports protection from over-voltage (input and output), over-current (input and output), short circuit, over-charge, over-discharge, and battery Positive Temperature Coefficient(PTC) | Supports protection from over-voltage (input and output), over-current (input and output), short circuit, over-charge, over-discharge, and battery Positive Temperature Coefficient(PTC) |
| Compatible       | Venus all series, UPower all series                                                                                                                                                      | Venus all series, UPower all series                                                                                                                                                      | Venus all series, UPower all series                                                                                                                                                      |
| Certification    | UL, CE, IEC-62133-1                                                                                                                                                                      | UL, CE, IEC-60950-1, IEC-62133-1                                                                                                                                                         | UL, CE, IEC-60950-1, IEC-62133-1                                                                                                                                                         |

## Mechanical and Environmental

|                  |                              |                              |                              |
|------------------|------------------------------|------------------------------|------------------------------|
| Architecture     | ABS + PC                     | ABS + PC                     | ABS + PC                     |
| Color            | White                        | White                        | White                        |
| Dimension        | 137(L) x 79(W) x 48 (H) mm   | 122(L) x 79(W) x 50 (H) mm   | 84(L) x 79(W) x 48 (H) mm    |
| Net Weight       | 690kg (1.52 lbs)             | 510kg (1.12 lbs)             | 320g(0.71lbs)                |
| Packing Size     | 234(L) x 180(W) x 76(H) mm   | 220(L) x 180(W) x 80(H) mm   | 230(L) x 150(W) x 90(H) mm   |
| Gross Weight     | 1.7kg (3.75 lbs)             | 1.3kg (2.87 lbs)             | 0.9kg (1.98 lbs)             |
| Operating Temp   | 0°C ~ 40°C(32°F ~ 104°F)     | 0°C ~ 40°C(32°F ~ 104°F)     | 0°C ~ 40°C(32°F ~ 104°F)     |
| Storage Temp     | -20°C ~ 60°C(-4°F ~ 140°F)   | -20°C ~ 60°C(-4°F ~ 140°F)   | -20°C ~ 60°C(-4°F ~ 140°F)   |
| Storage Humidity | 10%~95%@35°C, non-condensing | 10%~95%@35°C, non-condensing | 10%~95%@35°C, non-condensing |

## Battery LED Indicator

|                    |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|
| One LED Flashing   | 0%~5% capacity    | 0%~5% capacity    | 0%~5% capacity    |
| One LED Lighting   | 5%~20% capacity   | 5%~20% capacity   | 5%~20% capacity   |
| Two LED Lighting   | 20%~40% capacity  | 20%~40% capacity  | 20%~40% capacity  |
| Three LED Lighting | 40%~60% capacity  | 40%~60% capacity  | 40%~60% capacity  |
| Four LED Lighting  | 60%~80% capacity  | 60%~80% capacity  | 60%~80% capacity  |
| Five LED Lighting  | 80%~100% capacity | 80%~100% capacity | 80%~100% capacity |

\*Please see the user guide for more details.

# ORION

ORION is a complete software solution that controls every part of your Onyx device infrastructure from the server, to the software manager and client devices. This system works the same way as the email servers we use every day to communicate. Each ORION system has a single server that connects to nursing carts (clients) that push their information to the server (similar to sending an email).



## Key Features:

- Everything Remotely
- Break Up the Whole Into Parts
- To Improve the Quality



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### **Remote Backup / Recovery**

IT Managers can remotely perform critical operating system backup / recovery operations without having to be at any device's physical location.



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### **Remote Update / Installation**

System software / firmware installation and updates can also be performed remotely saving valuable time and resources.



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### **E-mail Reporting**

ORION includes an integrated e-mail client for regularly scheduled event reporting.



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### **Battery Diagnostics**

With potentially thousands of batteries in use in a single hospital, ORION can monitor them all with diagnostic tools that alert users of any battery-related errors.



## **ORION**

ORION is a complete software solution that controls every part of your Onyx device infrastructure from the server, to the software manager and client devices. This system works the same way as the email servers we use every day to communicate. Each ORION system has a single server that connects to nursing carts (clients) that push their information to the server (similar to sending an email). The software manager collects information on the server received from the nursing carts to perform further analysis like battery cycle count or capacity attenuation.



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### **+ Real-time Remote Monitoring**

Real-time remote monitoring provides quick data feedback to help IT managers diagnose and fix system problems.



---

### **+ User-friendly Interface**

ORION's user-friendly graphical interface conveniently organizes important data in a way that lets you quickly and easily review systemwide performance.



---

### **+ Customizable Dashboard**

All IT managers have their own preferences for how to perform their duties. ORION's customizable dashboard gives IT managers the freedom to set operational parameters to their own liking to maximize efficiency.



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### **+ Automated Task Scheduling**

With automated task scheduling, ORION takes care of less important repetitive tasks so you can focus on more important priorities.



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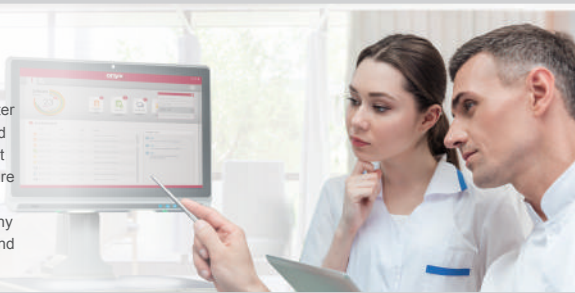
### **+ Group Settings**

Device settings can be managed and saved by groups so that each department in a facility can have custom-managed devices.



### **Successful Story – NHS in UK**

The Trust went live with their EPR called e-Care on 30th April 2016. Parity Medical were the chosen supplier of mobile computer carts. The Parity Infinity carts were selected after trialling as they are light weight, height adjustable, ergonomic, easy to clean and are powered 24/7 by hot swappable batteries. It was a big project that went live without any hiccups. Phase 2 has now been enabled and will be phased in throughout the year.





## ORION Remote

Hospital IT Management Software Package

### CORE FUNCTION

|                             |   |
|-----------------------------|---|
| Battery Diagnostics         | ✓ |
| Friendly UI                 | ✓ |
| Remote Backup/Recovery      | ✓ |
| Remote Update/Installation  | ✓ |
| E-Mail Reporting            | ✓ |
| Automated Task Scheduling   | ✓ |
| Group Settings              | ✓ |
| Real-time Remote Monitoring | ✓ |
| Customizable Dashboard      | ✓ |

### Ordering Information

|              |                                   |
|--------------|-----------------------------------|
| ORION-A01-V2 | ORION Air permission (per client) |
|--------------|-----------------------------------|

### Hardware Requirement

#### ► ORION Server

|         |                                                                               |
|---------|-------------------------------------------------------------------------------|
| CPU     | 1.6GHz or faster                                                              |
| RAM     | 1GB                                                                           |
| Storage | 20MB per client for one month record 10G for 500 clients for one month record |
| OS      | Windows 7, Windows 8.1, Windows 10                                            |

#### ► ORION Manager

|         |                                                                                 |
|---------|---------------------------------------------------------------------------------|
| CPU     | 1.6GHz or faster                                                                |
| RAM     | 1GB                                                                             |
| Display | DirectX 9-capable video card running at 1024 x 768 or higher display resolution |
| OS      | Windows 7, Windows 8.1, Windows 10                                              |
| Other   | .Net Framework 4.0 above                                                        |



## Mobile Medical Assistant

Onyx Mobile Medical Assistant tablets are especially designed to streamline data exchange for EMS and hospitals. With rugged features, high brightness LCD and high performance CPU, these tablets can be operated in harsh environments while delivering superb performance and a crystal clear image. Onyx Mobile Medical Assistant tablets help eliminate medical paperwork by automating EMS and hospital workflows allowing paramedics and nurses to instantly access and document patient records.

### Key Features:

- Effortless data collection and documentation with significant error reduction
- Seamless integration of medical devices
- Medical & ambulance dual certifications
- Continuous power for 24/7 non-stop operation
- Rugged design for outdoor and indoor use
- Reduce hospital and ambulance service TOC



Light weight & compact size



OS support for Windows



IP54



**MD116/ MD116I**  
12" Rugged EMS Tablet



**MD101**  
10.1" Portable  
Medical Gateway



## Application

EMS, Vital Sign Automation, Mobile Point of Care



## Main Specification

|                    |                                          |                                             |                                                |            |
|--------------------|------------------------------------------|---------------------------------------------|------------------------------------------------|------------|
| Processor          | Intel® Apollo Lake Processor             | Intel® Kaby Lake U Processor                | Intel® Cherry Trail QC Processor Z8350 1.44GHz |            |
| System Memory      | DDR3L SODIMM x1, Default 4GB (Up to 8GB) | DDR4 SO-DIMM x1, Default 4 GB (Up to 16 GB) | 2GB                                            |            |
| OS Support         | Microsoft® Windows 10 IOT                |                                             | Microsoft® Windows 10 IOT                      | Android6.0 |
| Storage Disk Drive | M.2 Interface x1, Default 64GB           |                                             | 64/128GB eMMC NAND                             |            |



## Display

|                        |                                  |                                   |
|------------------------|----------------------------------|-----------------------------------|
| Size/ Type             | 11.6" 16:9 Wide Screen LED Panel | 10.1" 16:10 Wide Screen LED Panel |
| Resolution             | FHD 1920 x 1080                  | FHD 1920 x 1200                   |
| PCT Multi-Touch Screen | 10 points Touch                  | 10 points Touch                   |



## I/O

|           |                                          |                                      |     |
|-----------|------------------------------------------|--------------------------------------|-----|
| USB       | USB 3.0 (Type-A) x1, USB 2.0 (Type-A) x1 | USB 2.0 (Type-A) x1                  |     |
| Ethernet  | Gigabit LAN x1                           | N/A                                  |     |
| Video Out | N/A                                      | Micro HDMI x1 (By Request)           |     |
| Audio     | N/A                                      | 3.5mm Audio Combo Jack x1 (Optional) | N/A |
| DC-In     | DC-In Jack x1                            | DC-In Jack x1                        |     |
| Docking   | Docking Connector x1                     | N/A                                  |     |



## Mechanical and Environment

|                       |                                                                                                                                                                                                                      |                          |                                                                                                                                                                                                                      |  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Mounting              | VESA 75 via docking station                                                                                                                                                                                          |                          | VESA 75 via cradle                                                                                                                                                                                                   |  |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F)                                                                                                                                                                                            | 0°C ~ 35°C (32°F ~ 95°F) | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                                                             |  |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                                                           |                          | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                                                           |  |
| Dimension             | 312(W) x 239(H) x 37(D) mm                                                                                                                                                                                           |                          | 260(W) x 186(H) x 23(D) mm                                                                                                                                                                                           |  |
| Packing Size          | 400 x 345 x160 mm                                                                                                                                                                                                    |                          | 310 x 220 x 110 mm                                                                                                                                                                                                   |  |
| Gross Weight          | 3 kg (6.6 lb)                                                                                                                                                                                                        |                          | 2 kg (4.4 lb)                                                                                                                                                                                                        |  |
| Net Weight            | Approx. 1.45~1.8 kg (3.2 lb~3.97 lb)                                                                                                                                                                                 |                          | Approx. 1 kg (2.2 lb)                                                                                                                                                                                                |  |
| Certifications        | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/A1:2013(V3.1) EN 300 328 (V2.1.1), EN 301 893 (V2.1.1) FCC: Part 18 Class B, Part 15 C/E UL: ANSI/AAMI ES60601-1:2012 (V3.1) cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |                          | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/A1:2013(V3.1) EN 300 328 (V2.1.1), EN 301 893 (V2.1.1) FCC: Part 18 Class B, Part 15 C/E UL: ANSI/AAMI ES60601-1:2012 (V3.1) cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |  |



