

# M1923

## 19" Fanless Intel® Medical Station



### Features

- Fanless design
- Applicable for clinical station, nursing and PACS
- Soldered onboard 7<sup>th</sup> Gen. Intel® Core™ i5-7442EQ processor
- 19 inch LCD with resistive touch
- IEC & EN 60601-1 (Edition 3.1), IEC & EN 60601-1-2 (Edition 4th) certified
- Streamline appearance - 59mm in thickness
- Multi-connectivity (Bluetooth, WLAN and GbE)
- RFID & NFC reader, 5.0 MP camera, dual smart card readers, and slim DVD-RW
- Optional alternative of external battery or PCIe x16 expansion box
- Isolated serial ports, USB and LAN ports
- Multi-expansion (3 x RS-232, 5 x USB, 2 x LAN, 1 x DisplayPort and 1 x SD Card)

### System

|                     |  |
|---------------------|--|
| CPU                 | Soldered onboard 7 <sup>th</sup> Gen. Intel® Core™ i5-7442EQ 2.1 GHz processor, up to 2.9GHz |
| Graphics Controller | Intel® HD Graphics 630   |
| Memory              | 4GB DDR4 SO-DIMM memory module installed, supporting up to 32GB                              |
| Storage             | 128GB M.2 2280 PCIe Gen3 SSD<br>2.5" 80GB SSD (optional)                                     |

### Peripherals and Devices

|                   |  |
|-------------------|--|
| Camera            | 1 x 5.0 MP front facing CMOS camera with auto-focus (optional)                 |
| WLAN & Bluetooth  | 1 x WLAN 802.11 a/b/g/n/ac & Bluetooth 5.1 LE, class1                          |
| RFID & NFC        | 1 x 13.56MHz RFID & NFC reader with ISO 14443A/14443B/15693 support (optional) |
| Smart Card Reader | 2 x Smart Card Reader slots  |
| DVD-RW            | 1 x Slim DVD-RW (optional)   |

### I/O Interface

|              |  |
|--------------|--|
| SD Card      | 1 x SD/SDHC card slot  |
| Audio        | 1 x microphone, 2 x 3W speakers<br>1 x Mic-in, 1 x Line-out                                |
| Video output | 1 x DisplayPort  |
| Video input  | 1 x SDI connector (optional)   |
| LAN          | 2 x Intel® RJ-45 GbE with 4KV isolation  |
| Serial Port  | 2 x RS-232 port with 4KV isolation<br>1 x RS-232/422/485 with 4KV isolation                |
| USB Port     | 4 x USB 3.0 ports<br>1 x USB 2.0 port with 4KV isolation (12MB/Bits) (on the top)          |
| Expansion    | 1 x for the alternative of external battery or PCIe x16 expansion box (optional, max. 25W) |

### Button & Indicator

|                    |  |
|--------------------|--|
| Cap-sensor Buttons | 1 x Power on/off<br>1 x Touch & LCD on/off<br>1 x Brightness up<br>1 x Brightness down<br>1 x Voice up<br>1 x Voice down<br>1 x Menu<br>1 x Programmable |
| Physical Buttons   | 1 x Power button (supporting battery mode power on)<br>1 x Reset button  |

### Touch Screen

|                      |                        |
|----------------------|------------------------|
| Type                 | Analog Resistive Touch |
| Light Transparency   | 80% (typ.)             |
| Controller Interface | USB interface          |

### LCD Display

|                      |                                      |
|----------------------|--------------------------------------|
| Size/Type            | 19" TFT Active Matrix Panel          |
| Max. Resolution      | 1280 x 1024 (SXGA) with 16.7M colors |
| Luminance            | 350 cd/m <sup>2</sup> (typ.)         |
| Contrast Ratio       | 1000:1 (typ.)                        |
| Backlight Type       | LED                                  |
| View Angle (U/D/R/L) | 80°/80°/85°/85° (typ.)               |

### Power Requirement

|                  |   |
|------------------|---|
| Adapter Input    | 100 ~ 240 VAC (full range)                          |
| Adapter Output   | DC 18V, 5.55A, 100W with medical certificate        |
| Battery Type     | Li-battery pack                                     |
| Battery Capacity | 1 x 7800mAh 9-cell external battery pack (optional) |

