Intelligence Point-of-Care Terminal

NEW

POCi-W22C-ULT5
POCi-W24C-ULT5

22" / 24" Medical Panel PC with 8th Generation Intel® mobile ULT Core™ i7/i5 processor

Features

- 14nm 8th generation Intel® Whiskey Lake U platform
- Aluminum front bezel (IP66) & PC/ABS rear cover
- Chemical etching AG coating
- Modular PCIe x4 expansion slot
- Dual reading light
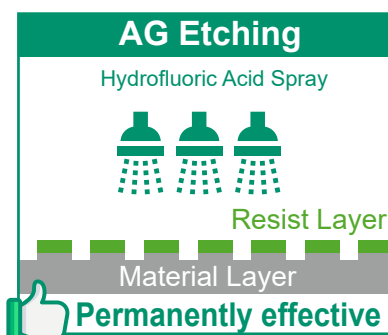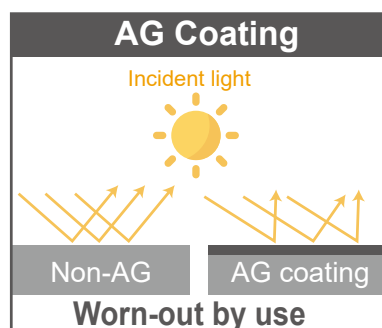- FHD IPS panel with optional DICOM preset module

| Intel® Whiskey lake | Wi-Fi 6 | RFID | 10 Point | Modular PCIe x4 | Isolated I/O | Ultra Slim | DICOM Module | Reading light | Chemical Etching AG Coating |

● Intelligent Working Station

The POCi series is a medical panel PC featuring AI, edge computing with rich expansion functions. It is ideal to work in many kinds of medical scenario such as radiology, telemedicine, endoscopy system or surgical working station.

Endoscopy system

Surgical working station

Telemedicine

Radiology
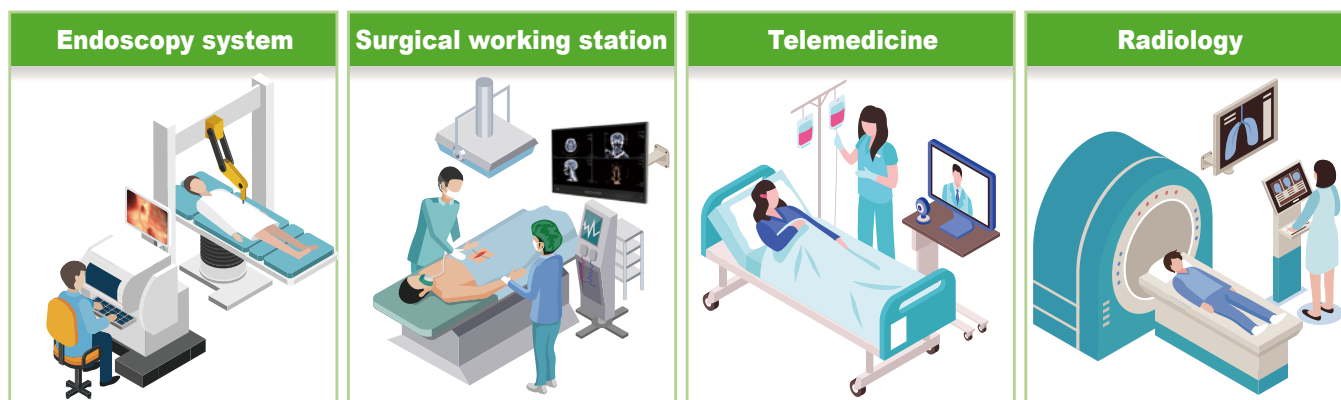
● IPS Panel with Chemical Etching AG Coating Glass

High-performance IPS panel enables a wider 178° viewing angles and advanced visual performance. The chemical etching AG coating reduces the watching fatigue resulting from glare or any other light interference in different kinds of environments.

AG Coating

Incident light

Non-AG | AG coating

Worn-out by use

AG Etching

Hydrofluoric Acid Spray

Resist Layer

Material Layer

👍 **Permanently effective**

Non AG | **AG**

≫Intelligent Point of Care Terminal

● Ultra-slim Aluminum Front Bezel

Ultra slim front bezel creates a premium user experience. This design lets the medical personnel more focus on the clinical information displayed on the screen.

