

# Point-of-Care Terminal

## POC-W22A-H81

22" Medical Panel PC with Intel® desktop Core™ i5/i3/  
Pentium® Processor

### Features

- 22" 16:9 LED panel with FHD (1920 x 1080)
- 4th generation Intel® Core™ i5/i3/Pentium® CPU
- Projected capacitive touchscreen supports multi-touch
- IP65 compliant front bezel
- Anti-bacteria cover
- Optional 3-in-1 card reader: MSR, SCR and fingerprint
- Optional Mifare RFID module
- Optional internal 54W battery module
- Optional VoIP phone handset
- Optional handle module with barcode scanner and reading light



## Slim Design with Multiple Expansion Capabilities and Remote Control Technology

The POC-W22A-H81 is a medical panel PC featuring IoT, and can be used as a bed-side terminal or a medical cart computer developed to completely meet users' needs and ergonomics. With the help of the IEI Remote Intelligent System (IRIS) technology, it is more convenient to manage, monitor and maintain the POC-W22A-H81 remotely. In addition, the light and slim design changes people's perception of the medical panel PC which is usually bulky and without any functional compromise.

### • An Optional Built-in IEI IRIS Module

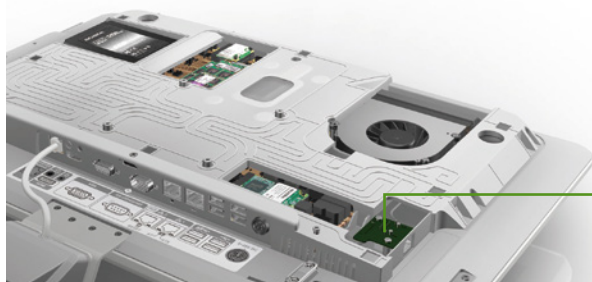
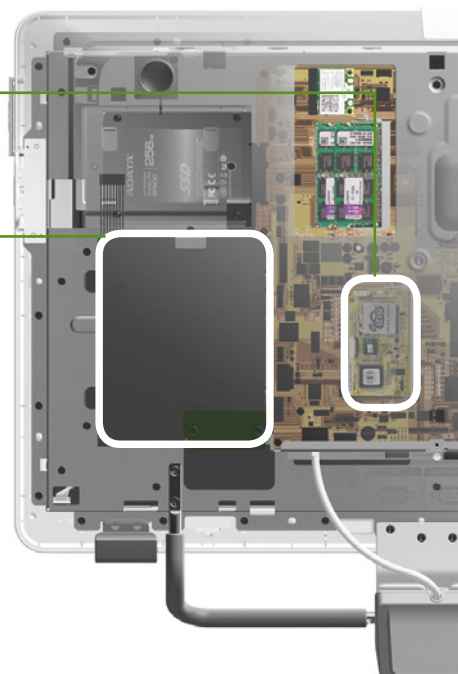
The IRIS technology provides remote control and monitoring features, which helps to reduce maintenance cost and to increase working efficiency in hospitals.

### • An Optional Built-in Battery Module

The 54 W battery provides back-up power for up to 30 minutes in case of a power interruption. This feature offers protection against disruption of critical business operations or loss of data.

### • Multiple Internal Expansion Capability

With the magnetic mechanism and the screw-less chassis design, it is easy to disassemble and replace the memory, fan, HDD and PCIe Mini card, making the upgrade and maintenance process become efficient and simple.



### • Customized Internal Expansion Capability

The peripheral interface on the side panel can be customized according to users' needs by installing different types of PCIe Mini cards.