### Mechanical & Environmental

|                        |   |
|------------------------|---|
| Operating Temp.        | 0 ~ 40°C (32 ~ 104°F)                           |
| Storage Temp.          | -20 ~ 60°C (-4 ~ 140°F)                         |
| Operating Humidity     | 10 ~ 95% @ 40°C (non-condensing)                |
| Dimensions (W x H x D) | 450 x 399.4 x 59 mm (17.7" x 15.7" x 2.32")     |
| Net Weight             | 7.5 kg (16.53 lb)                               |
| Vibration              | 5 ~ 500Hz, 1G random operation (SSD only)       |
| Shock                  | 10G peak (11m/sec)                              |
| Mounting               | VESA-75 compatible (M4)                         |
| IP Rating              | Compliance design with IP65 (front touch panel) |
| Operational Altitude   | Below 2000m                                     |

|            |   |
|------------|---|
| Regulatory | CE, FCC Part 18 Subpart C<br>IEC & EN 60601-1 Safety (Edition 3.1),<br>IEC & EN 60601-1-2 EMC (Edition 4th) |
|------------|---|

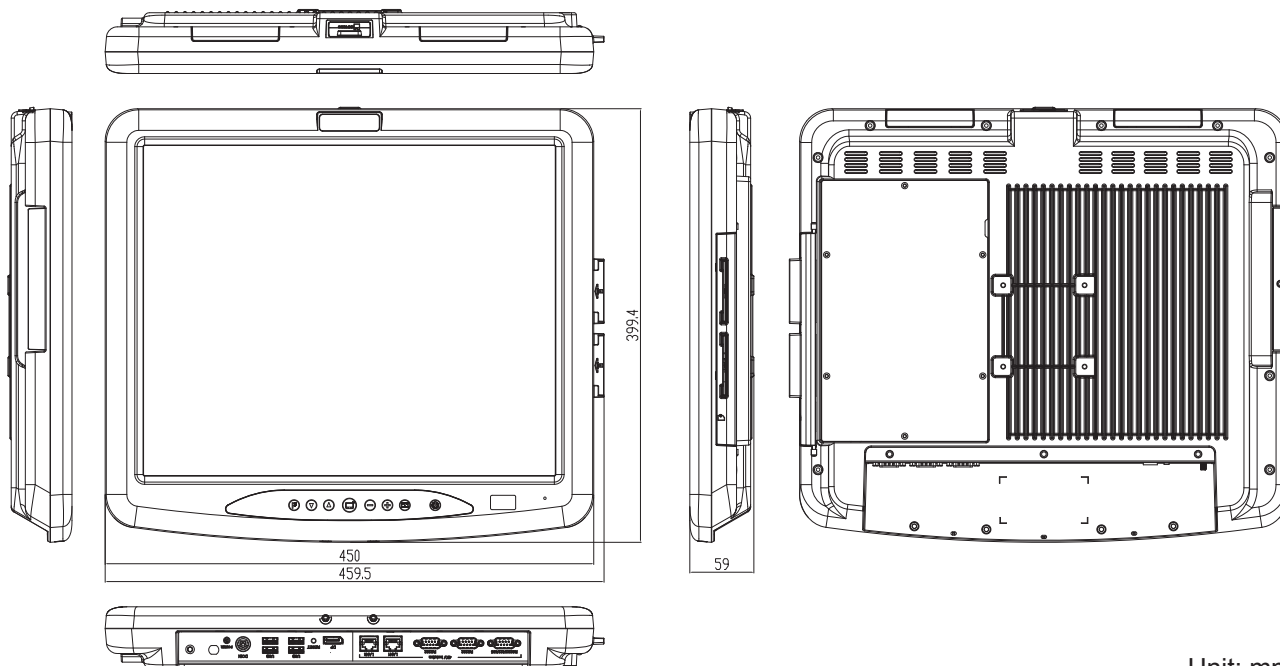
### OS Support

|                                |
|--------------------------------|
| Windows 10 IoT Enterprise LTSC |
| Linux: Ubuntu                  |

### Ordering Information

|       |  |
|-------|--|
| M1923 | 19" Fanless 7 <sup>th</sup> Gen. Intel® Core™ i5 Medical Station with WLAN and Bluetooth |
|-------|--|

## Dimensions



Unit: mm

### Power Requirement

PAC-M100W 100W medical-grade AC/DC adapter kit



### Optional Accessories

ARM-Kits VESA-75/100 medical arms

### Optional Configuration (CTOS\* Kit) (Not Sold Separately)

RFID & NFC-1920 RFID & NFC module kit for M192X



CAM-1920 5.0MP CMOS camera module kit for M192X



DVDRW-1920 Slim DVD-RW drive module kit for M192X



SSD80G-192X 2.5" Intel® 80GB SSD kit for M192X



eBAT-1920 7800mAh 9-cell external battery pack for M192X



eEXP-1920 PCIe x16 expansion module kit for M192X



\*CTOS means Configure-to-Order Service.