● Optional DICOM Preset

The way the human eye responds to contrasts in light levels is not linear. At low levels, we can notice small changes in luminance. At higher luminance, the change needs to be much greater before we perceive the difference from one level to the next. Calibration of the display system is important to ensure that each image is shown consistently every time it is viewed.

● Dual Reading Lights

The IEC 62471 compliant LEDs assure the reading light emits comfortable and safe light for human eyes. Easy adjustable dimming interface allows the user to choose the best brightness in different situations.

● Isolated I/O Ports

These 1.5kV isolated COM & LAN ports are compliant to the MOOP classification and use UL94 V-0 Flammability Standard Mylar® sheet insulation.

RS-232 **LAN**

Fire resistant Mylar® sheet insulation

● ESD Protection

IEI provides Electrostatic discharge (ESD) 15kV (air) and 8kV (contact) ESD Protection. It can protect a circuit of device from an Electrostatic discharge (ESD), in order to prevent a malfunction of device.

● Chemical Resistance for Easy Sterilization

Sterilization is a daily routine of hospitals. Aluminum front frame is not only lightweight but also very durable for chemical erosion. The PC/ABS back cover is also carefully selected and proved to be resistant to the commonly seen detergents.

Cleaners / Disinfectants					
Cavi Wipes	Protex Wipes	Sani-cloth Wipes	Bleach	Alcohol	Virkon® S

High-Level Disinfectants				
Cidex	Cidex OPA	Metricide 14	Metricide 28	Wavicide

● IP Protection

IP66 front bezel and cover are easy to be cleaned with cleaners.
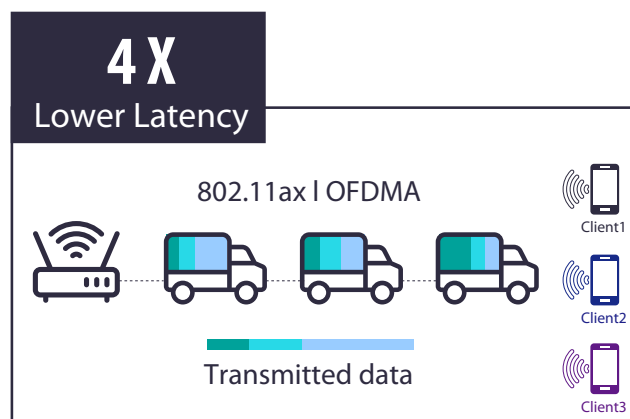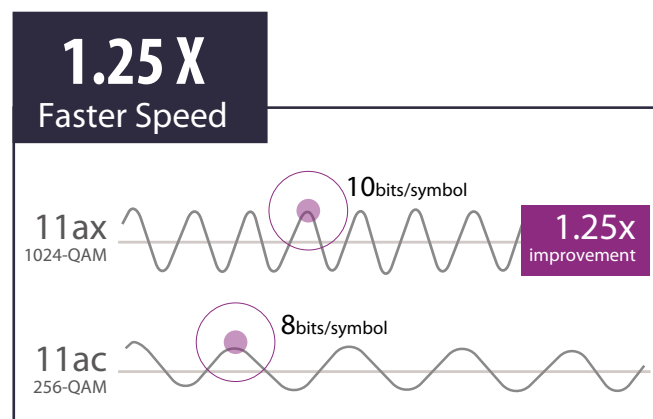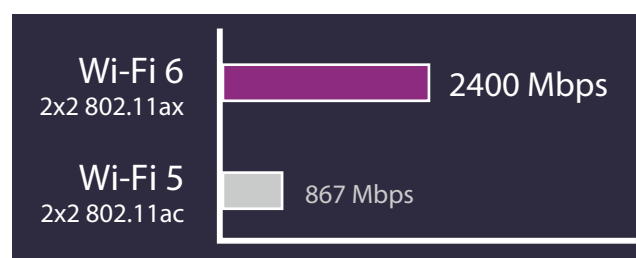
IP66 WATERPROOF

● True Flat OSD Hotkey Buttons

True flat OSD button design with no inaccessible corner brings conveniences for the cleaning personnel and increases cleaning efficiency.