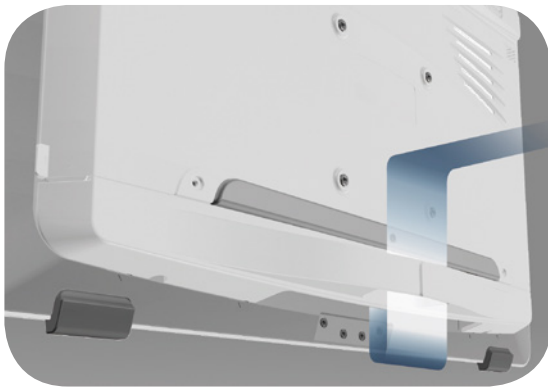
# Rich External Expansion Module Suitable for Every Customized Environment

Multiple external expansion modules make the POC-W22A-H81 meet every customer's needs.



### ● 3-in-1 Combo Card Reader

The 3-in-1 card reader that supports IC cards, magnetic cards and fingerprint eliminates unnecessary cables, and does not occupy any USB port on the I/O interface at the bottom of the POC-W22A-H81.

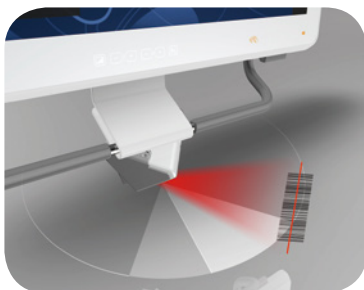


### ● Hug Style Cable Cover

Users can easily manage all the cables from the I/O ports, making it look fresh and allowing easier cleaning.

### ● Handle Module with Barcode Reader and Reading Light

Users can move panel PC easily. The barcode reader and the reading light module with adjustable operating angle can be used for multiple purposes.



● EZ Stand

The EZ stand which combines a cable management hole and slim outlook is designed for desk-based environments.



## A System with Care—Simple and Light, yet Powerful!

Through the minus design thinking, the design concept of the medical panel PC becomes pure and simple, making the POC-W22A-H81 look slim. Through the plus design thinking, the design concept of the external expansion capability becomes more flexible and much fit the customized requirements.

● Smooth Curves at the Back

The smooth curves perfectly shape the air vents and make users feel warm.

● Slim and Comfortable Sense of Touch

Slim and comfortable sense of touch makes users feel good while using it, and the clinician's view will not be blocked when moving the medical cart.



● Reserved Screw Holes for Customized Projects

Reserved screw holes for multiple modules, such as handset or sphygmomanometer, allow for customized installation capability.

● Privacy Cover for Webcam

The webcam cover protects the privacy of patients





## Pay High Attention to Users' Experiences and Integrate All the Suggestions from Industry-academic Cooperation

Intensive cooperation with the Chang Gung University School of Nursing and the professional medical centers' personnel at the beginning stage of development makes the product 100% ideal for users' requirements. Implement the innovative design thinking activity to develop unique product features and to improve product functions.

### ● Reduce the Occupation on the Desk of the Medical Cart

Integrating various modules into one entity saves more desk space of the medical cart and provides a convenient using environment.

### ● Easy Using

With the stable handle, users can easily adjust the using angle and the position of the POC-W22A-H81. This feature greatly reduces the effort required using two hands to move the system.

### ● Reading Light Support

The built-in reading light on the handle module provides lighting for a small area in a dark environment without bothering patients.

### ● Adjustable-angle Barcode Reader

The barcode reader on the handle module supports angle adjustment, with which users can scan the objects conveniently without moving the entire panel PC.



## 1. Bedside Infotainment

The highly-integrated POC-W22A-H81 can save time on cable-managing process. Its optional accessories also make the healthcare environment become more flexible and friendly.