**MPAD-800**  
8" Medical Tablet



**Julia-J07**  
7" PDA (mPDA)



**Julia-J05**  
5" PDA (mPDA)

 **Application** On Demand Accessing Medical Data , Clinical Decision Making , Patient Monitoring

### Main Specification

|                  |                                      |                                                                                   |                                                                                   |
|------------------|--------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Processor        | ARM® Cortex™-Octa-core up to 1.6 GHz | ARM® Cortex™-A53 Octa-core 1.3 GHz                                                | ARM® Cortex™-A53 Octa-core 1.3 GHz                                                |
| System Memory    | 2GB SDRAM                            | 2GB RAM                                                                           | 2GB SDRAM                                                                         |
| Storage          | 16GB eMMC                            | 16GB eMMC<br>Additional storage available:<br>SD (up to 2 GB), SDHC (up to 32 GB) | 16GB eMMC<br>Additional storage available:<br>SD (up to 2 GB), SDHC (up to 32 GB) |
| Operating system | Android 6.0.1                        | Android 5.1                                                                       | Android 5.1                                                                       |

### Display

|            |                                  |                                  |                                  |
|------------|----------------------------------|----------------------------------|----------------------------------|
| Size       | 8-inch                           | 7-inch                           | 5-inch                           |
| Resolution | 1280 x 800                       | 1280 x 720                       | 1280 x 720                       |
| Touch      | Multi-touch projected capacitive | Multi-touch projected capacitive | Multi-touch projected capacitive |

### Wireless Communication

|           |               |                      |                      |
|-----------|---------------|----------------------|----------------------|
| WLAN      | 802.11 a/c    | 802.11 a/b/g/n       | 802.11 a/b/g/n       |
| Bluetooth | Bluetooth 4.0 | Bluetooth 4.0        | Bluetooth 4.1        |
| GPS       | N/A           | GPS / AGPS / GLONASS | GPS / AGPS / GLONASS |

### Interface

|                   |                              |                        |                        |
|-------------------|------------------------------|------------------------|------------------------|
| Docking Connector | 1x Type-A USB ,1x Type-C USB | 1 x Docking connector  | 1 x Docking connector  |
| USB               | 1 x Micro USB                | 1 x Micro USB          | 1 x Micro USB          |
| Power input       | 1 x Power Jack               | 1 x Power Jack         | 1 x Power Jack         |
| Micro SD          | 1 x Micro SD Card Slot       | 1 x Micro SD Card Slot | 1 x Micro SD Card Slot |
| SIM Card Slot     | 2 x SIM Card Slot            | 2 x SIM Card Slot      | 1 x SIM Card Slot      |

### Input

|                |                                      |                                                                                                                    |                                                           |
|----------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Button         | 1 x Volume +/- ,<br>1 x Power Button | 1 x Volume +/- , 1 x Power Button,<br>1 x Home Button,<br>1 x Menu Button,1 x Return Button,<br>1 x Trigger Button | 1 x Volume +/- , 1 x Power Button,<br>2 x Function Button |
| LED Indicators | 1 x LED indicator (Power, Battery)   | 2 x LED indicators (Power, Battery)                                                                                | 1 x LED indicator                                         |

### Mechanical and Environment

|                       |                     |                       |                        |
|-----------------------|---------------------|-----------------------|------------------------|
| Dimension (W x L x H) | 136.6 x 219 x 21 mm | 212.4 x 132.8 x 19 mm | 85.9 x 163.2 x 22.5 mm |
| Packing Size          | 280 x 250 x 80 mm   | 280 x 240 x 60 mm     | 240 x 140 x 100 mm     |
| Gross Weight          | 1.8kg (3.96 lb)     | 1.5kg (3.3 lb)        | 1.2 kg (2.64 lb)       |
| Net Weight            | 0.67 Kg (1.48lb)    | 0.55 Kg (1.21lb)      | 0.315 Kg (0.69lb)      |

### Power Management

|                        |                  |               |               |
|------------------------|------------------|---------------|---------------|
| Battery Operating Time | 8Hrs             | 20Hrs         | 20Hrs         |
| Adapter                | 12V / 3A Adapter | 5V 3A Adapter | 5V 2A Adapter |

# Mobile Medical Assistant Accessory Selection-

## MD116/MD116I Accessory



**Vehicle Dock**  
OPM-T016-A2



**VESA Cradle**  
OPM-T021-A1



**Office Dock**  
OPM-T022-A1



**Battery Charger**  
UP-M62-A1-10101

### Optional Accessories

| Part Number   | OPM-T016-A2  | OPM-T021-A1 | OPM-T022-A1 | UP-M62-A1-10101 |
|---------------|--------------|-------------|-------------|-----------------|
| Description   | Vehicle Dock | VESA Cradle | Office Dock | Battery Charger |
| Input Power   | 12V          | N/A         | 12V         | 24V             |
| Installations | VESA 75      | VESA 75     | Stationary  | Stationary      |

### I/O

| IO            | 2x USB 2.0 Type-A<br>1x RJ45<br>1x Line Out<br>1x Phoenix Port<br>1x DC In Jack | N/A | 2x USB 2.0 Type-A<br>1x RJ45<br>1x RS-232<br>1x DC-In | 1x Micro USB (Client)<br>1x DC-In                                                                            |
|---------------|---------------------------------------------------------------------------------|-----|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| LED Indicator | N/A                                                                             | N/A | Steady Green: Connection<br>LED Off: Disconnection    | Flickering Blue: Battery Charging<br>Steady Blue: Battery Fully Charged<br>Flickering Purple<br>Green: Error |

### Mechanical and Environment

| Dimensions            | 236.89 x 293.03 x 88.22 mm     | 206.69 x 196.64 x 87.8mm       | 354 x 117 x 78.2mm             | 245.95 x 124.64 x 143.65mm     |
|-----------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Weight                | 800g                           | 395g                           | 1060g                          | 860g                           |
| Operating Temperature | 0°C ~ 40°C<br>(32°F ~ 104°F)   | 0°C ~ 40°C<br>(32°F ~ 104°F)   | 0°C ~ 35°C<br>(32°F ~ 95°F)    | 0°C ~ 35°C<br>(32°F ~ 95°F)    |
| Storage Temperature   | -20°C ~ 60°C<br>(-4°F ~ 140°F) | -20°C ~ 60°C<br>(-4°F ~ 140°F) | -20°C ~ 60°C<br>(-4°F ~ 140°F) | -20°C ~ 60°C<br>(-4°F ~ 140°F) |



## Surgical and Server Level Workstation Solution

Zeus is the mighty symbol of the gods which are strong and powerful. In the name of Zeus, to fulfill the demanding requirements of the OR, ICU, ER and Reading Room, Onyx has spent two years developing the new Zeus Series, the Smart View Medical Station. Zeus gives doctors crystal clear imaging when viewing PACS, ENDO, or just EMR.

### Key Features:

- Smart View Design with Worldwide Patents
- 24/22/19 inch Medical Grade MVA panel
- Multi-touch PCT screen / 5-wire Resistive Touch Screen
- Flat and edgeless ID design gives doctors the best-in-market user interaction experience
- Patented smart multi function keys covers up to 10 features for reading light, speaker volume, LCD brightness, etc.



Intel® 7th Gen.  
i7 Platform for Critical  
Applications



Super 3.0 for USB,  
SATA and PCI-e



DICOM Compliance  
Display



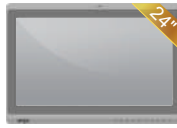
MIS with Remote  
Control Power



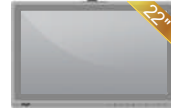
Triple Isolation  
Protection to



Backup Battery for  
Uninterruptible  
Power Supply



**ZEUS-248**  
24" Fanless Smart View 7th Gen.  
Core i7 Medical Station



**ZEUS-228**  
22" Fanless Smart View 7th  
Gen. Core i7 Medical Station

 **Application** EMR/EHR Solution, DICOM to PACS Conversion, Organ Transplantation Surgery

### Main Specifications

|                        |                                                                             |
|------------------------|-----------------------------------------------------------------------------|
| Processor              | Intel 7th Generation Core i7-7600U 3.9GHz Dual Core                         |
| System Memory          | DDR4 SODIMM up to 32GB                                                      |
| Chipset                | N/A                                                                         |
| OS Support             | Windows® 10, Linux®                                                         |
| Remote Management      | Intel Active Management Technology                                          |
| Expansion Interface    | PCI Express[x4] x1, PCI Express[x1] or PCIx1(optional)                      |
| Storage Disk Drive     | 2.5" SATA HDD/SSD x1, M.2 SSD x1,<br>Slim DVD-RW Drive x1(optional)         |
| Security               | Trusted Platform Module, Smart Card Reader(optional), RFID Reader(optional) |
| Wireless Communication | 802.11a/b/g/n/ac(optional), Bluetooth 4.1(optional)                         |
| Speaker                | 5W x 2                                                                      |
| Power Requirement      | DC 12~24V, AC 100~240V , 25wh Backup Battery (optional)                     |

### Display

|                            |                                          |                                          |
|----------------------------|------------------------------------------|------------------------------------------|
| Size/ Type                 | 24" MVA LCD                              | 22" MVA LCD                              |
| Max. Resolution            | 1920 x 1080                              | 1920 x 1080                              |
| Luminance (cd/m2)<br>(TYP) | 250 nits                                 | 250 nits                                 |
| Viewing Angle              | 178(H)/178(V)                            | 178(H)/178(V)                            |
| Contrast Ratio             | 3000:1                                   | 3000:1                                   |
| Touch Screen               | Capacitive Multi-Touch / Resistive Touch | Capacitive Multi-Touch / Resistive Touch |

### I/O

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| USB          | USB 3.0 x4, USB 3.1 x2(side I/O), Isolated USB 2.0 x1(optional) |
| Serial Ports | Isolated RS-232 x2(optional)                                    |
| Ethernet     | Isolated Gigabit LAN x2                                         |
| Video Out    | Display Port x1(optional)                                       |
| Audio        | Mic x1(optional) / Line out (optional)                          |

### Mechanical and Environmental

|                       |                          |                       |
|-----------------------|--------------------------|-----------------------|
| Power Consumption     | Full loading:50 watts    | Full loading:47 watts |
| Operating Temperature | 0°C to 40°C (32°F~104°F) |                       |
| Dimension             | 600 x 415 x 65 mm        | 546 x 352 x 66 mm     |
| Packing Size          | 790 x 220 x 550 mm       | 750 x 220 x 490 mm    |
| Gross Weight          | 14 kg (30.86 lb)         | 12 kg (26.45 lb)      |
| Net Weight            | 9.2kg (20.28lb)          | 8.0Kg(17.6lb)         |



## ZEUS-198

19" Fanless Smart View 7th  
Gen. Core i7 Medical Station



### Application

EMR/HER Solution, DICOM to PACS Conversion, Organ  
Transplantation Surgery



### Main Specifications

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Processor                 | Intel 7th Generation Core i7-7600U 3.9GHz Dual Core                            |
| System Memory             | DDR4 SODIMM up to 32GB                                                         |
| Chipset                   | N/A                                                                            |
| OS Support                | Windows® 10, Linux®                                                            |
| Remote Management         | Intel Active Management Technology                                             |
| Expansion Interface       | PCI Express[x4] x1, PCI Express[x1] or PCIx1(optional)                         |
| Storage Disk Drive        | 2.5" SATA HDD/SSD x1, M.2 SSD x1,<br>Slim DVD-RW Drive x1(optional)            |
| Security                  | Trusted Platform Module, Smart Card Reader(optional), RFID<br>Reader(optional) |
| Wireless<br>Communication | 802.11a/b/g/n/ac(optional), Bluetooth 4.1(optional)                            |
| Speaker                   | 5W x 2                                                                         |
| Power Requirement         | DC 12~24V , 25wh Backup Battery (optional)                                     |



### Display

|                            |                                          |
|----------------------------|------------------------------------------|
| Size/ Type                 | 19" TN LCD                               |
| Max. Resolution            | 1280 x 1024                              |
| Luminance (cd/m2)<br>(TYP) | 250 nits                                 |
| Viewing Angle              | 170(H)/160(V)                            |
| Contrast Ratio             | 1000:1                                   |
| Touch Screen               | Capacitive Multi-Touch / Resistive Touch |



### I/O

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| USB          | USB 3.0 x4, USB 3.1 x2(side I/O), Isolated USB 2.0 x1(optional) |
| Serial Ports | Isolated RS-232 x2(optional)                                    |
| Ethernet     | Isolated Gigabit LAN x2                                         |
| Video Out    | Display Port x1(optional)                                       |
| Audio        | Mic x1(optional) / Line out (optional)                          |



### Mechanical and Environmental

|                          |                          |
|--------------------------|--------------------------|
| Power Consumption        | Full loading:42 watts    |
| Operating<br>Temperature | 0°C to 40°C (32°F~104°F) |
| Dimension                | 450 x 388 x 66 mm        |
| Packing Size             | 640 x 220 x 520 mm       |
| Gross Weight             | 11 kg (24.25 lb)         |
| Net Weight               | 7kg (15.43lb)            |



## Operating Room Solution

In a digital operating room, important information and images such as patient vital signs, surgical images, and xray images need to be displayed all at once. With the latest technology, ACCEL series offers large screen ultra high definition 4K resolution display, Intel Xeon / Core i7 quad core processor, capacitive multi-touch screen and multiple video inputs to improve display quality and work efficiency.

