

Body Temperature Monitoring Solution

Plug and play, easy and convenient



iei®



Medical Grade Panel PC ▶

Thermal Camera ▶



www.ieiworld.com



Frontline Pandemic Prevention

To against pandemic, common thermometer products are regarded as indispensable necessities. And yet, most thermometers consume both time and manpower. IEI introduces a brand-new Body Temperature Monitoring Solution, which not only provides plug-and-play functionality but also quick and easy operation, effectually improving the process of taking temperatures.



An alarm will be triggered when it detects a high temperature.



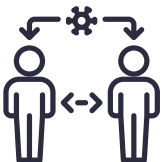
The person with a high temperature can be easily found by comparing the recognized face and the temperature data.



The detection results will not be influenced if people carry hot drinks.



It can detection well if people wear masks.



The range and value for detection can be adjusted according to users' requirements.



The temperature records e.g. photos, date and time, can be exported for follow-ups.

Fit in Every Scenario Application



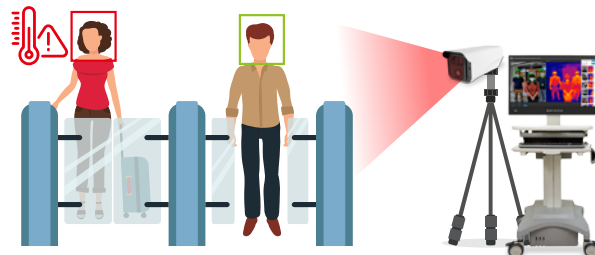
Business & Retail

Business buildings, industrial parks, and also all kinds of shopping centers



Transportation & Infrastructure

Airports, train stations, sports arenas, school and so on



Government & Hospital

Data can be saved in terminals, ensuring user's privacy. Suitable for government and hospitals.



Easy and accurate deployment for fighting against pandemic

IEI's Body Temperature Monitoring System uses IEI Panel PC and a thermal camera. It is easy to deploy, and equipped with clear user interface, FHD IPS panel, all-in-one panel PC and high accuracy. This system has everything you need. It can reduce workload, improve the efficiency of temperature measurement and it can be your best partner for pandemic prevention.



Thermal Camera

Available options




Camera 1




Camera 2

Network cable




IEI Panel PC


Available options



POCi-W22C-ULT5



TAIWAN EXCELLENCE 2020
POCm-W22C-ULT3



AFL3-W19C-ULT3

Optional Accessory

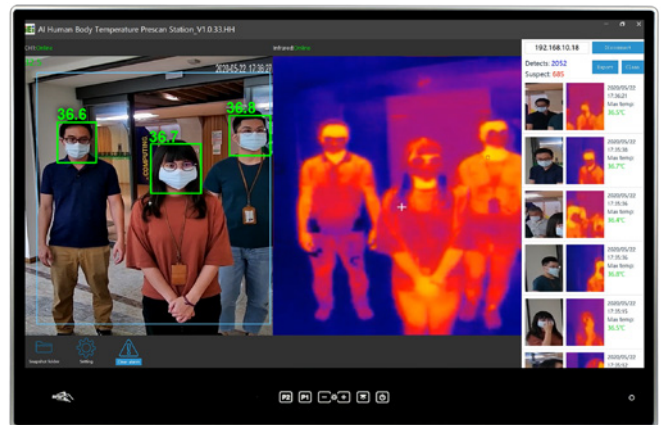
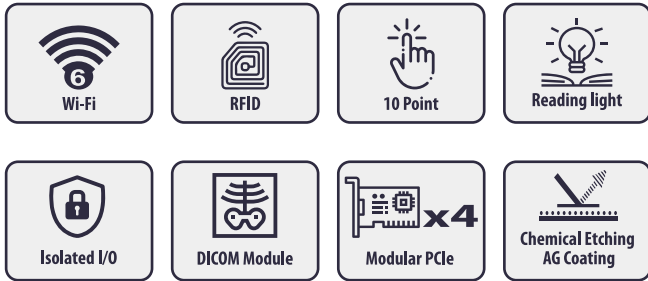
Rolling cart with wheels for high mobility