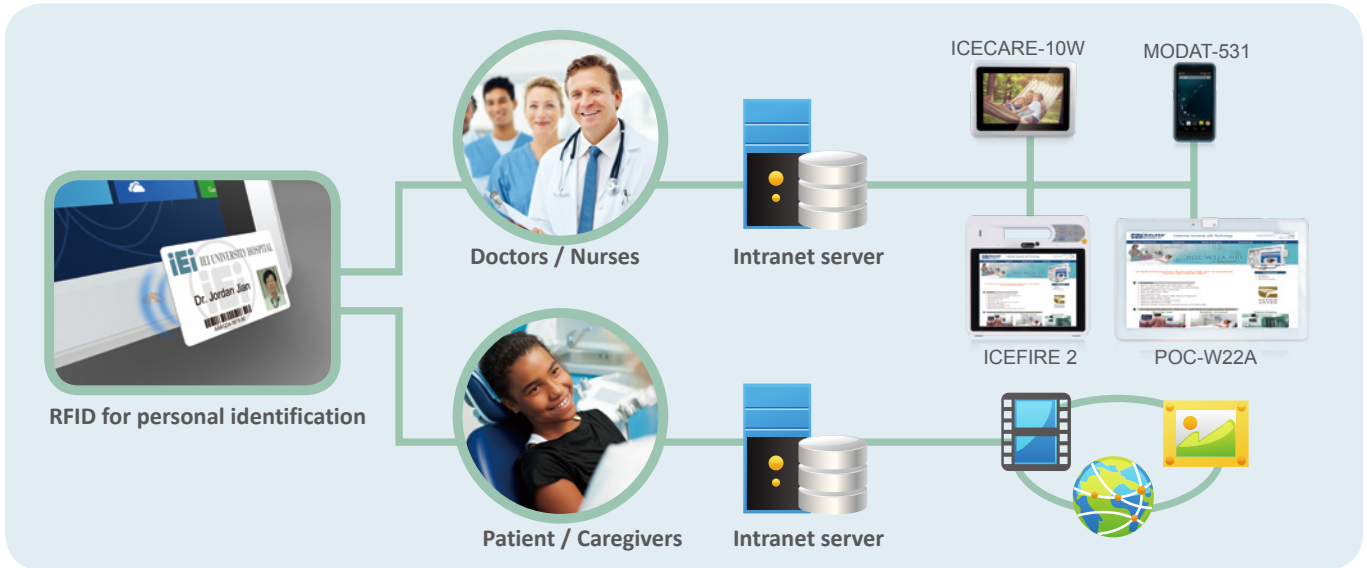


Through RFID, 3-in-1 card reader and Wi-Fi connection, doctors and nurses can log-in to the hospital information system to input medical checkup results, and to check the dosing records and other healthcare information. Nurses can also use barcode reader to collect relative information in the healthcare environment to eliminate human errors.



With the hospital system integrated, patients can check their medication records on the POC-W22A-H81 via RFID and the barcode reader. Through the Wi-Fi connection, patients can have their entertainment time as well. In addition, the multiple-fixed handle module offers great convenience to users so that they can adjust the using angle by just using a finger.

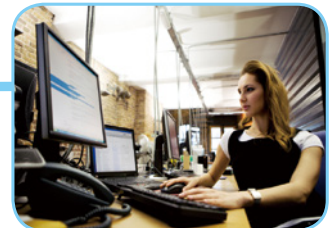
With various kinds of sensors (e.g. RFID and smart card reader), the IT personnel in hospitals can separate different loggers to different login path for data accessing. This application increases the safety of the data protection.