### Key Features:

- 32/27-inch 4K UHD High Resolution & High Brightness Display
- Intel® Quad Core Xeon Platform
- Triple PCI Express Slot for High End Graphics, Fiber LAN and UHD Video Capture
- Enhance functional for Medical Imaging
- IP Certified, Antimicrobial Surface Coatin and Fanless



32/27-inch 4K UHD  
High Resolution & High  
Brightness Display



Intel® Quad Core  
Xeon Platform



PCI Express [x16] Slot  
for  
High End Graphics



Enhance functional  
for Medical Imaging



IP54 Certified,  
Antimicrobial  
Surface Coatin and  
Fanless

\* Note: All specifications are subject to change without notice.



### ACCEL-A3201

32" 4K UHD Smart View 6th Generation Xeon /  
Core i7 Multi-Touch Medical Station

### ACCEL-A3202

32" 4K UHD Smart View AMD Ryzen  
Embedded V1000 Multi-Touch Medical  
Station



## Application

MRI, CT Scan , DICOM to PACS Conversion, Organ Transplantation Surgery



## Main Specifications

|                           |                                                                                                 |                                                        |
|---------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Processor                 | Intel® 6th Generation Xeon E3-1505M v5<br>2.8GHz Quad Core /<br>Core i7-6820QE 2.8GHz Quad Core | AMD Ryzen Embedded V1605B Quad Core                    |
| System Memory             | ECC (for Xeon) / Non-ECC (for Core i7) DDR4<br>SODIMM up to 32GB                                | ECC / Non-ECC DDR4 SODIMM up to 32GB                   |
| Chipset                   | CM236 (for Xeon) / QM170(for Core i7)                                                           | N/A                                                    |
| OS Support                | Windows® 7, Windows® 10, Linux®                                                                 | Windows® 10, Linux®                                    |
| Expansion Interface       | PCI Express[x16] x1, PCI Express[x4] x1, PCI<br>Express[x1] x1)                                 | PCI Express[x4] x1                                     |
| Storage Disk Drive        | 2.5" SATA Hard Disk Drive/Solid State Disk<br>Drive x 2                                         | 2.5" SATA Hard Disk Drive/Solid State Disk<br>Drive x1 |
| Security                  | Trusted Platform Module 2.0                                                                     | FTPM2.0                                                |
| Wireless<br>Communication | 802.11ac/a/b/g/n, Bluetooth V4.1 / 5                                                            | 802.11ac/a/b/g/n, Bluetooth V4.1 / 5                   |
| Speaker                   | 5W x 2                                                                                          | 5W x 2                                                 |



## Display

|                            |                        |                        |
|----------------------------|------------------------|------------------------|
| Size/ Type                 | 32" LCD                | 32" LCD                |
| Max. Resolution            | 3840 x 2160            | 3840 x 2160            |
| Luminance (cd/m2)<br>(TYP) | 350 nits               | 350 nits               |
| Viewing Angle              | 178(H)/178(V)          | 178(H)/178(V)          |
| Contrast Ratio             | 1000:1                 | 1000:1                 |
| Touch Screen               | Capacitive Multi-Touch | Capacitive Multi-Touch |



## I/O

|              |                                   |                                                         |
|--------------|-----------------------------------|---------------------------------------------------------|
| USB          | USB 3.0 x4                        | USB 3.1 ,Type-A x2, USB 3.1 Type -C x1 ,<br>USB 2.0 x 2 |
| Serial Ports | Isolated RS-232 x2(optional)      | Isolated RS-232 x2(optional)                            |
| Ethernet     | Isolated Gigabit LAN x2           | Gigabit LAN x2                                          |
| Video Out    | Display Port 1.4 x1               | Display Port 1.2 x1, HDMI 2.0 x 1,<br>USB 3.1 Type-C x1 |
| Audio        | Mic(optional), Line out(optional) | Mic, Line out                                           |



## Mechanical and Environmental

|                       |                            |                         |
|-----------------------|----------------------------|-------------------------|
| Power Consumption     | Full loading : 90 Watts    | Full loading : 80 Watts |
| Operating Temperature | 0°C to 35°C (32°F~95°F)    |                         |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F) |                         |
| Dimension             | 778 x 478 x 102 mm         | 778 x 478 x 53 mm       |
| Packing Size          | 910 x 618 x 220 mm         | 910 x 618 x 220 mm      |
| Gross Weight          | 21.5 kg (47.3 lb)          | 17.5 kg (38.58 lb)      |
| Net Weight            | 18.5 kg (40.78 lb)         | 14.5 kg (31.96 lb)      |



### ACCEL-A2701

27" 4K UHD Smart View 6th Generation Xeon /  
Core i7 Multi-Touch Medical Station

### ACCEL-A2702

27" 4K UHD Smart View AMD Ryzen  
Embedded V1000 Multi-Touch Medical  
Station

## Application

MRI, CT Scan , DICOM to PACS Conversion, Organ Transplantation Surgery

## Main Specifications

|                           |                                                                                                 |                                                        |
|---------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Processor                 | Intel® 6th Generation Xeon E3-1505M v5<br>2.8GHz Quad Core /<br>Core i7-6820QE 2.8GHz Quad Core | AMD Ryzen Embedded V1605B Quad Core                    |
| System Memory             | ECC (for Xeon) / Non-ECC (for Core i7) DDR4<br>SODIMM up to 32GB                                | ECC / Non-ECC DDR4 SODIMM up to 32GB                   |
| Chipset                   | CM236 (for Xeon) / QM170(for Core i7)                                                           | N/A                                                    |
| OS Support                | Windows® 7, Windows® 10, Linux®                                                                 | Windows® 10, Linux®                                    |
| Expansion Interface       | PCI Express[x16] x1, PCI Express[x4] x1, PCI<br>Express[x1] x1)                                 | PCI Express[x4] x1                                     |
| Storage Disk Drive        | 2.5" SATA Hard Disk Drive/Solid State Disk<br>Drive x 2                                         | 2.5" SATA Hard Disk Drive/Solid State Disk<br>Drive x1 |
| Security                  | Trusted Platform Module 2.0                                                                     | FTPM2.0                                                |
| Wireless<br>Communication | 802.11ac/a/b/g/n, Bluetooth V4.1 / 5                                                            | 802.11ac/a/b/g/n, Bluetooth V4.1 / 5                   |
| Speaker                   | 5W x 2                                                                                          | 5W x 2                                                 |

## Display

|                            |                        |                        |
|----------------------------|------------------------|------------------------|
| Size/ Type                 | 27" LCD                | 27" LCD                |
| Max. Resolution            | 3840 x 2160            | 3840 x 2160            |
| Luminance (cd/m2)<br>(TYP) | 250 nits               | 250 nits               |
| Viewing Angle              | 178(H)/178(V)          | 178(H)/178(V)          |
| Contrast Ratio             | 1000:1                 | 1000:1                 |
| Touch Screen               | Capacitive Multi-Touch | Capacitive Multi-Touch |

## I/O

|              |                                   |                                                         |
|--------------|-----------------------------------|---------------------------------------------------------|
| USB          | USB 3.0 x4                        | USB 3.1 ,Type-A x2, USB 3.1 Type -C x1 ,<br>USB 2.0 x 2 |
| Serial Ports | Isolated RS-232 x2(optional)      | Isolated RS-232 x2(optional)                            |
| Ethernet     | Isolated Gigabit LAN x2           | Gigabit LAN x2                                          |
| Video Out    | Display Port 1.4 x1               | Display Port 1.2 x1, HDMI 2.0 x 1,<br>USB 3.1 Type-C x1 |
| Audio        | Mic(optional), Line out(optional) | Mic, Line out                                           |

## Mechanical and Environmental

|                       |                            |                         |
|-----------------------|----------------------------|-------------------------|
| Power Consumption     | Full loading : 90 Watts    | Full loading : 80 Watts |
| Operating Temperature | 0°C to 35°C (32°F~95°F)    |                         |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F) |                         |
| Dimension             | 676 x 429 x 102 mm         | 676 x 429 x 53 mm       |
| Packing Size          | TBD                        | TBD                     |
| Gross Weight          | TBD                        | TBD                     |
| Net Weight            | 13.5 kg (29.76 lb)         | 11.3 kg (24.91 lb)      |

\* Note: All specifications are subject to change without notice.



**ACCEL-M3201**  
32" 4K-UHD Medical  
LCD Monitor

**Application** MRI, CT Scan , DICOM to PACS Conversion, Organ Transplantation Surgery

## Display

|                             |                                               |
|-----------------------------|-----------------------------------------------|
| Size                        | 32"                                           |
| Resolution                  | 3840 x 2160 (UHD 4K)                          |
| Aspect Ratio                | 16:9, Full, 16:10, 4:3, 5:4, 1:1              |
| Brightness (Typ.)           | 350nits                                       |
| Viewing Angle (CR=10)(Typ.) | 178°(H)/178°(V)                               |
| Contrast Ratio (Typ.)       | 1000:1                                        |
| Touch Screen                | Projective capacitive touch screen (optional) |

## System

|                  |                                                  |
|------------------|--------------------------------------------------|
| OS Support       | Windows® XP, Windows® 7, Windows® 10             |
| Image Support    | DICOM, Gamma correction, 3DLUT, 1DLUT (optional) |
| Product Features | Ambient light sensor, IR Control                 |

## I/O

|               |                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------|
| Input Signal  | 3G SDI x 1 , VGA x 1 , HDMI 2.0 x1 , Dual DVI in x1 , DP 1.2 x1 ,HDMI 1.4 x1 , Audio In x1           |
| Output Signal | DP (Multi-Stream Transport) x 1 ,Audio Out x 1, 5V out x 1,SDI (Loop Through), support to 1080P* x 1 |

## Mechanical and Environmental

|                       |                                                                                                                                                                                                                             |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Consumption     | 24V DC in 150W, with external<br>110-240V AC to DC Adapte                                                                                                                                                                   |
| Operating Temperature | 5°C ~ 40°C(41°F ~ 104°F)                                                                                                                                                                                                    |
| Storage Temperature   | -10°C ~ 60°C(14°F ~ 140°F)                                                                                                                                                                                                  |
| Storage Humidity      | 10%~90%@35°C, non-condensing                                                                                                                                                                                                |
| Housing               | Antimicrobial Surface Coating                                                                                                                                                                                               |
| IP Rating             | Protection: front IP65 - rear IP22                                                                                                                                                                                          |
| Dimension             | 777.58 x 477.62 x 48 mm                                                                                                                                                                                                     |
| Packing Size          | 980 x 260 x700 mm                                                                                                                                                                                                           |
| Gross Weight          | 13 kg (28.66 lb)                                                                                                                                                                                                            |
| Net Weight            | 11 kg (24.25 lb)                                                                                                                                                                                                            |
| Certifications        | CE: IEC 60601-1:2005 + A1:2015 (Ed. 4.0)<br>IEC 60601-1-6:2010 + A1:2013 (Ed. 3.1)<br>UL : ANSI/AAMI ES60601-1:2005/ A1:2012 and<br>C1:2009/(R)2012 and A2:2010/(R)2012<br>cUL: CAN/CSA-C22.2 No.60601-1:14<br>FCC part 15B |