True Flat OSD Hotkey Buttons
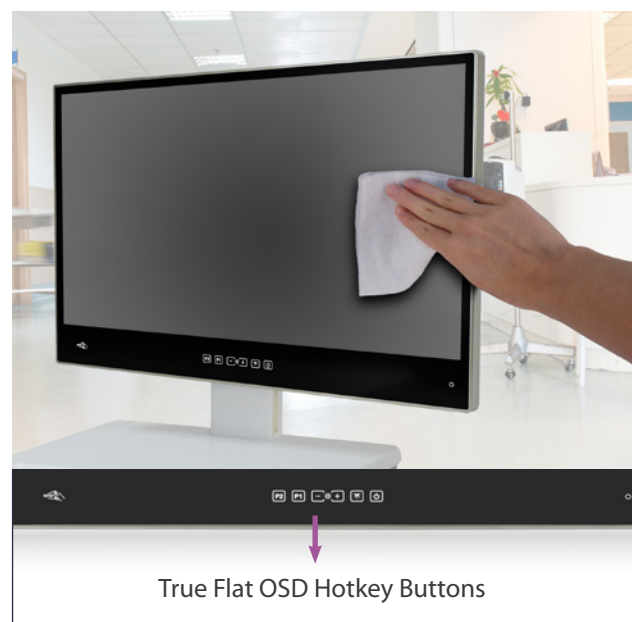
● Wi-Fi 6 Module

The POCi-W22/24C-ULT5 supports the latest Wi-Fi 6 standard which enables more clients in dense environments and will provide a better experience for typical wireless LAN networks.

Wi-Fi 6
2x2 802.11ax — 2400 Mbps

Wi-Fi 5
2x2 802.11ac — 867 Mbps

1.25 X
Faster Speed

11ax
1024-QAM
10 bits/symbol
1.25x improvement

11ac
256-QAM
8 bits/symbol

4 X
Lower Latency

802.11ax I OFDMA

Client1
Client2
Client3

Transmitted data

● Storage Device

The POCi-W22C-ULT5 provides flexible options for storage

˙ 2.5" HDD/SSD

˙ M.2 M key slot for NVMe, up to PCIe 3.0 x4

Intel® Core™ i5-8365UE/i7-8665UE — PCIe 3.0 x4 / NVMe → M.2 M key 2242/60/80
SATA (6Gb/s) → 2.5" SSD/HDD Bay

| Interface	Bandwidth	
M.2 SATA 6Gb/s	Mainstream	6Gb/s
M.2 PCIe 2.0 x2		1.0GB/s
M.2 PCIe 3.0 x4		3.94GB/s
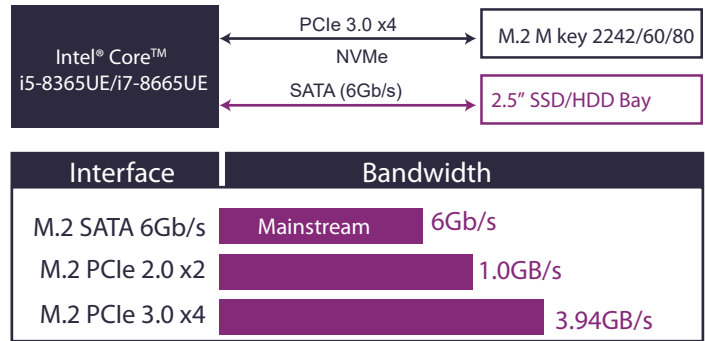
● Accessible HDD Cover & Cable Cover

Users can easily manage all the cables from the I/O ports, preventing splash to IO ports or messy cabling. Accessible HDD cover makes the IT maintenance job more efficient.

Cable Cover

Accessible HDD Cover

2.5" SSD/HDD   2242, 2260 and 2280 M.2 SSD

✓ M.2 2242 SSD
✓ M.2 2260 SSD
✓ M.2 2280 SSD
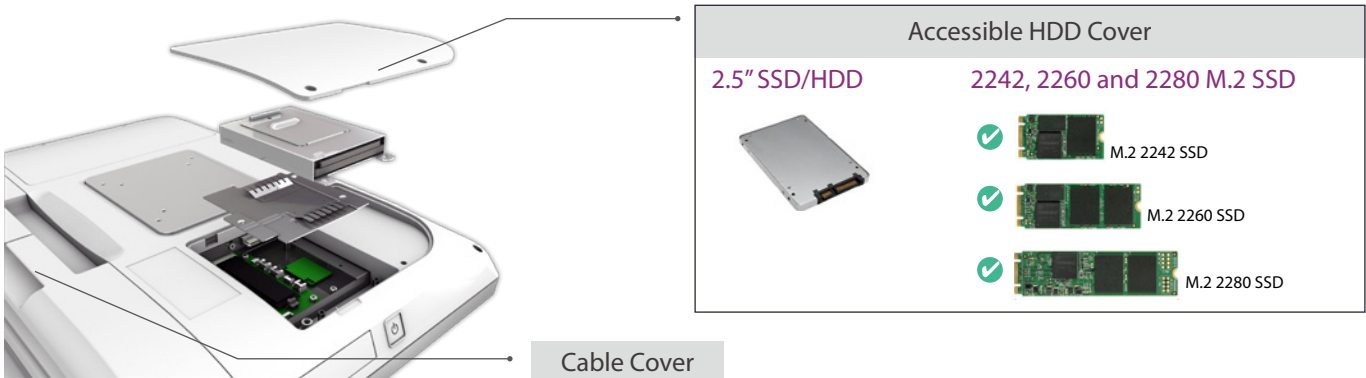
● Click-to-fix M.2 Slot