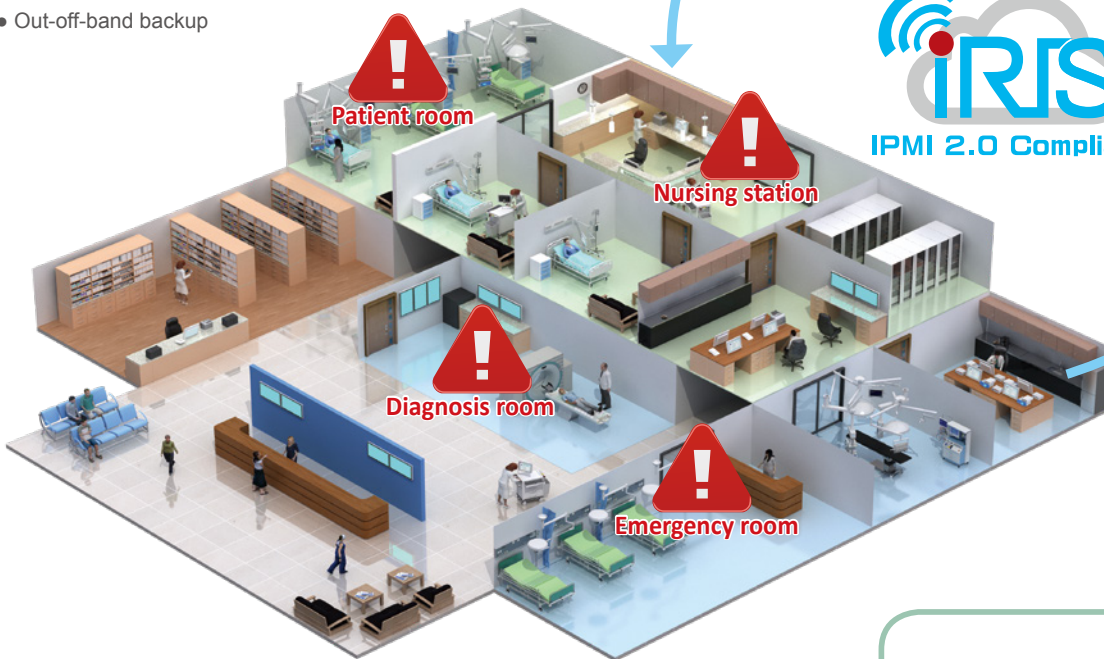
● Remote Diagnosis & Troubleshooting

iRIS remote troubleshooting solved 85% of issues

- Remote BIOS update
- Remote OS recovery
- Remote KVM + virtual media
- Out-off-band backup



IT Console



The light, slim and smooth curves design with no inaccessible corners brings conveniences for the cleaning personnel and increases cleaning efficiency.



## 2. Nursing Cart Computer



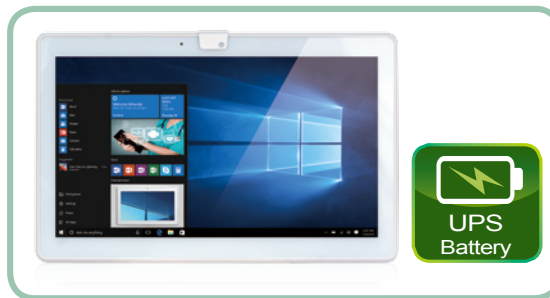
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Checking dosing information and recording the patient-care information usually happen hundreds of times in a nurse's daily work. If these repeated processes can be improved to make it friendlier, the working efficiency and convenience of the stressful nurses will be greatly increased. The handle module is integrated with a barcode reader and a reading light located near the working area instead of the side of the device, offering a great convenience for the repetitive work.



The PCAP touch helps nurses operate the devices like using their mobile phone. Nurses who wear the latex gloves can operate the user interface easily during their daily routine.



The light, slim and smooth curves design with no inaccessible corners brings conveniences for the cleaning personnel and increases cleaning efficiency.