## ACCEL-VM500

Medical Video Management System with  
9th Generation Intel Xeon / Core i7 CPU

### Application

MRI, CT Scan , DICOM to PACS Conversion, Organ Transplantation Surgery

### Main Specifications

|                    |                                                    |
|--------------------|----------------------------------------------------|
| Processor          | Intel® Xeon E-2278GE 3.3GHz / Core i7-9700E 2.6Ghz |
| System Memory      | Supports DDR4 2133 DIMM x 4 up to 64GB             |
| Chipset            | Intel® C246                                        |
| OS Support         | Windows® 10 , Linux (optional)                     |
| Storage Disk Drive | 2.5" SATA x 2, M.2 SSD x 1                         |
| TPM                | 2.0                                                |

### I/O

|                      |                                                                              |
|----------------------|------------------------------------------------------------------------------|
| USB                  | USB 3.1 Gen2 x 6 & USB 3.1 Gen1 x 4                                          |
| Ethernet             | Gigabit LAN x 2                                                              |
| Video Out            | DP x 1, VGA x 1, HDMI x 2                                                    |
| Audio                | Line-in, Mic-in, Line-out                                                    |
| Series Ports         | COMx2                                                                        |
| Extension area       | M.2 E key (2230) for WIFI x1, PCIe [x16] x1<br>PCIe [x4] x2 , PCIe [x1] x 1  |
| Optional Capture I/O | 4Kp60: HDMI 2.0 in<br>FHD:1xHDMI, 1xDVI-I, 1xYPbPr, 1xSDI, 1xCVBS, 1xS-Video |

### Mechanical and Environmental

|                       |                             |
|-----------------------|-----------------------------|
| Power Consumption     | 100V to 240V AC Input, 500W |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)    |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)  |
| Dimension             | TBD                         |
| Packing Size          | TBD                         |
| Gross Weight          | TBD                         |
| Net Weight            | TBD                         |



## Slim Fanless Medical Panel PC

The Slim Medical Panel PC is designed to meet the requirements of the best Return on Investment for medical users. With an ultra slim chassis and Intel® fanless Core i Series or Atom Dual Core processor, the slim series gives users a real green solution. Green in money, Green in energy saving, Green in space. The Slim size extends the flexibility in various hospital applications such as mobile nursing station, wall-mount diagnosis panel, pharmacy automation and hospital administration automation.

### Key Features:

- Green Operation
- Flexible Power Input
- High Speed Wireless Data Transmission
- Processing in Compact Size
- Small to large LCD Choices
- Quiet, Clean & Easy Maintenance



Small to Large LCD Choices



Quiet, Clean & Easy Maintenance



Green & Compact Size for Operation



Wide Range Power Input for Different Carts



Dual Antennas with Best WLAN performance



**ONYX-BE182**  
18.5" Fanless Celeron J1900  
Quad Core Slim Medical Panel PC



**ONYX-1731**  
17" Fanless Celeron J1900  
Quad Core Slim Medical Panel PC

**Application** Telemedicine, Medical IT, Medical Device Controller

**Main Specifications**

|                        |                                                                                        |                                                                              |
|------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Processor              | Intel® Celeron J1900 Quad Core 2.42GHz                                                 | Intel® Celeron J1900 Quad Core 2.42GHz                                       |
| System Memory          | Supports DDR3 SODIMM up to 8GB                                                         | Supports DDR3L SODIMM up to 8GB                                              |
| Chipset                | N/A                                                                                    | N/A                                                                          |
| Expansion Interface    | Mini Card x2                                                                           | Mini Card x 1                                                                |
| Storage Disk Drive     | 2.5" SATA Hard Disk Drive/SSD x 1                                                      | mSATA SSD x 1,<br>Slim DVD-RW Drive x 1(optional)                            |
| OS Support             | Windows® 7, Windows® 10, Linux                                                         | Windows® 7, Windows® 10, Linux®                                              |
| Security               | Trusted Platform Module, Smart Card Reader (optional), MSR (optional), RFID (optional) | Trusted Platform Module, Smart Card Reader (optional), RFID Reader(optional) |
| Wireless Communication | 802.11b/g/n(optional), Bluetooth 4.0 (optional)                                        | 802.11a/b/g/n/ac(optional), Bluetooth 4.0 (optional)                         |
| Speaker                | 3W x 2                                                                                 | 3W x 2                                                                       |
| Power Requirement      | DC 12~24V                                                                              | DC 12~24V                                                                    |

**Display**

|                         |                                                     |                  |
|-------------------------|-----------------------------------------------------|------------------|
| Size/ Type              | 18.5" (16:9) TFT LCD                                | 17" LCD          |
| Max. Resolution         | 1366 x 768                                          | 1280 x 1024      |
| Luminance (cd/m2) (TYP) | 250 nits                                            | 350 nits         |
| Viewing Angle           | 170°(H)/160°(V)                                     | 170°(H)/160°(V)  |
| Contrast Ratio          | 1000:1                                              | 1000:1           |
| Touch Screen            | Projected Capacitive Touch / 5-Wire Resistive Touch | 5-wire Resistive |

**I/O**

|              |                |                          |
|--------------|----------------|--------------------------|
| USB          | USB 2.0 x4     | USB2.0 x 4               |
| Serial Ports | N/A            | Isolated RS-232 x 1      |
| Ethernet     | Gigabit LAN x2 | Isolated Gigabit LAN x 2 |
| Video Out    | N/A            | VGA x 1                  |
| Audio        | Line out, Mic  | Line-out, Mic-in         |

**Mechanical and Environmental**

|                       |                                                                                                                                                                            |                                                                                                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Consumption     | Full loading: 26 Watts                                                                                                                                                     | Full loading: 21 Watts                                                                                                                                                     |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                   | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                   |
| Storage Temperature   | -20°C ~60°C(-4°F ~ 140°F)                                                                                                                                                  | -20°C ~60°C(-4°F ~ 140°F)                                                                                                                                                  |
| Mounting              | VESA 75/100 mm                                                                                                                                                             | VESA 75/100 mm                                                                                                                                                             |
| Dimension             | 463 x 336 x 48.3 mm                                                                                                                                                        | 384 x 338 x 69 mm                                                                                                                                                          |
| Packing Size          | 721 x 224 x 464 mm                                                                                                                                                         | 630 x 250 x 640 mm                                                                                                                                                         |
| Gross Weight          | 8kg (17.63 lb)                                                                                                                                                             | 9kg (19.84 lb)                                                                                                                                                             |
| Net Weight            | 4.2 kg(9.26lb)                                                                                                                                                             | 5.6kg(12.32lb)                                                                                                                                                             |
| Certifications        | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |

\* Note: All specifications are subject to change without notice.



**ONYX-1531**  
15.6" Fanless Celeron J1900  
Quad Core Slim Medical Panel  
PC



**ONYX-1222**  
11.6" Fanless Celeron J1900  
Quad Core Slim Medical Panel  
PC



**ONYX-1022**  
10.1" Fanless Celeron J1900  
Quad Core Slim Medical Panel  
PC

## Application

Telemedicine, Medical IT, Medical Device Controller

## Main Specifications

|                        |                                                                               |        |               |
|------------------------|-------------------------------------------------------------------------------|--------|---------------|
| Processor              | Intel® Celeron J1900 Quad Core 2.42GHz                                        |        |               |
| System Memory          | Supports DDR3L SODIMM up to 8GB                                               |        |               |
| Chipset                | N/A                                                                           |        |               |
| Expansion Interface    | Mini Card x 1                                                                 |        |               |
| Storage Disk Drive     | 2.5" SATA SSD x 1 / mSATA SSD x 1                                             |        | mSATA SSD x 1 |
| OS Support             | Windows® 7, Windows® 10, Linux®                                               |        |               |
| Security               | Trusted Platform Module, Smart Card Reader (optional), RFID Reader (optional) |        |               |
| Wireless Communication | 802.11a/b/g/n/ac(optional), Bluetooth 4.0 (optional)                          |        |               |
| Speaker                | 3W x 2                                                                        | 2W x 2 | 2W x 2        |
| Power Requirement      | DC 12~24V / Power over Ethernet (optional)                                    |        | DC 12V        |

## Display

|                                      |                                           |                                           |                                           |
|--------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Size/ Type                           | 15.6" LCD                                 | 11.6" LCD                                 | 10.1" LCD                                 |
| Max. Resolution                      | 1920 x 1080                               | 1366 x 768                                | 1280 x 800                                |
| Luminance (cd/m <sup>2</sup> ) (TYP) | 300 nits                                  | 220 nits                                  | 300 nits                                  |
| Viewing Angle                        | 160°(H)/140°(V)                           | 170°(H)/170°(V)                           | 170°(H)/170°(V)                           |
| Contrast Ratio                       | 700:1                                     | 800:1                                     | 1300:1                                    |
| Touch Screen                         | 5-Wire Resistive / Capacitive Multi-Touch | 5-Wire Resistive / Capacitive Multi-Touch | 5-Wire Resistive / Capacitive Multi-Touch |

## I/O

|              |                          |                          |                          |
|--------------|--------------------------|--------------------------|--------------------------|
| USB          | USB2.0 x 4               | USB3.0 x 1 , USB2.0 x 4  | USB 3.0 x 1, USB 2.0 x 3 |
| Serial Ports | Isolated RS-232 x 1      | Isolated RS-232 x 1      | RS-232 x 1               |
| Ethernet     | Isolated Gigabit LAN x 2 | Isolated Gigabit LAN x 2 | Gigabit LAN x 2          |
| Video Out    | N/A                      | N/A                      | HDMI x 1 (optional)      |
| Audio        | Mic, Line-out            | Mic, Line-out            | N/A                      |

## Mechanical and Environmental

|                       |                                                                                                                                                                        |                           |                           |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|
| Power Consumption     | Full loading: 19 Watts                                                                                                                                                 | Full loading: 22 Watts    | Full loading:20 Watts     |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                               | 0°C ~ 40°C(32°F ~ 104°F)  | 0°C ~ 40°C(32°F ~ 104°F)  |
| Storage Temperature   | -20°C ~60°C(-4°F ~ 140°F)                                                                                                                                              | -20°C ~60°C(-4°F ~ 140°F) | -20°C ~60°C(-4°F ~ 140°F) |
| Mounting              | VESA 75/100 mm                                                                                                                                                         | VESA 75/100 mm            | VESA 75/100 mm            |
| Dimension             | 398 x 265 x 39 mm                                                                                                                                                      | 300 x 208 x 39 mm         | 262 x 191 x 45 mm         |
| Packing Size          | 721 x 224 x 464 mm                                                                                                                                                     | 540 x 230 x 370 mm        | 402 x 190 x 335 mm        |
| Gross Weight          | 6.5 kg (14.33lb)                                                                                                                                                       | 4kg (8.82lb)              | 3.7kg (8.2lb)             |
| Net Weight            | 2.8kg(6.2lb)                                                                                                                                                           | 1.5kg (3.3lb)             | 1.2kg(2.6lb)              |
| Certifications        | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B / UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |                           |                           |

# Patient Monitoring Accessory Selection



**OPM-H02S**  
Desktop Stand

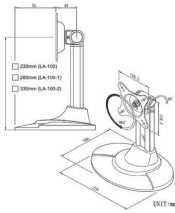


**OPM-H01S**  
Desktop Stand

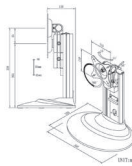


**OPM-H10A**  
Gas Spring Arm

- Apply to 10"~22" Slim Medical Panel PC, Medical Display
- Spinning around high and mighty; able to bear 5kg to 12kg.
- Providing 2 mounting space in coordination with VESA standard: 75mm x 75mm and 100mm x 100mm



- Apply to 15" ~ 24" Medical Station, Slim Medical Panel PC, Medical Display
- Spinning around high and mighty; able to bear 5 kg to 15kg.
- Providing 2 mounting space in coordination with VESA standard: 75mm x 75mm and 100mm x 100mm
- The angle of view was designed adjustable for clear vision
- Flexible angle create brand-new atmosphere of monitors.
- Up-to-date choice in the multimedia era.
- Show yourself and break the limit of environment.
- Regulate as you want to make more space.