pCART-D1

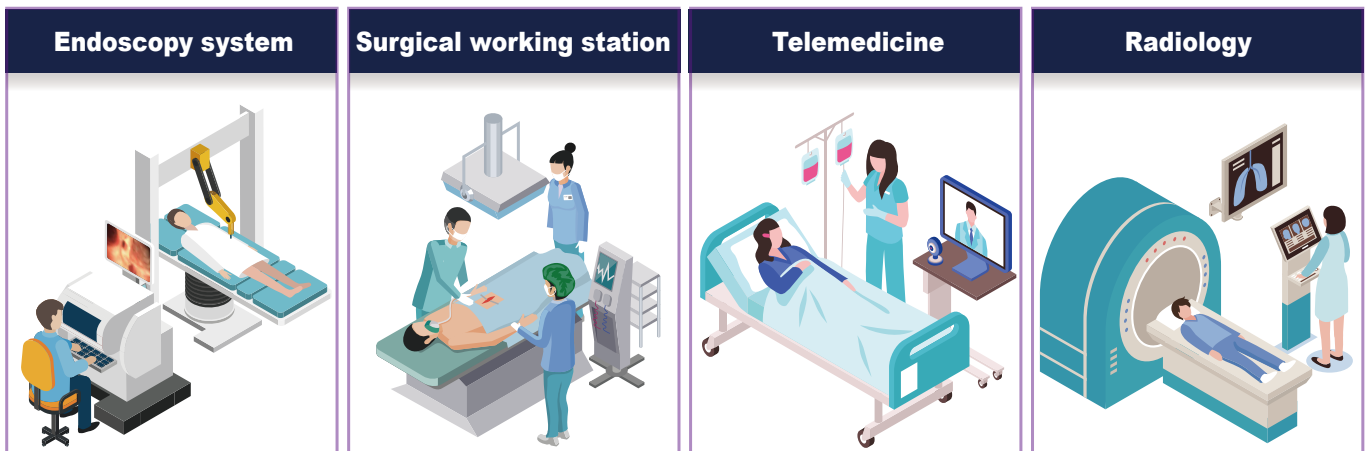
All-in-one Medical Grade Panel PC

POCi-W22C-ULT5



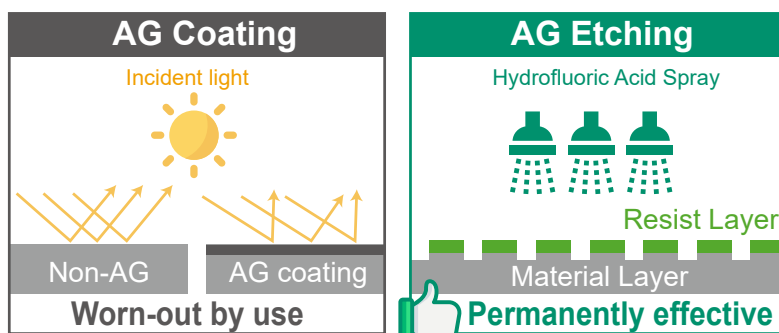
Intelligent Working Station

The POCi-W22C-ULT5 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.



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.



► 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 fire resistant Mylar® sheet insulation. Voltage isolation and isolation signals ensure that the signals and voltages of medical instruments and computers will not interfere with each other. It can provide a safe medical environment.



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.

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.



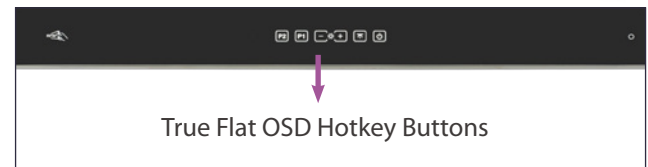
IP Protection

IP66 front bezel and IP54 back cover are easy to be cleaned with cleaners.