## 3. Applications



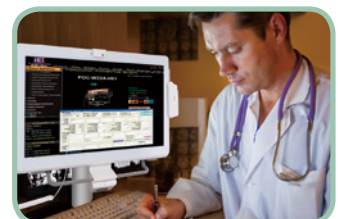
Operating room



Pharmacy counter



Dialysis lab



Examination center



## Specifications

Model		POC-W22A-H81												
LCD Specifications	LCD Display	21.5" (16:9)												
	Max Resolution	1920 (W) x 1080 (H)												
	Brightness (cd/m <sup>2</sup> )	250												
	Contrast Ratio	1000 : 1												
	LCD Color	16.7M colors (RGB 6-bit)												
	Pixel Pitch (mm)	0.24825 (H) x 0.24825 (V)												
	Viewing Angle (H-V)	170°/160°												
	Backlight MTBF (hrs)	30000 (LED backlight)												
Touch	Touchscreen	Projected capacitive type with 10-point multi-touch												
	Touch Controller	EETI: EXC3188												
	Surface Hardness	6H												
System	CPU Support	Intel® desktop Core™ i7/i5/i3/Pentium®/Celeron® CPU with Intel® H81 chipset (Up to TDP 35W CPU)												
	Chipset	Intel® H81												
	RAM	Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM, 4GB pre-installed (system max. 16GB)												
	I/O Port	<table border="0"> <tr> <td>1 x RS-232/422/485</td> <td>1 x HDMI output</td> </tr> <tr> <td>2 x GbE LAN by RJ-45 (1 for iRIS)</td> <td>1 x 12V~28V DC Jack</td> </tr> <tr> <td>1 x Power button</td> <td>2 x USB 3.0</td> </tr> <tr> <td>1 x VGA output</td> <td>4 x USB 2.0 (2 on bottom and 2 on side)</td> </tr> <tr> <td></td> <td>1 x RJ-11 for barcode module</td> </tr> </table>	1 x RS-232/422/485	1 x HDMI output	2 x GbE LAN by RJ-45 (1 for iRIS)	1 x 12V~28V DC Jack	1 x Power button	2 x USB 3.0	1 x VGA output	4 x USB 2.0 (2 on bottom and 2 on side)		1 x RJ-11 for barcode module		
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		1 x RJ-11 for barcode module												
	Storage	1 x 2.5" SATA HDD bay												
Audio	2 x 3W speaker													
Webcam & Microphone	2-megapixel CMOS front-facing camera with auto-focus and digital microphone													
Expansion Interface	1 x PCIe Mini for Wi-Fi module, 1 x PCIe Mini reserved													
LED Indicator	2-light battery status LED, RFID indicator LED													
Other Features	MIFARE RFID	Optional: MIFARE 13.56 MHz card reader												
	Function Key	<table border="0"> <tr> <td>1 x LCD on/off</td> <td>Combinations:</td> </tr> <tr> <td>1 x Brightness up</td> <td>1 x Lock/Unlock OSD</td> </tr> <tr> <td>1 x Brightness down</td> <td>1 x Power on/off</td> </tr> <tr> <td>1 x Volume up</td> <td></td> </tr> <tr> <td>1 x Volume down</td> <td></td> </tr> <tr> <td>1 x Touch lock button for cleaning</td> <td></td> </tr> </table>	1 x LCD on/off	Combinations:	1 x Brightness up	1 x Lock/Unlock OSD	1 x Brightness down	1 x Power on/off	1 x Volume up		1 x Volume down		1 x Touch lock button for cleaning	
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1 x Touch lock button for cleaning														
Light Sensor	Ambient light sensor for panel brightness adjustment													
Battery	Optional built-in 54W battery pack (30 mins)													
Remote Monitoring	1 x iRIS-2400 slot (iRIS remote management model)													
Cooling Method	Smart Fan													
Connectivity	Wi-Fi and Bluetooth	IEEE 802.11 a/b/g/n/ac 1T1R module with bluetooth V4.0 (PCIe half mini card)												
Physical	Construction Material	ABS+PC plastic with anti-bacterial material												
	Mounting	Wall, Stand and Arm VESA 100mm x 100mm												
	Net Weight	7.3 kg												
	Dimensions (WxHxD)	542.5 mm x 349.5 mm x 52 mm												
Environment	Operating Temperature	0°C~40°C												
	Storage Temperature	-20°C~60°C												
	Humidity	10% to 95% (non-condensing)												
	Vibration	1G												
	Shock	Operating Shock: 5G peak acceleration (11ms duration) Non-Operating Shock: 15G peak acceleration (11ms duration)												
	IP Level	IP65 compliant front panel												
Power	Power Input	12V~28V DC input												
	Power Adapter	120W medical power adapter: Input: 100V~240V AC; Output: 19V DC												
Certificationa	<ul style="list-style-type: none"> <li>• 47 CFR FCC Part 18 Class B, Subpart C</li> <li>• EN 60601-1-2:2007 + AC:2010</li> <li>• CE (EN60601-1:2006+A11:2011+A1:2013+A12:2014; IEC 60601-1:2005 + CORR.1:2006 + CORR.2:2007 + AM1:2012)</li> <li>• ANSI/AAMI ES60601-1 (2005/(R)2012 + A1:2012, C1:2009/(R)2012 + A2:2010/(R)2012)</li> <li>• CAN/CSA-C22.2 NO.60601-1:14</li> <li>• ISO 14971: 2007</li> <li>• R.E.D</li> </ul>													