- Clamp type can fit all kind of mobile car.
- Weight capacity : 2~8KG (4.4~17.6lb)
- Clockwise / counterclockwise rotation



**OPM-H12A**  
VESA Mount Power Adapter Holder

- Design for 1255301202 & 1255301204 with 120W
- Apply to 15" to 24" Medical Station, Slim Medical Panel PC
- Providing 2 mounting spaces in coordination with VESA standard: 75mm x 75mm and 100mm x 100mm



## Medical AIO Solution

Medical AIO is a highly cost effective solution. Intel Core i7 processor, up to 32GB DDR4 and capacitive multi-touch screen enhance the efficiency of hospital applications. Fanless design keeps environment quiet and reduces the effort in cleaning. With one PCI Express[x1] slot, any standard PCI Express[x1] card such as isolated RS-232 card and video capture card can be installed to enhance capability.

### Key Features:

- 19"/22"/24"LCD with resistive touch or capacitive multi-touch
- Trusted Platform Module and Smart Card Reader for Security Enhancement
- One PCI Express[x1] or [x4] Slot
- Fanless Design for Quiet and Easy Maintenance
- Reading Light



**MATE-2405**  
24" Fanless Core i7 Medical AIO

**MATE-2205**  
22" Fanless Core i7 Medical AIO

## System

|                        |                                                                                       |                                                                                       |
|------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Processor              | Intel® 8th/9th Generation Core i7 / i5 / i3 Processor                                 | Intel® 8th/9th Generation Core i7 / i5 / i3 Processor                                 |
| System Memory          | Supports Dual Channel DDR4 2666 SODIMM up to 32GB                                     | Supports Dual Channel DDR4 2666 SODIMM up to 32GB                                     |
| OS support             | Windows® 10, Linux®                                                                   | Windows® 10, Linux®                                                                   |
| Expansion Interface    | PCI Express[x4] (optional)                                                            |                                                                                       |
| Security               | Trusted Platform Module<br>RFID Reader (optional)<br>Smart Card Reader x 1 (optional) | Trusted Platform Module<br>RFID Reader (optional)<br>Smart Card Reader x 1 (optional) |
| Wireless Communication | 802.11 ac/a/b/g/n(optional), Bluetooth 4.1/5 (optional)                               | 802.11 ac/a/b/g/n(optional), Bluetooth 4.1/5 (optional)                               |

## Display

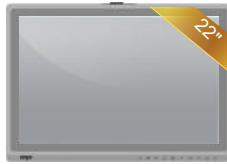
|              |                                           |                                           |
|--------------|-------------------------------------------|-------------------------------------------|
| Size         | 24" MVA LCD                               | 22" MVA LCD                               |
| Resolution   | 1920 x 1080                               | 1920 x 1080                               |
| Brightness   | 250 nits                                  | 250 nits                                  |
| Touch Screen | 5-Wire Resistive / Capacitive Multi-Touch | 5-Wire Resistive / Capacitive Multi-Touch |

## I/O

|             |                                                                     |                                                                     |
|-------------|---------------------------------------------------------------------|---------------------------------------------------------------------|
| USB         | USB 3.0 x 4, USB 2.0 x 2                                            | USB 3.0 x 4, USB 2.0 x 2                                            |
| Serial Port | RS-232 x 2                                                          | RS-232 x 2                                                          |
| Ethernet    | 1.5KV Isolated Gigabit LAN x 2                                      | 1.5KV Isolated Gigabit LAN x 2                                      |
| Video Out   | Display Port x1, HDMI x1<br>(Supports resolution up to 3840 x 2160) | Display Port x1, HDMI x1<br>(Supports resolution up to 3840 x 2160) |
| Audio       | Mic-in, Line-out                                                    | Mic-in, Line-out                                                    |

## Mechanical and Environmental

|                       |                                                                                                                                                                            |                                                                                                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Temperature | 0°C ~ 35°C(32°F ~ 95°F)                                                                                                                                                    | 0°C ~ 35°C(32°F ~ 95°F)                                                                                                                                                    |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 |
| Mounting VESA         | 75/100 mm                                                                                                                                                                  | 75/100 mm                                                                                                                                                                  |
| Degree of Protection  | IP65 in the front ; IP54 in the back                                                                                                                                       | IP65 in the front ; IP54 in the back                                                                                                                                       |
| Dimension             | 600 x 415 x 65 mm                                                                                                                                                          | 546 x 352 x 66 mm                                                                                                                                                          |
| Packing Size          | 790 x 220 x 550 mm                                                                                                                                                         | 750 x 220 x 490 mm                                                                                                                                                         |
| Gross Weight          | 14 kg (30.86 lb)                                                                                                                                                           | 12 kg (26.45 lb)                                                                                                                                                           |
| Net Weight            | 9.2 kg(20.28 lb)                                                                                                                                                           | 8 kg (17.63 lb)                                                                                                                                                            |
| Certification         | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |



### MATE-2204

22" Fanless AMD Ryzen Embedded V1000  
Medical AIO

### MATE-1903

19" Fanless Core i7 Medical AIO

## System

|                        |                                                                                       |                                                                                       |
|------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Processor              | AMD Ryzen Embedded V1605B Processor                                                   | Intel® 6th Generation Core i7 / i5 / i3 Processor                                     |
| System Memory          | Supports Dual Channel DDR4 2400 SODIMM up to 32GB                                     | Supports Dual Channel DDR4 2133 SODIMM up to 32GB                                     |
| OS support             | Windows® 10, Linux®                                                                   | Windows® 7, Windows® 10, Linux®                                                       |
| Expansion Interface    | PCI Express[x4] (optional)                                                            | PCI Express[x1] (optional)                                                            |
| Security               | Trusted Platform Module<br>RFID Reader (optional)<br>Smart Card Reader x 1 (optional) | Trusted Platform Module<br>RFID Reader (optional)<br>Smart Card Reader x 1 (optional) |
| Wireless Communication | 802.11 ac/a/b/g/n(optional), Bluetooth 4.1/5 (optional)                               | 802.11 ac/a/b/g/n(optional), Bluetooth 4.1/5 (optional)                               |

## Display

|              |                                           |                                                  |
|--------------|-------------------------------------------|--------------------------------------------------|
| Size         | 22" MVA LCD                               | 19" TN LCD                                       |
| Resolution   | 1920 x 1080                               | 1280 x 1024                                      |
| Brightness   | 250 nits                                  | 250 nits                                         |
| Touch Screen | 5-Wire Resistive / Capacitive Multi-Touch | 5-Wire Resistive / Capacitive Multi-Touch Screen |

## I/O

|             |                                                                                           |                                                                     |
|-------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| USB         | USB 3.1 x 3, USB 2.0 x 2                                                                  | USB 3.0 x 4, USB 2.0 x 2                                            |
| Serial Port | RS-232 x 2                                                                                | RS-232 x 2                                                          |
| Ethernet    | 1.5KV Isolated Gigabit LAN x 2                                                            | 1.5KV Isolated Gigabit LAN x 2                                      |
| Video Out   | Display Port x1, HDMI x1,<br>USB 3.1 Type-C x1<br>(Supports resolution up to 3840 x 2160) | Display Port x1, HDMI x1<br>(Supports resolution up to 3840 x 2160) |
| Audio       | Mic-in, Line-out                                                                          | Mic-in, Line-out                                                    |

## Mechanical and Environmental

|                       |                                                                                                                                                                            |                                                                                                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Temperature | 0°C ~ 35°C(32°F ~ 95°F)                                                                                                                                                    | 0°C ~ 35°C(32°F ~ 95°F)                                                                                                                                                    |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 |
| Mounting VESA         | 75/100 mm                                                                                                                                                                  | 75/100 mm                                                                                                                                                                  |
| Degree of Protection  | IP65 in the front ; IP54 in the back                                                                                                                                       | IP65 in the front ; IP54 in the back                                                                                                                                       |
| Dimension             | 546 x 352 x 66 mm                                                                                                                                                          | 450 x 388 x 66 mm                                                                                                                                                          |
| Packing Size          | 750 x 220 x 490 mm                                                                                                                                                         | 640 x 220 x 520 mm                                                                                                                                                         |
| Gross Weight          | 12 kg (26.45 lb)                                                                                                                                                           | 11 kg (24.25 lb)                                                                                                                                                           |
| Net Weight            | 8 kg (17.63 lb)                                                                                                                                                            | 7.5kg (16.53b)                                                                                                                                                             |
| Certification         | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |



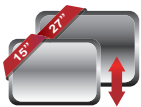
## Medical Display

Are you still looking for suitable displays for all kinds of requirement in hospital?  
Do you still wonder where the solutions are?

The Onyx slim display provides full product functions and complete sizes of LCD Monitor to fulfill the requirements of various hospital applications. Analog and digital ports allow user to choose their solutions by situation. Digital port prevents signal distortion during transmission while viewing medical images. All displays have touchscreen function and high definition Graphic quality.

### Key Features:

- Versatile LCD size
- High Speed Graphic Performance
- Photo Sensor achieved Stable and Consistent Image
- CE/ FCC, Class B Passed 18, EN60601-1:2006



Small to Large LCD  
Display Choices



Fabulous Touch  
experience



Green and Low power  
consumption



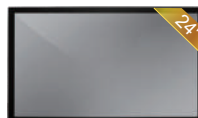
Long term product life  
time support



Flexibility for  
customization request  
to medical equipment



**MEDDP-627**  
27" LED LCD Monitor



**MEDDP-624**  
24" LED LCD Monitor



**MEDDP-722**  
21.5" LED LCD Monitor

**New**

## Application

## Main Specification

|                             |                                               |                     |                     |
|-----------------------------|-----------------------------------------------|---------------------|---------------------|
| Size                        | 27"                                           | 23.8"               | 21.5"               |
| Resolution                  | Full HD 1920 x 1080                           | Full HD 1920 x 1080 | Full HD 1920 x 1080 |
| Max. Colors                 | 16.7M                                         | 16.7M               | 16.7M               |
| White Luminance (Typ.)      | 350 nits                                      | 400 nits            | 250 nits            |
| Viewing Angle (CR=10)(Typ.) | 178°(H)/178°(V)                               | 178°(H)/178°(V)     | 178°(H)/178°(V)     |
| Contrast Ratio (Typ.)       | 3000:1                                        | 1000:1              | 3000:1              |
| Touch Screen                | Projective capacitive touch screen (optional) |                     |                     |

## System

|            |                                   |
|------------|-----------------------------------|
| OS Support | Windows®XP, Window® 7, Window® 10 |
|------------|-----------------------------------|

## IO

|             |                              |                              |                              |
|-------------|------------------------------|------------------------------|------------------------------|
| Audio       | Audio-in x 1                 | Audio-in x 1                 | Audio-in x 1                 |
| Serial Port | USB x 1 for touch controller | USB x 1 for touch controller | USB x 1 for touch controller |
| Signal      | DVI x 1, HDMI x 1, DP x 1    | DVI x 1, HDMI x 1, DP x 1    | DVI x 1, HDMI x 1, DP x 1    |
| Speaker     | 2W speaker x 2 on back side  | 2W speaker x 2 on back side  | 3W speaker x 2 on back side  |