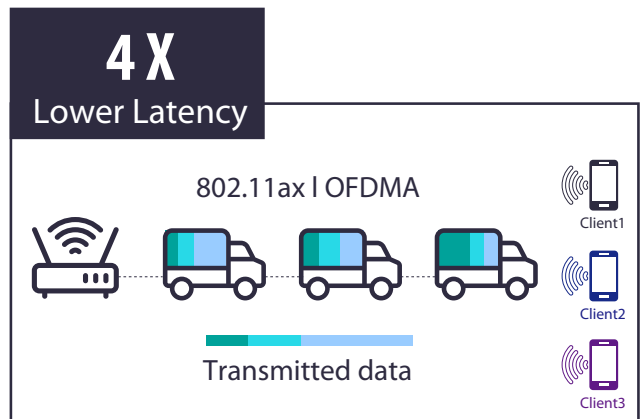
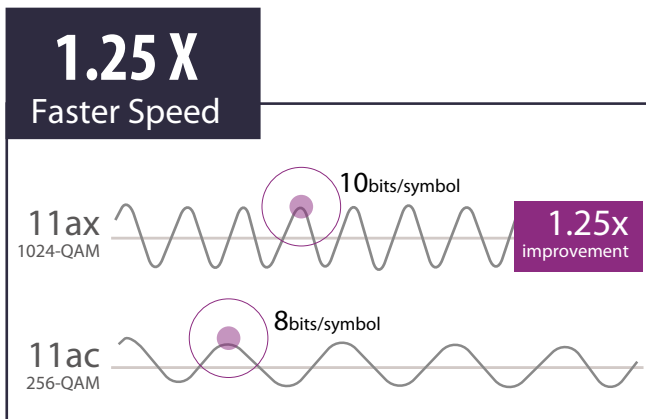
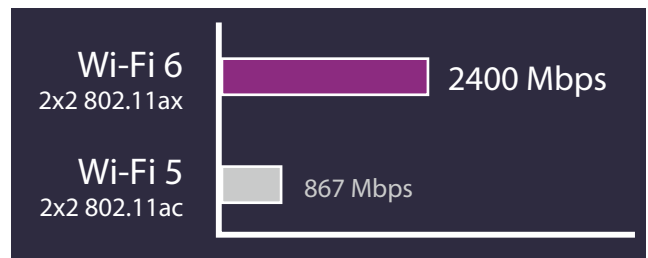
True Flat OSD Hotkey Buttons

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



Wi-Fi 6 Module

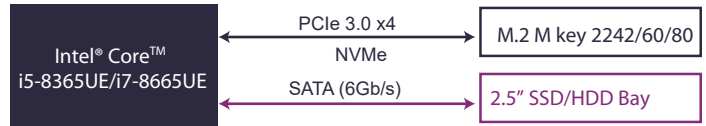
The POCi-W22C-ULT5 supports the latest Wi-Fi 6 standard which enables more clients in dense environments and will provide a better experience for typical wireless LAN networks.



Storage Device

The POCi-W22C-ULT5 provides flexible options for storage

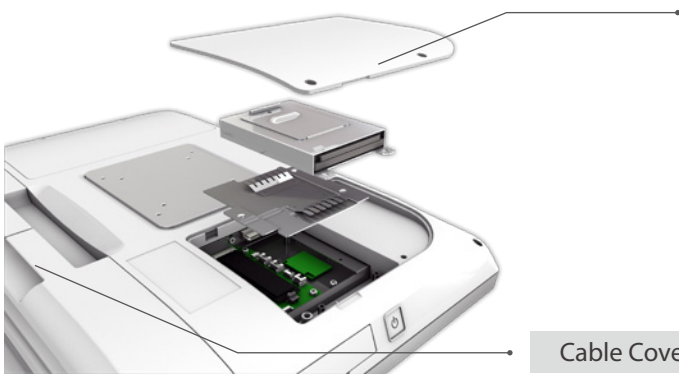
- 2.5" HDD/SSD
- M.2 M key slot for NVMe, up to PCIe 3.0 x4







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.