Special click-to-fix plunger design makes the M.2 replacing work much more convenient and prompt.

Click
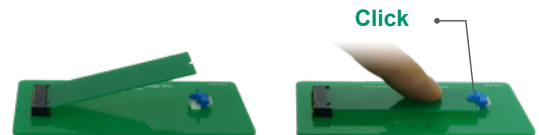
● Modular Expansion Design

The highly expandable PCIe x4 slot makes the whole system more flexible and easily meet the individual needs from different applications. For instance, adopting the AI accelerator card to enhance computing power, adding an all-in-one capture card to connect with medical devices, integrating PoE injector card with webcam, or expanding the desired I/O card for multiple usage.

AI Accelerator Card   PoE Injector Card   Capture Card   Isolation I/O Card
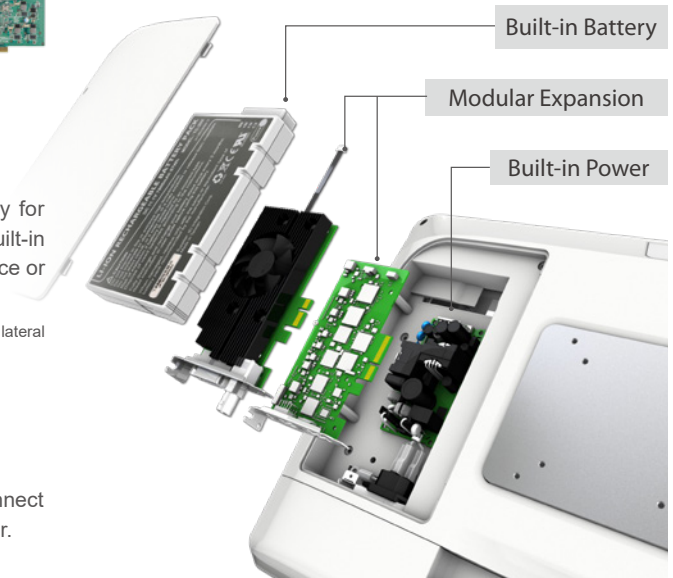

● Optional Built-in Battery

Uninterruptible Power System (UPS) is widely used in medical industry for securing patient's safety. The lateral expansion slot is available for a built-in battery which provides emergency power for 60 mins when the input source or main power fails under unexpected events.

* This feature needs to be requested before product shipment only and it will interfere with the lateral PCIe x 4 expansion slot.

Built-in Battery

Modular Expansion

Built-in Power

● Optional Build-in Power

To implement the built-in medical-grade power supply system, simply connect the power cord to the system without the use of an external power adapter.