## Mechanical and Environment

|                       |                                                                                          |                                                                                          |                                                                                             |
|-----------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Power Requirement     | DC12V / 5A power input                                                                   | DC12V / 5A power input                                                                   | DC12V / 5A power input                                                                      |
| Operating Temperature | 5°C ~ 40°C(41°F ~ 104°F)                                                                 | 5°C ~ 40°C(41°F ~ 104°F)                                                                 | 5°C ~ 40°C(41°F ~ 104°F)                                                                    |
| Storage Temperature   | -10°C ~ 60°C(14°F ~ 140°F)                                                               | -10°C ~ 60°C(14°F ~ 140°F)                                                               | -10°C ~ 60°C(14°F ~ 140°F)                                                                  |
| Storage Humidity      | 10%~90%@35°C, non-condensing                                                             | 10%~90%@35°C, non-condensing                                                             | 10%~90%@35°C, non-condensing                                                                |
| Dimension             | 647.8 x 388.7 x 63.4 mm                                                                  | 576 x 344.3 x 62.1 mm                                                                    | 546 x 352 x 55.1 mm                                                                         |
| Packing Size          | 730 x 300 x 560 mm                                                                       | 645 x 545 x 295 mm                                                                       | 570 x 478 x 260 mm                                                                          |
| Gross Weight          | 10.4kg (22.93lb)                                                                         | 8.6kg (19lb)                                                                             | 8.4kg (18.51lb)                                                                             |
| Net Weight            | 6.6kg (14.55lb)                                                                          | 6.4kg (14.11lb)                                                                          | 5.7kg (12.57lb)                                                                             |
| Certifications        | CE: EN 60601-1-2:2015(V4.0) ,<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B, | CE: EN 60601-1-2:2015(V4.0) ,<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B, | CE: EN 60601-1-2:2015(V4.0) ,<br>EN 60601-1:2006/<br>A1:2013(V3.1)<br>FCC: Part 18 Class B, |



**MEDDP-622**  
21.5" LED LCD Monitor



**MEDDP-615**  
15.6" Slim Medical LCD Monitor



**MEDDP-415**  
15" Slim Medical LCD Monitor

## Application

## Main Specification

|                             |                                               |                     |               |
|-----------------------------|-----------------------------------------------|---------------------|---------------|
| Size                        | 21.5"                                         | 15.6"               | 15"           |
| Resolution                  | Full HD 1920 x 1080                           | Full HD 1920 x 1080 | 1024 x 768    |
| Max. Colors                 | 16.7M                                         | 16.7M               | 16.2M         |
| White Luminance (Typ.)      | 350 nits                                      | 300 nits            | 250 nits      |
| Viewing Angle (CR=10)(Typ.) | 178°(H)/178°(V)                               | 85°(H)/85°(V)       | 80°(H)/70°(V) |
| Contrast Ratio (Typ.)       | 1000:1                                        | 700:1               | 700:1         |
| Touch Screen                | Projective capacitive touch screen (optional) |                     |               |

## System

|            |                                     |
|------------|-------------------------------------|
| OS Support | Windows®XP, Windows® 7, Windows® 10 |
|------------|-------------------------------------|

## IO

|             |                              |                              |                              |
|-------------|------------------------------|------------------------------|------------------------------|
| Audio       | Audio-in x 1                 | Audio-in x 1                 | Audio-in x 1                 |
| Serial Port | USB x 1 for touch controller | USB x 1 for touch controller | USB x 1 for touch controller |
| Signal      | DVI x 1, HDMI x 1, DP x 1    | VGA x 1, HDMI x 1            | VGA x 1, HDMI x 1            |
| Speaker     | 2W speaker x 2 on back side  | 1 W speaker x 2 on back side | 1 W speaker x 2 on back side |

## Mechanical and Environment

|                       |                                                                                          |                                                                                                                                                                                                                                    |                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Power Requirement     | DC12V / 5A power input                                                                   | DC12V / 5A power input                                                                                                                                                                                                             | DC12V / 5A power input                                                                                 |
| Operating Temperature | 5°C ~ 40°C(41°F ~ 104°F)                                                                 | 5°C ~ 40°C(41°F ~ 104°F)                                                                                                                                                                                                           | 5°C ~ 40°C(41°F ~ 104°F)                                                                               |
| Storage Temperature   | -10°C ~ 60°C(14°F ~ 140°F)                                                               | -10°C ~ 60°C(14°F ~ 140°F)                                                                                                                                                                                                         | -10°C ~ 60°C(14°F ~ 140°F)                                                                             |
| Storage Humidity      | 10%~90%@35°C, non-condensing                                                             | 10%~90%@35°C, non-condensing                                                                                                                                                                                                       | 10%~90%@35°C, non-condensing                                                                           |
| Dimension             | 527.3 x 348.5 x 55.1 mm                                                                  | 387.8 x 232.9 x 38.4 mm                                                                                                                                                                                                            | 352.5x 276.1 x 45.0 mm                                                                                 |
| Packing Size          | 570 x 478 x 260 mm                                                                       | 425.3 x 269.2 x 45.6 mm                                                                                                                                                                                                            | 402.5x 326.1 x 80.0 mm                                                                                 |
| Gross Weight          | 8.4kg (18.51lb)                                                                          | 6.5 kg (14.33lb)                                                                                                                                                                                                                   | 2.6kg (5.73 lb)                                                                                        |
| Net Weight            | 5.7kg (12.57lb)                                                                          | 2.8 kg (6.2lb)                                                                                                                                                                                                                     | 3.7 kg (8.16lb)                                                                                        |
| Certifications        | CE: EN 60601-1-2:2015(V4.0) ,<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B, | CE: EN 60601-1-2:2015(V4.0), EN 60950-1<br>EN 60601-1:2006/A1:2013/ A12:2014 (V3.1)<br>EN 62366:2007 + A1:2014 (V1.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0)<br>EN 60601-1:2006/ A1:2013(V3.1)<br>FCC: Part 18 Class B, Part 15 Class B |



## MEDPC Series for Medical Equipment

The Onyx MEDPC series shortens your product time to market and helps you to win more market share. Featuring a rich and diversified medical computer platform, the MEDPC series offers a more powerful fanless box PC with flexible I/O customization options.

### Key Features:

- All system with flat shape outline, easy to clean
- Support dual display output
- Variety IO, High speed USB 3.0, COM ports, GbE LAN, digital / analogue video output



Ready-to-use Medical  
Certified Platform



Latest Off-the-shelf  
Processor for Selection



Unique Medical  
Device Functions



5-7 Year Longevity  
Lifecycle Support



New

### MEDPC-9200

High Performance Medical Grade Fanless  
Box PC with  
Intel® 6/7th Generation Core™i Series



New

### MEDPC-9300

High Performance Medical Grade Box PC  
with AMD Ryzen™ Embedded V1000



## Application

Hospital Information System, Medical equipment, Drug Store, Lab



## System specification

|                     |                                                                                 |                                                                                |
|---------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Processor           | Intel® 7th/6th Generation Core™ i7/<br>Core™i5/Core™ i3                         | AMD Ryzen™ Embedded V1000 V1807B<br>/ V1605                                    |
| System Memory       | Supports Dual Channel DDR4 SODIMM<br>up to 32 GB                                | DDR4 SODIMM x2, Max. 32GB (V1807B)<br>DDR4 SODIMM x2, Max. 24GB (V1605B)       |
| OS Support Chipset  | Windows® 7, Windows® 8, Windows® 10,<br>Linux® (optional)                       | Win 10 IoT Enterprise 64-bit / Linux                                           |
| Expansion Interface | PCI-Express [x1] x 1, Half-size Mini-Card<br>x1,<br>Full/Half-size Mini-Card x1 | 1x PCI-E(8x), M.2 (E-key, type:2230), 1x M.2<br>(B-key, type:2280)1x Mini-Card |
| Storage Disk Drive  | 2.5" SATA SSD x 1                                                               | 2.5" SATA SSD x 1, M.2 (B-key, Type 2280) x1                                   |



## Graphic Specification

|         |             |     |
|---------|-------------|-----|
| Chipset | Intel® H110 | N/A |
|---------|-------------|-----|



## I/O

|             |                            |                                            |
|-------------|----------------------------|--------------------------------------------|
| Video       | Display Port x 1, HDMI x 1 | Display port x 1, HDMI x 1, USB Type C x 1 |
| Audio       | Mic-in, Line-out           | Mic-in, Line-out                           |
| USB         | USB 3.0 x 4, USB 2.0 x 2   | USB 3.1 x 2 USB 2.0 x 2,<br>USB TypeC x 1  |
| Serial Port | RS232 x 2                  | RS232 x 2                                  |
| Ethernet    | Gigabit LAN x 2            | Gigabit LAN x 2                            |



## Mechanical and Environmental

|                       |                                                                                                                                                                                                 |                                                                        |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Power Requirement     | DC12V power input                                                                                                                                                                               | DC12V power input                                                      |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                                        | 0°C ~ 40°C(32°F ~ 104°F)                                               |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                                      |                                                                        |
| Dimension             | 197x197x59.5 mm for main layer<br>197x197x44 mm for extension layers                                                                                                                            | 197x197x59.5 mm for main layer<br>197x197x44 mm for extension layers   |
| Packing Size          | 300 x 280 x 95 mm                                                                                                                                                                               | 300 x 280 x 95 mm                                                      |
| Gross Weight          | 3.3 kg (7.25 lb) in the single layer,<br>4.0 kg (7.25 lb) in two layer                                                                                                                          | 3.3 kg (7.25 lb) in the single layer,<br>4.0 kg (7.25 lb) in two layer |
| Net Weight            | 2.5 kg in the single layer,<br>3.7 kg in two layers                                                                                                                                             | 2.5 kg in the single layer,<br>3.7 kg in two layers                    |
| Certifications        | CE: EN60601-1-2:2015(V4.0), EN60601-1:2006/ A1:2013/A12:2014 (V3.1)<br>FCC: Part 18 Class B , Part 15 Class B<br>UL: ANSI/AAMI ES60601-1:2012(V3.1)<br>CUL: CAN/CSA-C22.2 No.60601-1:2014(V3.1) |                                                                        |



### MEDPC-5700

High Performance Medical Grade Box PC

### MEDPC-2700

Fanless Quad Core Box PC

**Application** Hospital Information System, Medical equipmetn, Drug Store, Lab

### System specification

|                     |                                                                                        |                                               |
|---------------------|----------------------------------------------------------------------------------------|-----------------------------------------------|
| Processor           | Intel® Quad Core i7-4770TE<br>Intel® Quad Core i5-4570TE<br>Intel® Quad Core i3-4370TE | Intel® Cherry Trail x5-Z8350 SoC              |
| System Memory       | Supports Dual Channel DDR3 SODIMM up to 16GB                                           | DDR3L on board up to 4GB, default support 2GB |
| OS Support Chipset  | Windows® 7, Windows® 8, Linux® (optional) ,Windows® 10                                 | Windows®10,Android 6.0                        |
| Expansion Interface | Mini Card x2 [full x1,halfx1]                                                          | N/A                                           |
| Storage Disk Drive  | 2.5" SATA HDD / SSD x 1                                                                | emmc on board, default support 32GB           |

### Graphic Specification

|         |                    |                    |
|---------|--------------------|--------------------|
| Chipset | Intel® HD Graphics | Intel® HD Graphics |
|---------|--------------------|--------------------|

### I/O

|             |                            |                 |
|-------------|----------------------------|-----------------|
| Video       | Display Port x 1, HDMI x 1 | HDMI x 1        |
| Audio       | Mic-in, Line-out           | N/A             |
| USB         | USB 3.0 x 4 USB 2.0 x 4    | USB 2.0 x 4     |
| Serial Port | N/A                        | N/A             |
| Ethernet    | Gigabit LAN x 2            | Gigabit LAN x 1 |