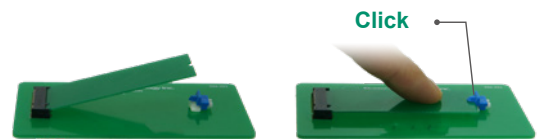


Accessible HDD Cover

<p>2.5" SSD/HDD</p> 	<p>2242, 2260 and 2280 M.2 SSD</p> <ul style="list-style-type: none">  M.2 2242 SSD  M.2 2260 SSD  M.2 2280 SSD
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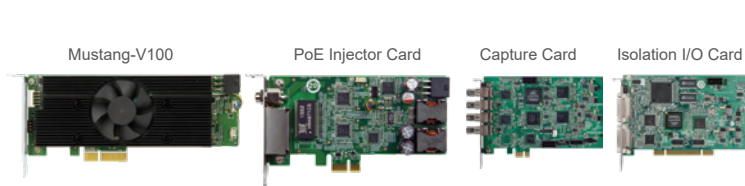
Click-to-fix M.2 Slot

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



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 Mustang-V100 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.



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.



All-in-one Medical Grade Panel PC

POCm-W22C-ULT3



Three Hot-swappable Batteries

Three hot-swappable batteries that can provide sufficient power, and the ergonomic side-facing design ease the use for nurses with different height. Compared to the LiFePO4 battery of the traditional nursing cart, the batteries installed on the POCm have better design by reducing more than 5 kilograms of weight. The battery docking station can perform fast charging, taking only 3.5 hours from 0 to 100%.



Lightweight Design

Traditionally, the battery of working station is bulky and occupies space. The hot-swappable batteries make the POCm series an ideal medical cart computer by decreasing the total weight by up to 5 kg.



Highly Integrated

The POCm series is a highly integrated PPC. When building a mobile working station, the easy installation steps prevent you from facing the trouble of integrating different components and messy cabling.



Cost Effective

The typical price range of nursing cart battery is more than USD 600 (after service included). Our anti-bacteria battery saves more than USD 400 cost. The charging dock design meets the need of medical context and relieves the wasted time and efforts generated from going back and forth between nursing station and ward.

► Specifications



Model		POCi-W22C-ULT5	POCm-W22C-ULT3
LCD Specifications	LCD Display	21.5" (16:9)	21.5" (16:9)
	Max Resolution	1920 (W) x 1080 (H)	1920 (W) x 1080 (H)
	Brightness (cd/m ²)	250	250
	Contrast Ratio	1000:1	1000:1
	LCD Color	16.7M RGB 6-bit (Hi-FRC)	16.7M RGB 8-bit
	Pixel Pitch (mm)	247.95 (H) x 247.95 (V)	274.5 (H) x 274.5 (V)
	Viewing Angle (H-V)	178° / 178°	170°/160°
	Backlight MTBF (hrs)	30000 (LED backlight)	30000 (LED backlight)
Touchscreen	Touchscreen	Projected capacitive type with USB interface	Projected capacitive type with 10-point multi-touch
	Touch Controller	EETI (80H84)	EETI (EXC3188+EX5440)
	Surface Hardness	6H	6H