Specifications

Model		POCi-W22C-ULT5	POCi-W24C-ULT5
LCD Specifications	LCD Display	21.5'' (16:9)	23.8'' (16:9)
	Max Resolution	1920 (W) x 1080 (H)	
	Brightness (cd/m²)	250	
	Contrast Ratio	1000:1	
	LCD Color	16.7M RGB 6-bit (Hi-FRC)	
	Pixel Pitch (mm)	247.95 (H) x 247.95 (V)	274.5 (H) × 274.5(V)
	Viewing Angle (H-V)	178˚ / 178˚	
	Backlight MTBF (hrs)	30,000 (LED backlight)	
Touchscreen	Touchscreen	Projected capacitive type with USB interface	
	Touch Controller	EETI (80H84)	
	Surface Hardness	6H	
	Coating	Chemical etching AG	
	Multi-touch	Projected capacitive type with 10-point multi-touch	
System	CPU Support	Intel® Core™ i7-8665UE (Whiskey Lake ULT platform) Intel® Core™ i5-8365UE (Whiskey Lake ULT platform)	
	RAM	DDR4 SO-DIMM up to 64GB	
	LAN Controller	1 x Intel® I219 Ethernet Controller (AMT 12.x supported by i7/i5 SKUs) 1 x Intel® I211 Ethernet Controller	
	I/O Port	Bottom I/O 1 x DC jack 1 x HDMI 1.4 output 1 x Isolated Gigabit LAN (I219 supports Intel® vPro) 1 x Isolated Gigabit LAN (I211) 1 x Isolated 1.5kV RS-232 1 x Combo audio-out / mic-in 4 x USB 3.2 Gen 2 port Other 2 x USB 2.0 port (side)	
	Storage	1 x 2.5" accessible SATA HDD/SSD bay 1 x M.2 2242/60/80 M key (PCIe x4)	
	Audio	2 x 3W speaker	
	Expansion Interface	1 x PCIe x4	
	LED	1 x RFID indicator (optional) 2 x LED reading light	
	Wi-Fi and Bluetooth	IEEE 802.11 ax 2T2R module (Wi-Fi 6 Module) Bluetooth V5.0 (M.2 2230)	
Physical	Construction Material	Front bezel: Aluminum die-casting Rear cover: ABS+PC plastic with anti-bacterial material	
	Mounting	Wall, Stand and Arm VESA 75/100	
	Net Weight	6.9 kg	8.1 kg
	Dimensions (WxHxD)	507.5 x 335.5 x 64.5 mm	567 x 370.6 x 63.9 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	Front: IP66	
	Thermal	Fanless heatsink without fin	
Power	Power Input	19V DC input	
	Power Adapter	150W medical power adapter	
	Battery	3S3P Li-ion battery pack, 11.1V, 7800mAh (Optional)	
	Built-in Medical Power	150W, 85 ~264VAC, medical power supply (Optional)	
Certificate	EMC & Safety	CE, FCC Class B Part18 EN 60601-1:2006/A1:2013 (Edition 3.1) EN 60601-1-2: 2015 (Edition 4.0)	

Ordering Information

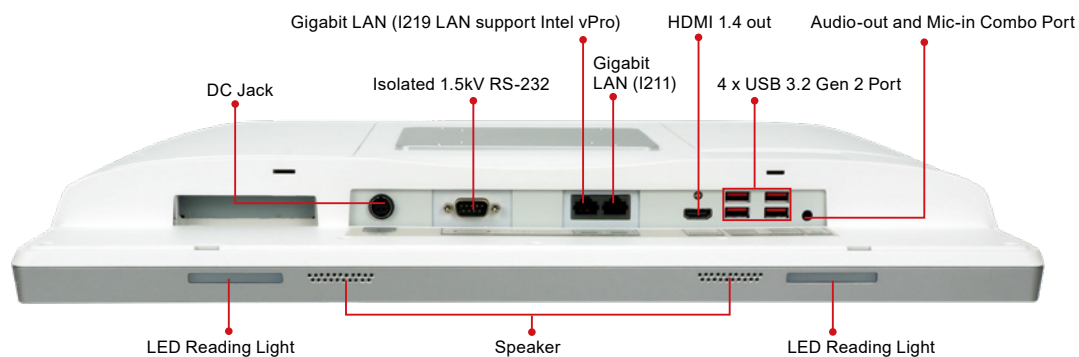| Part No.		Description
22"	POCi-W22C-ULT5-i5/PC/4G-R10	21.5" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i5-8365UE (15W) 1.6GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, R10
	POCi-W22C-ULT5-i5/PC/4G-B-R10 *	21.5" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i5-8365UE (15W) 1.6GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ battery, R10
	POCi-W22C-ULT5-i5/PC/4G-BP-R10 *	21.5" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i5-8365UE (15W) 1.6GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ built-in power, R10
	POCi-W22C-ULT5-i7/PC/4G-R10 *	21.5" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i7-8665UE (15W) 1.7GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, R10
	POCi-W22C-ULT5-i7/PC/4G-B-R10 *	21.5" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i7-8665UE (15W) 1.7GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ battery, R10
	POCi-W22C-ULT5-i7/PC/4G-BP-R10 *	21.5" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i7-8665UE (15W) 1.7GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ built-in power, R10
24"	POCi-W24C-ULT5-i5/PC/4G-R10	23.8" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i5-8365UE (15W) 1.6GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, R10
	POCi-W24C-ULT5-i5/PC/4G-B-R10 *	23.8" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i5-8365UE (15W) 1.6GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ battery, R10
	POCi-W24C-ULT5-i5/PC/4G-BP-R10 *	23.8" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i5-8365UE (15W) 1.6GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ built-in power, R10
	POCi-W24C-ULT5-i7/PC/4G-R10 *	23.8" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i7-8665UE (15W) 1.7GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, R10
	POCi-W24C-ULT5-i7/PC/4G-B-R10 *	23.8" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i7-8665UE (15W) 1.7GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ battery, R10
	POCi-W24C-ULT5-i7/PC/4G-BP-R10 *	23.8" 250cd/m² FHD medical panel PC with 8th generation 14nm Intel® mobile Core™i7-8665UE (15W) 1.7GHz on-board processor (ULT), one 4GB DDR4 RAM, 802.11 ax Wi-Fi module, PCAP touchscreen w/ AG coating, microphone, w/ built-in power, R10