### Mechanical and Environmental

|                       |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Requirement     | DC12~24V power input                                                                                                                                                                                                                               | DC 5V power input                                                                                                                                                                                                                                  |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                                                                                           | 0°C ~ 30 °C(32°F ~86°F)                                                                                                                                                                                                                            |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                    |
| Dimension             | 185 x 194 x 40 mm                                                                                                                                                                                                                                  | 131 x 97.8 x 32 mm                                                                                                                                                                                                                                 |
| Packing Size          | 255 x 160 x 275 mm                                                                                                                                                                                                                                 | 340 x 232 x 66 mm                                                                                                                                                                                                                                  |
| Gross Weight          | 2.9kg (6.4lb)                                                                                                                                                                                                                                      | 2.9kg (6.4lb)                                                                                                                                                                                                                                      |
| Net Weight            | 1.5kg (3.3lb)                                                                                                                                                                                                                                      | 1.5kg (3.3lb)                                                                                                                                                                                                                                      |
| Certifications        | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1), EN 300 328 (V2.1.1), EN 301 893 (V2.1.1)<br>FCC: Part 18 Class B, Part 15 Class B, Part 15 C/E<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1), EN 300 328 (V2.1.1), EN 301 893 (V2.1.1)<br>FCC: Part 18 Class B, Part 15 Class B, Part 15 C/E<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |



**MEDPC-2100**  
Fanless Quad Core Box PC



**MEDPC-2000**  
Fanless Quad Core Box PC

**Application** Hospital Information System, Medical equipmetn, Drug Store, Lab

**System specification**

|                     |                                     |                                     |
|---------------------|-------------------------------------|-------------------------------------|
| Processor           | Intel® Quad Core Celeron J1900 2GHz | Intel® Quad Core Celeron J1900 2GHz |
| System Memory       | 2GB DDR3 up to 8GB                  | 2GB DDR3 up to 8GB                  |
| OS Support Chipset  | Windows® 7, Windows® 10             | Windows® 7, Windows® 8, Windows® 10 |
| Expansion Interface | Mini Card Slot x 1 [half size]      | Mini Card x 2 [full x 1, half x 1]  |
| Storage Disk Drive  | Cfast Card x 1                      | Cfast Card                          |

**Graphic Specification**

|         |                    |                    |
|---------|--------------------|--------------------|
| Chipset | Intel® HD Graphics | Intel® HD Graphics |
|---------|--------------------|--------------------|

**I/O**

|             |                           |                           |
|-------------|---------------------------|---------------------------|
| Video       | VGA x 1, HDMI x 1         | VGA x 1, HDMI x 1         |
| Audio       | Line out, Mic-in          | Line out, Mic-in          |
| USB         | USB 2.0 x 3 , USB 3.0 x 1 | USB 2.0 x 3 , USB 3.0 x 1 |
| Serial Port | RS232 x1                  | RS232 x2                  |
| Ethernet    | Gigabit LAN x 1           | Gigabit LAN x 2           |

**Mechanical and Environmental**

|                       |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Requirement     | DC 12V power input                                                                                                                                                                                                                              | DC 12V power input                                                                                                                                                                                                                              |
| Operating Temperature | 0°C ~ 40 °C(32°F ~104°F)                                                                                                                                                                                                                        | 0°C ~ 40 °C(32°F ~104°F)                                                                                                                                                                                                                        |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                 |
| Dimension             | 196 x 131 x 50 mm                                                                                                                                                                                                                               | 214 x 138.9 x 72 mm                                                                                                                                                                                                                             |
| Packing Size          | 305 x 225 x 230 mm                                                                                                                                                                                                                              | 305 x 225 x 230 mm)                                                                                                                                                                                                                             |
| Gross Weight          | 2.4kg (5.28lb)                                                                                                                                                                                                                                  | 2.7kg (5.95lb)                                                                                                                                                                                                                                  |
| Net Weight            | 1.2Kg (2.64lb)                                                                                                                                                                                                                                  | 1.7Kg (3.75lb)                                                                                                                                                                                                                                  |
| Certifications        | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/A1:2013(V3.1), EN 300 328 (V2.1.1), EN 301 893 (V2.1.1)<br>FCC: Part 18 Class B, Part 15 Class B, Part 15 C/E<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0), EN 60601-1:2006/A1:2013(V3.1), EN 300 328 (V2.1.1), EN 301 893 (V2.1.1)<br>FCC: Part 18 Class B, Part 15 Class B, Part 15 C/E<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |



## Healthcare Infotainment

Onyx Infotainment Series are offered in 10.1"/11.6"/15.6"/18.5" touch panel LCDs and are all low power high performance all-in-one terminals with high brightness, wide viewing angles, and anti-microbial design. From the high performance Intel® processor to power saving Atom Based CPUs, Onyx Infotainment series allows customers to select from a wide variety of bedside solutions variety bedside solution that best fits their need and budget.

### Key Features:

- Improving the quality of patient care
- Providing right care for individual patient
- Reducing work load for medical staffs
- Reducing human error
- Help hospital generate new revenues
- Make patients hospital stay more comfortable



## ONYX-BE182

18.5" Fanless Bedside Infotainment Touch Terminal

### Application

Ward - Bedside Infotainment, Nursing Station / Cart

### Main Specification

|                        |                                                                                        |
|------------------------|----------------------------------------------------------------------------------------|
| Processor              | Intel® Celeron J1900 Quad Core 2.42GHz                                                 |
| System Memory          | Supports DDR3 SODIMM up to 8GB                                                         |
| OS Support             | Windows® 7, Windows® 10, Linux                                                         |
| Expansion              | Mini Card x 2                                                                          |
| Storage Disk Drive     | 2.5" SATA Hard Disk Drive x 1 / SSD x 1                                                |
| Security               | Trusted Platform Module, Smart Card Reader (optional), MSR (optional), RFID (optional) |
| Wireless Communication | 802.11b/g/n(optional), Bluetooth 4.0 (optional)                                        |
| Speaker                | 1W x 2                                                                                 |
| Camera                 | 2 Megapixels                                                                           |
| Power Requirement      | DC 12~24V                                                                              |

### Display

|              |                                                     |
|--------------|-----------------------------------------------------|
| Size         | 18.5" (16:9) Color TFT LCD                          |
| Resolution   | 1366 x 768                                          |
| Touch Screen | Projected Capacitive Touch / 5-Wire Resistive Touch |

### I/O

|             |                                     |
|-------------|-------------------------------------|
| USB         | USB 2.0 x 4                         |
| Serial Port | Isolated RS-232 x 1                 |
| Ethernet    | Isolated Gigabit LAN x 2            |
| Speaker     | 3W x 2                              |
| Audio       | 1 x Line out / MIC in/ Internal MIC |

### Mechanical and Environment

|                       |                                       |
|-----------------------|---------------------------------------|
| Infection Control     | Anti-Bacteria (optional)              |
| Power Requirement     | DC 12V ~24V                           |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)              |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)            |
| Degree of protection  | Front Panel: IP65; Whole Unit: IPX1   |
| Mounting              | VESA 75/100 mm                        |
| Dimension             | 463 x 336 x 48 mm                     |
| Packing Size          | 721 x 224 x 464 mm                    |
| Gross Weight          | 9kg (19.84 lb)                        |
| Net Weight            | 4.2 kg(9.26b)                         |
| Certifications        | CE/ FCC Class B, UL60601-1, EN60601-1 |



**ONYX-1531**  
15.6" Fanless Bedside Infotainment  
Touch Terminal



**ONYX-1222**  
11.6" Fanless Bedside Infotainment  
Touch Terminal

**Application** Ward - Bedside Infotainment, Nursing Station / Cart

## Main Specification

|                        |                                                                           |                                                                           |
|------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Processor              | Intel® Celeron J1900 Quad Core 2.4GHz                                     | Intel® Celeron J1900 Quad Core 2.4GHz                                     |
| System Memory          | Supports DDR3L SODIMM up to 8GB                                           | Supports DDR3L SODIMM up to 8GB                                           |
| OS Support             | Windows® 7, Windows® 10, Linux                                            | Windows® 7, Windows® 10, Linux                                            |
| Expansion              | Mini Card x 1                                                             | Mini Card x 1                                                             |
| Storage Disk Drive     | 2.5" SATA SSD x 1 / mSATA SSD x 1                                         | 2.5" SATA SSD x 1 / mSATA SSD x 1                                         |
| Security               | Trusted Platform Module, Smart Card Reader x 1 (optional), RFID(optional) | Trusted Platform Module, Smart Card Reader x 1 (optional), RFID(optional) |
| Wireless Communication | 802.11a/b/g/n/ac(optional), Bluetooth 4.0 (optional)                      | 802.11a/b/g/n/ac(optional), Bluetooth 4.0 (optional)                      |
| Speaker                | 3W x 2                                                                    | 2W x 2                                                                    |
| Power Requirement      | DC 12-24V / Power over Ethernet (optional)                                | DC 12-24V / Power over Ethernet (optional)                                |

## Display

|              |                                           |                                           |
|--------------|-------------------------------------------|-------------------------------------------|
| Size         | 15.6" LCD                                 | 11.6" LCD                                 |
| Resolution   | 1920 x 1080                               | 1366 x 768                                |
| Touch Screen | 5-Wire Resistive / Capacitive Multi-Touch | 5-Wire Resistive / Capacitive Multi-Touch |

## I/O

|             |                          |                          |
|-------------|--------------------------|--------------------------|
| USB         | USB 2.0 x 4              | USB3.0 x 1 , USB2.0 x 4  |
| Serial Port | Isolated RS-232 x 1      | Isolated RS-232 x 1      |
| Ethernet    | Isolated Gigabit LAN x 2 | Isolated Gigabit LAN x 2 |
| Speaker     | N/A                      | N/A                      |
| Audio       | Mic, Line-out            | Mic, Line-out            |

## Mechanical and Environment

|                       |                                                                                                                                                                               |                                                                                                                                                                            |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infection Control     | Anti-Bacteria (optional)                                                                                                                                                      | Anti-Bacteria (optional)                                                                                                                                                   |
| Power Requirement     | Full loading: 19 Watts                                                                                                                                                        | Full loading:22 Watts                                                                                                                                                      |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                      | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                   |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                    | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 |
| Degree of protection  | Front Panel: IP65; Whole Unit: IPX1                                                                                                                                           | Front Panel: IP65; Whole Unit: IPX1                                                                                                                                        |
| Mounting              | VESA 75/100 mm                                                                                                                                                                | VESA 75/100 mm                                                                                                                                                             |
| Dimension             | 398 x 265 x 39 mm                                                                                                                                                             | 300 x 208 x 39 mm                                                                                                                                                          |
| Packing Size          | 721 x 224 x 464 mm                                                                                                                                                            | 540 x 230 x 370 mm                                                                                                                                                         |
| Gross Weight          | 6.5 kg (14.33lb)                                                                                                                                                              | 4kg (8.82lb)                                                                                                                                                               |
| Net Weight            | 2.8kg(6.2lb)                                                                                                                                                                  | 1.5kg (3.3lb)                                                                                                                                                              |
| Certifications        | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2<br>No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |



**ONYX-BE153R**  
15.6" Fanless Android Bedside Infotainment  
Touch Terminal



**ONYX-BE122R**  
11.6" Fanless Android Bedside Infotainment  
Touch Terminal



## Application

Ward - Bedside Infotainment, Nursing Station / Cart



## Main Specification

|                        |                                          |                                          |
|------------------------|------------------------------------------|------------------------------------------|
| Processor              | Rockchip RK3288 ARM Cortex-A17 QC 1.6GHz | Rockchip RK3288 ARM Cortex-A17 QC 1.6GHz |
| System Memory          | DDR3L 2 GB                               | DDR3L 2 GB                               |
| OS Support             | Android6.0                               | Android6.0                               |
| Expansion              | Mini PCIe Slot x 1                       | Mini PCIe Slot x 1                       |
| Storage Disk Drive     | 16 GB eMMC                               | 16 GB eMMC                               |
| Security               | 13.56MHz RFID Reader (Optional)          | 13.56MHz RFID Reader (Optional)          |
| Wireless Communication | 802.11 ac + BT 4.1                       | 802.11 ac + BT 4.1                       |
| Speaker                | 2W x2                                    | 2W x2                                    |
| Camera                 | 5 Megapixels                             | 5 Megapixels                             |
| Power Requirement      | DC 12V / POE                             | DC 12V / POE                             |