	Coating	Chemical etching AG	-
	Multi-touch	Projected capacitive type with 10-point 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)	6th Generation Intel® mobile ULT Core™ i7-6600U / Core™ i5-6300U / Celeron® 3855U
	RAM	DDR4 SO-DIMM up to 32GB	Two 260-pin 2400/2133MHz dual-channel DDR4 SO-DIMM, 4GB pre-installed (system max. 32GB)
	LAN Controller	1 x Intel® I219 Ethernet Controller (AMT 12.x supported by i7/i5 SKUs) 1 x Intel® I211 Ethernet Controller	1 x Intel® I219 Ethernet Controller 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)	Bottom I/O 1 x DC jack 2 x HDMI output 2 x GbE LAN port 2 x RS-232/422/485 4 x USB 3.2 Gen 1 port Other 2 x USB 2.0 port (side) 1 x Audio out (side)+1 x Mic in (side) 1 x Digital mic (front, bottom)
	Storage	1 x 2.5" accessible SATA HDD/SSD bay 1 x M.2 2242/60/80 M key (PCIe x4)	1 x 2.5" Accessible SATA HDD bay 2 x M.2 2280 M key (PCIe x1, SATA) with RAID 1 x M.2 1630/2230/3030 A/E key (PCIe x1, USB 2.0)
	Audio	2 x 3W speaker	2 x 3W speaker
	Expansion Interface	1 x PCIe x4	1 x Full-size/half-size PCIe Mini (PCIe+USB)
	LED	1 x RFID indicator (optional) 2 x LED reading light	1 x RFID indicator 3 x Battery indicator (color: blue/red) 1 x Power indicator
	Wi-Fi and Bluetooth	IEEE 802.11 ax 2T2R module (Wi-Fi 6 Module) Bluetooth V5.0 (M.2 2230)	IEEE 802.11 a/b/g/n/ac 2T2R module with Bluetooth V4.2 M.2 2242 A/E key (PCIe x1, USB 2.0)
	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	Wall, Stand and Arm VESA 75/100
Net Weight		6.9 kg	7.07 kg without battery 8.43 kg with 3 batteries
Dimensions (WxHxD)		507.5 x 335.5 x 64.5 mm	543 x 350 x 71 mm
Environment	Operating Temperature	0°C~40°C	0°C~40°C
	Storage Temperature	-20°C~60°C	-20°C~60°C
	Humidity	10% to 95% (non-condensing)	10% to 90% (non-condensing)
	Vibration	1G	1G
	Shock	Operating shock: 5G peak acceleration (11ms duration) Non-Operating shock: 15G peak acceleration (11ms duration)	Operating Shock: 5G peak acceleration (11ms duration) Non-Operating Shock: 10G peak acceleration (11ms duration)
	IP Level	Front: IP66, Back: IP54	Front: IP65, Back: IP32
	Thermal	Fanless heatsink without fin	Fanless heatsink without fin
Power	Power Input	19V DC input	19V DC input
	Power Adapter	150W medical power adapter	150W medical power adapter
	Battery	Built-in TC202 battery (Optional)	3 slots for Li-ion battery pack (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)	CE, FCC Class B Part18 IEC 60601-1:2005+AMD1:2012 (Edition 3.1) IEC 60601-1-2: 2014 (Edition 4.0)