## Ordering Information

Part No.	Description
POC-W22A-H81i-P/PC/4G-R12	21.5" 250cd/m <sup>2</sup> FHD medical panel PC with Intel® H81 chipset, Intel® Pentium® G3320TE processor (dual core, 2.3 GHz, TDP 35W), two 2 GB DDR3 RAM, 802.11a/b/g/n/ac Wi-Fi module, projected capacitive touchscreen, 2M camera, microphone, support iRIS-2400, R12
POC-W22A-H81i-3/PC/4G-R12	21.5" 250cd/m <sup>2</sup> FHD medical panel PC with Intel® H81 chipset, Intel® Core™ i3-4330TE processor (dual core, 2.4 GHz, TDP 35W), two 2 GB DDR3 RAM, 802.11a/b/g/n/ac Wi-Fi module, projected capacitive touchscreen, 2M camera, microphone, support iRIS-2400, R12
POC-W22A-H81i-5/PC/4G-R12	21.5" 250cd/m <sup>2</sup> FHD medical panel PC with Intel® H81 chipset, Intel® Core™ i5-4570TE processor (dual core, 2.7 GHz, TDP 35W), two 2 GB DDR3 RAM, 802.11a/b/g/n/ac Wi-Fi module, projected capacitive touchscreen, 2M camera, microphone, support iRIS-2400, R12

## Options

Number	Description
MEDP-HS-R10	USB interface VoIP phone and its holder, white
MEDP-CR-R10	Magnetic card reader/Smart card reader/Fingerprint sensor, white
MEDP-HD-R10	Metal handle covered with soft rubber
MEDP-HD-BR-R10	Metal handle covered with soft rubber, with barcode reader and reading light, White
MEDP-MF-RFID-R10	MIFARE RFID reader, 13.56MHz, with LED indicator, IEI assembly only
MEDP-TPM-R10	Trusted platform module kit, IEI assembly only
MEDP-BAT-R10	Li-Ion Battery, 3700mAh; Charging Voltage: above 16.8V; with LED indicator, IEI assembly only; RoHS
MEDP-EZS-R10	VESA 100 x 100 mm panel PC stand with a cable management hole, white
iRIS-2400-R10	IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface
POCP-CC01-R10	POC-W22A-H81 cable cover, white, plastic, R10
POC-W22A-H81-WES7P64-R10	OS Image with 64bit Windows Embedded Standard 7 P for POC-W22A-H81 Series, with DVD-ROM
POC-W22A-H81-WE8S64-R10	OS Image with 64bit Windows Embedded Standard 8 for POC-W22A-H81 Series, with DVD-ROM