* By order production

Options

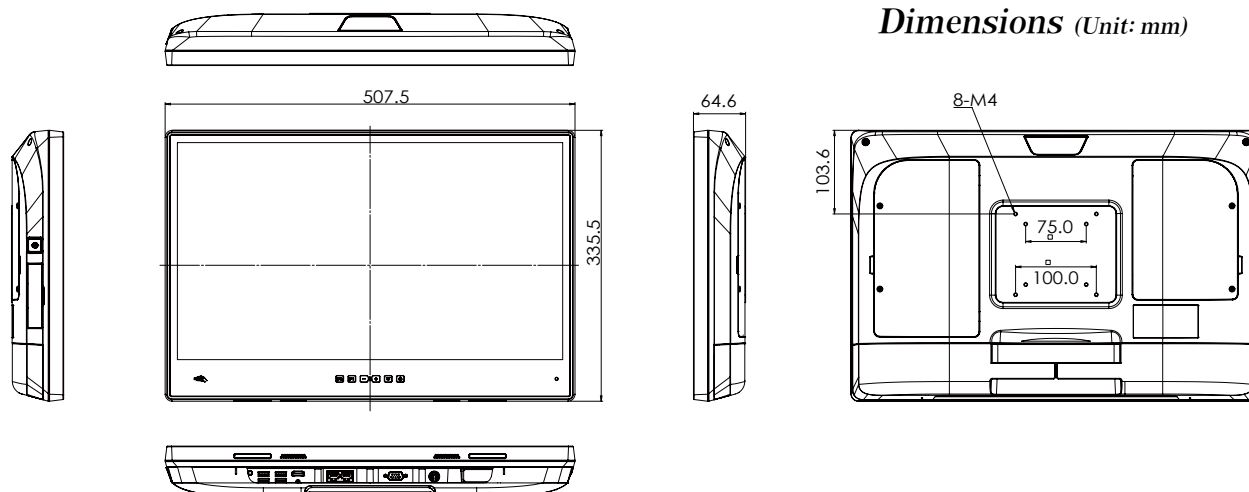| Item	Part No.	Description
RFID	MEDP-MF-RFID-R11	Mifare RFID reader, 13.56MHz, PN7362AUHN, with LED indicator, 250mm Antenna cable, IEI assembly only
DICOM	MEDP-DICOM-R10	DICOM engine for digital image processing, including image enhancement, color adjustment and panel compensation,IEI assembly only
PoE	GPoE-2P-R20	PCI Express Power over Ethernet card, 2-port 1000 Base(T), 802.3at compliant, low profile, RoHS
Cable Cover	POCP-CC06-R10	POCi-W22C-ULT5 cable cover,white, plastic, R10
TPM	TPM-IN03-R10	20-pin Infineon SPI TPM2.0 module, software mangement tool, firmware V7.63
Battery	31603-000069-RS	Battery pack; Li Ion; DPC; TC-202; SAMSUNG; ICR1865026J; 7800mAH; 11.1V; 3S3P; ATO only; CCL; RoHS

Packing List

Item	Q'ty	Remark
Power Adapter	1	150W medical power adapter
Power Cord	1	European power cords, 183 CM, C13

POCi-W22C-ULT5 / POCi-W24C-ULT5
I/O Interface

Gigabit LAN (l219 LAN support Intel vPro)   HDMI 1.4 out   Audio-out and Mic-in Combo Port

DC Jack   Isolated 1.5kV RS-232   Gigabit LAN (l211)   4 x USB 3.2 Gen 2 Port

LED Reading Light   Speaker   LED Reading Light

POCi-W22C-ULT5
Dimensions (Unit: mm)

507.5
335.5
64.6
8-M4
103.6
75.0
100.0

POCi-W24C-ULT5
Dimensions (Unit: mm)

567
370.6
63.9
8-M4
121.8
75
100