## Display

|                 |                            |                            |
|-----------------|----------------------------|----------------------------|
| Size / Type     | 15.6" (16:9) Color TFT LCD | 11.6" (16:9) Color TFT LCD |
| Max. Resolution | 1920 x 1080 FHD            | 1366 x 768 HD              |
| Luminance       | 220 nits                   | 250nits                    |
| Touch Screen    | Projected Capacitive Touch | Projected Capacitive Touch |



## I/O

|              |                                              |                                              |
|--------------|----------------------------------------------|----------------------------------------------|
| USB          | USB 2.0 (Type-A) x2                          | USB 2.0 (Type-A) x2                          |
| Serial Port  | RS-232 x1 (Optional)                         | RS-232 x1 (Optional)                         |
| Ethernet     | Gigabit LAN x1 (Support Power over Ethernet) | Gigabit LAN x1 (Support Power over Ethernet) |
| Audio        | 3.5mm Phone Jack x1                          | 3.5mm Phone Jack x1                          |
| Video        | HDMI Out x1 (Optional)                       | HDMI Out x1 (Optional)                       |
| SD Card Slot | Micro SD x1 (Optional)                       | Micro SD x1 (Optional)                       |
| DC-In        | DC-In Jack x1                                | DC-In Jack x1                                |



## Mechanical and Environment

|                       |                                                                                                                                                                            |                                                                                                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infection Control     | Anti-Bacteria (Optional)                                                                                                                                                   | Anti-Bacteria (Optional)                                                                                                                                                   |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                   | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                   |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 |
| Degree of protection  | Front Panel: IP65, Whole Unit: IP54                                                                                                                                        | Front Panel: IP65, Whole Unit: IP54                                                                                                                                        |
| Mounting              | VESA 75/100 mm                                                                                                                                                             | VESA 75/100 mm                                                                                                                                                             |
| Dimension             | 397.8 x 268.0 x 42.3 mm                                                                                                                                                    | 299.9 x 204.9 x 38.9 mm                                                                                                                                                    |
| Packing Size          | 721 x 224 x 464 mm                                                                                                                                                         | 540 x 230 x 370 mm                                                                                                                                                         |
| Gross Weight          | 6.5 kg (14.33lb)                                                                                                                                                           | 4 kg (8.82lb)                                                                                                                                                              |
| Net Weight            | 2.8 kg (6.17lb)                                                                                                                                                            | 1.5 kg (3.3lb)                                                                                                                                                             |
| Certifications        | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |

\* Note: All specifications are subject to change without notice.



## ONYX-BE102R

10.1" Fanless Android Bedside Infotainment Touch Terminal



### Application

Ward - Bedside Infotainment, Nursing Station / Cart



### Main Specification

|                        |                                          |
|------------------------|------------------------------------------|
| Processor              | Rockchip RK3288 ARM Cortex A17 QC 1.6GHz |
| System Memory          | DDR3L 2GB                                |
| OS Support             | Android 6.0                              |
| Expansion              | Mini PCIe Slot x 1                       |
| Storage Disk Drive     | 16GB eMMC                                |
| Security               | 13.56MHz RFID Reader (optional)          |
| Wireless Communication | 802.11 ac + BT 4.1                       |
| Speaker                | 2W x2                                    |
| Camera                 | 5 Megapixels                             |
| Power Requirement      | DC 12V / POE                             |



### Display

|              |                            |
|--------------|----------------------------|
| Size         | 10.1" (16:9) Color TFT LCD |
| Resolution   | 1280 x 800                 |
| Luminance    | 400nits                    |
| Touch Screen | Projected Capacitive Touch |



### I/O

|              |                                                 |
|--------------|-------------------------------------------------|
| USB          | USB 2.0 (Type-A) x2                             |
| Serial Port  | RS-232 x1 (Optional)                            |
| Ethernet     | Gigabit LAN x1<br>(Support Power over Ethernet) |
| Audio        | 3.5mm Phone Jack x1                             |
| Video        | HDMI Out x1 (Optional)                          |
| SD Card Slot | Micro SD x1 (Optional)                          |
| DC-In        | DC-In Jack x1                                   |



### Mechanical and Environment

|                       |                                                                                                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infection Control     | Anti-Bacteria (Optional)                                                                                                                                                   |
| Operating Temperature | 0°C ~ 40°C(32°F ~ 104°F)                                                                                                                                                   |
| Storage Temperature   | -20°C ~ 60°C(-4°F ~ 140°F)                                                                                                                                                 |
| Degree of protection  | Front Panel: IP65, Whole Unit: IP54                                                                                                                                        |
| Mounting              | VESA 75/100 mm                                                                                                                                                             |
| Dimension             | 262.36 x191.10 x45 mm                                                                                                                                                      |
| Packing Size          | 402 x 190 x 335 mm                                                                                                                                                         |
| Gross Weight          | 3.7 kg (8.2lb)                                                                                                                                                             |
| Net Weight            | 1.2 kg (2.6lb)                                                                                                                                                             |
| Certifications        | CE: EN 60601-1-2:2015(V4.0),<br>EN 60601-1:2006/A1:2013(V3.1)<br>FCC: Part 18 Class B<br>UL: ANSI/AAMI ES60601-1:2012 (V3.1)<br>cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) |

# Healthcare Infotainment Accessory Selection



**OPM-H13A/H14A**  
Easi Wall Mount Swivel ARM



**OPM-H15A/H16A**  
Easi Ceiling Mount Swivel ARM

## Features

- Built in "Gas Spring" for easy movement
- Cable management
- Anti-bacteria coating (optional)

## Features

- Built in "Gas Spring" for easy movement
- Cable management
- Anti-bacteria coating (optional)

|                 | OPM-H13A-A1                                                | OPM-H14A-A1           | OPM-H15A-A1                                                | OPM-H06A-A1 |
|-----------------|------------------------------------------------------------|-----------------------|------------------------------------------------------------|-------------|
| Feature         | Long ARM                                                   |                       | Ceiling Mount                                              |             |
| Tile            | 20° up and 35° down (display)<br>20° up and 60° down (arm) |                       | 20° up and 35° down (display)<br>20° up and 60° down (arm) |             |
| Mounting Option | Wall Mount Type                                            |                       | Ceiling Mount Type                                         |             |
| VESA            | 75/100mm                                                   |                       | 75/100mm                                                   |             |
| Material        | Aluminum alloy and plastic cover                           |                       | Aluminum alloy and plastic cover                           |             |
| Pivot           | 180°, 370°, 270° (wall, arm, display)                      |                       | 270°, 370°, 270° (ceiling, arm, display)                   |             |
| Extension       | 1907mm                                                     |                       | 1927mm                                                     |             |
| Capacity        | 1~6Kg (2.2~13.2lbs)                                        | 6~12kg (13.2~26.4lbs) | 1~6Kg                                                      | 6~12kg      |



**OPM-H04A**  
Ergonomic Wall Mount Swivel ARM

## Features

- Durable and easy to clean
- Double Gas springs assisted for high vertical movement
- Fully cable managed

|                 |                                  |
|-----------------|----------------------------------|
| Feature         | Long ARM                         |
| Tile            | 20° up and 40° down              |
| Mounting Option | Wall Mount Type                  |
| Material        | Aluminum alloy and plastic cover |
| Arm swivel      | 180°                             |
| Overall reach   | 1700mm                           |
| Capacity        | 1~8Kg                            |



**OPM-T018**  
Smart VOIP Handset

## Features

- Extend Onyx Bedside Services closed to the Patients
- Foil keyboard designed for easy cleaning and infection control
- Integrate the hall sensor for auto detection of on and off hook event
- Lockable socket designed for the lost prevention
- Sample code and API available for easy programming of
- key mapping for different field applications

|                   |                                    |
|-------------------|------------------------------------|
| Interface         | USB 2.0 with RJ45 Socket           |
| Connection Cable  | 41cm Curly Cable with RJ45 Plug    |
| On-hook Key       | x1                                 |
| Off-hook Key      | x1                                 |
| Numeric Keypad    | 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, *, # |
| Multimedia Keypad | x1                                 |
| Hall Sensor       | x1                                 |
| Loudspeaker       | x1                                 |
| Microphone        | x1                                 |
| Camera            | 2 Megapixels x1 (Optional)         |
| Nurse Call Button | x1 (By Request)                    |



## Medical Slim MB for OEM/ODM

Medical Slim MB is a ideal solution for medical computer or instrument. EMI prescan is done to guarantee EN 60601-1-2 compliance. Onyx provides the latest ultra low power and high performance Intel platform to minimize the effort in cpu cooler design.

### Key Features:

- Intel/AMD Ultra Low Power Processor
- Dual or Triple Independent Display
- Single or Dual PCI Express Slots
- Wide Range DC Power Input
- Medical Grade EN 60601-1-2 Compliance



### OMB-M322

AMD Ryzen Embedded V1000 Medical  
Mini-ITX Motherboard

### OMB-M228

Intel Skylake Medical Motherboard

## Main Specification

|                     |                                                                                              |                                                       |
|---------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Processor           | AMD Ryzen Embedded V1000 Processor                                                           | Intel 6th Generation Core i7-6600U 3.4GHz Dual Core   |
| System Memory       | Supports Dual Channel DDR4 SODIMM up to 32GB                                                 | Supports Dual Channel DDR4 SODIMM up to 32GB          |
| Graphics            | AMD Vega GPU with up to 11 Compute Units                                                     | Intel® HD Graphics                                    |
| Expansion Interface | PCIe[x8] x1, M.2 2230(E-Key) for WiFi x1, M.2 2280(B-Key) for SSD x1, Half Size Mini Card x1 | PCI Express[x4] x1, PCI Express[x1] / PCIx1(optional) |
| OS Support          | Windows 10, Linux                                                                            | Windows 7, Windows 10, Linux                          |

## Rear I/O

|             |                                                  |                |
|-------------|--------------------------------------------------|----------------|
| USB         | USB 3.1 Type-A x2, USB 3.1 Type-C x1, USB 2.0 x2 | USB 3.0 x4     |
| Ethernet    | Gigabit LAN x 2                                  | Gigabit LAN x2 |
| Audio       | Mic, Line-out                                    | N/A            |
| Power Input | DC 12V~24V                                       | DC 12~24V      |

## Internal I/O

|                        |                          |                                        |
|------------------------|--------------------------|----------------------------------------|
| Display Output         | Display Port x1, HDMI x1 | LVDS x1, Display Port x1               |
| USB                    | USB 3.1 x1, USB 2.0 x1   | USB 3.1 x2, USB 2.0 x6                 |
| COM                    | RS-232 x2                | RS-232 x2                              |
| Audio                  | Mic, Line-out, Line-in   | Mic, Line-out                          |
| Serial ATA             | SATA 6.0Gb/s x1          | SATA 6.0Gb/s x2                        |
| Touch Screen Interface | N/A                      | Supports 5-wire Resistive Touch Screen |
| Speaker Connector      | 5W x2                    | 5W x2                                  |

## Mechanical and Environment

|                       |                  |                  |
|-----------------------|------------------|------------------|
| Operating Temperature | 0°C ~ 60 °C      | 0°C ~ 60 °C      |
| Dimension             | 170mm x 170mm    | 160mm x 209mm    |
| Certifications        | CE & FCC Class B | CE & FCC Class B |



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