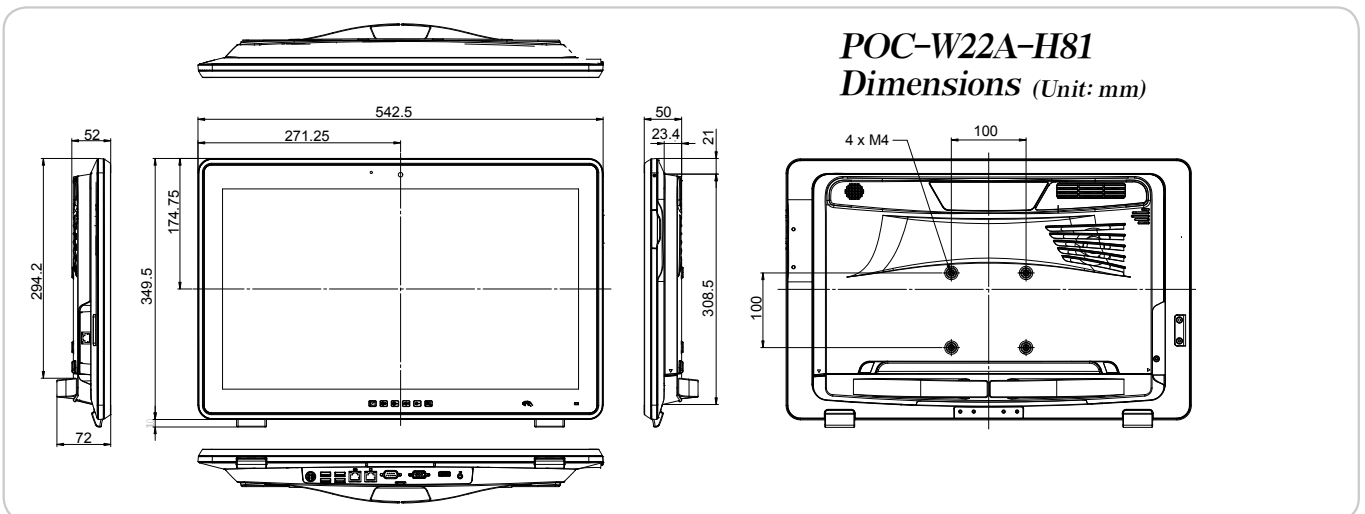
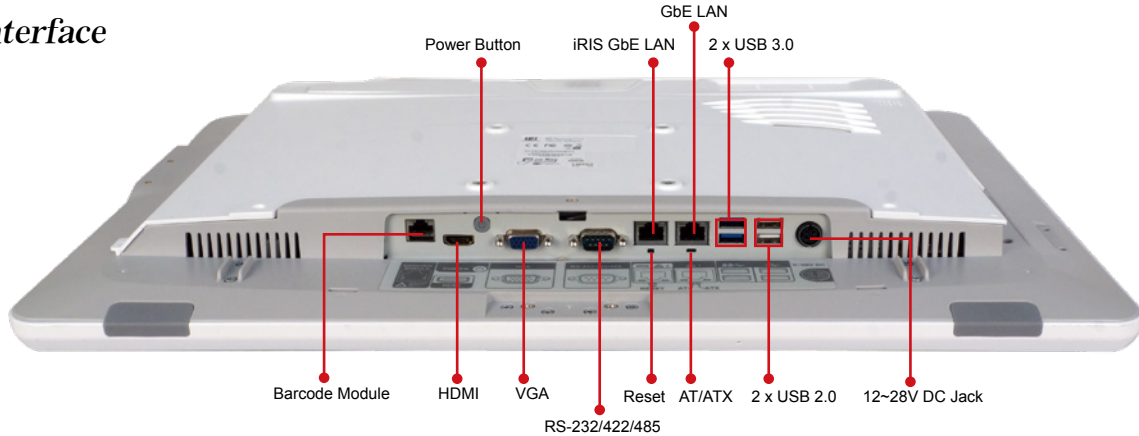
## IQ Mounting Options

Item	Part No.
Wall Mount Kit	AFLWK-19B
Arm	ARM-31-RS
Stand	STAND-300SW-RS/STAND-A21-R10

## Packing List

Item	Part No.	Q'ty	Description
Utility CD	7B000-001137-RS	1	Drivers and User Manual
Power Adapter	63040-010120-010-RS	1	120W medical power adapter: Input: 100V~240V AC, Output: 19 V DC
Power Cord	32702-000200-100-RS	1	European power cords, 183 CM, C13

## I/O Interface



**POC-W22A-H81**  
Dimensions (Unit: mm)