Light Industrial Panel PC

AFL3-W19C-ULT3



Intel® Core™ i5 and Celeron® ULT processor



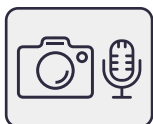
PCAP touch screen



IP64 compliant front panel



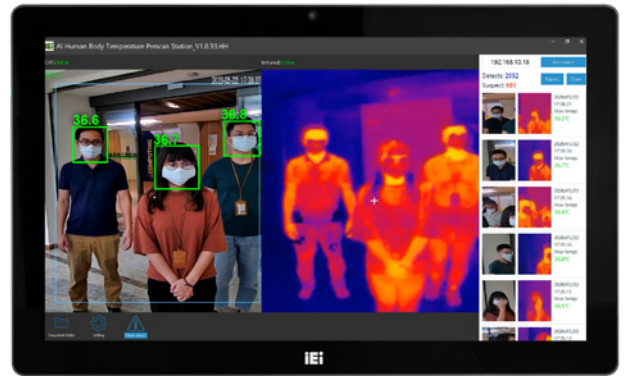
Rich I/O interface



Built-in camera, microphone and speaker



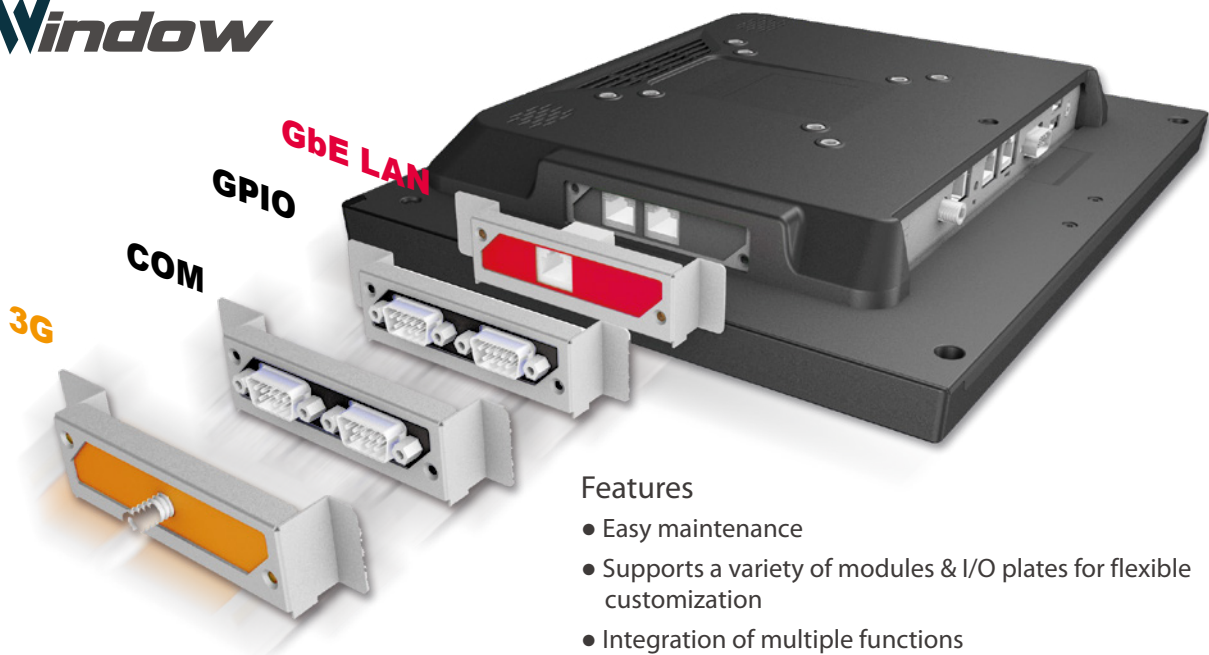
Anti-UV and anti-glare screen



E-Window Tool Kit

Innovative E-Window technology is a new modular way of adding flexible functionality to a wide range of devices. Using standardized component helps system integrators easily add more features without any costly efforts.

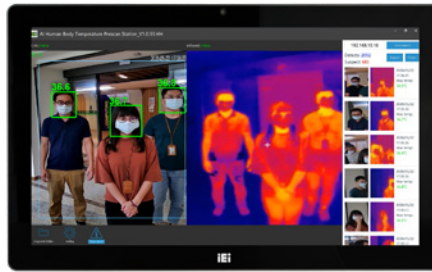
E-Window



Features

- Easy maintenance
- Supports a variety of modules & I/O plates for flexible customization
- Integration of multiple functions
- Easy replacement of different modules

► Specifications



Model		AFL3-W19C-ULT3
LCD	Size	18.5"
	Resolution	1366 x 768 (16:9)
	Brightness (cd/m ²)	250
	Contrast Ratio	1000:1
	LCD Color	16.7M
	Pixel Pitch (mm)	0.240 (H) x 0.240 (V)
	Viewing Angle (H-V)	170°/160°
	Backlight MTBF (hrs)	30,000 (LED backlight panel)
Touch Screen		Projected capacitive with USB interface (anti-UV / anti-glare coating)
Touch Controller		EETI EXC3180
Mainboard	CPU	Intel® Core™ i5 and Celeron® ULT Processor
	Memory	Two 260-pin 2133/1867 MHz dual-channel DDR4 SO-DIMMs (system max. 32 GB)
	Ethernet	2 x Intel® I211-AT PCIe GbE controller
	Audio Codec	ALC892
Storage		1 x mSATA (E-Window) 1 x 2.5" SATA 3Gb/s HDD bay 1 x M.2 2280/22110 M key (PCIe signal)
I/O Ports & Switch		1 x RS-232 by DB-9 (RI/5V/12V) 1 x RS-232/422/485 by DB-9 (RI/5V/12V) 2 x GbE LAN 4 x USB 3.2 Gen 1 (5Gb/s) 1 x HDMI output 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x 9V ~ 30V lockable power jack
E-Window Expansion		Yes, optional (full-size PCIe Mini slot with PCIe/SATA/USB)
Audio		AMP 3W + 3W (internal speaker)
Camera / Microphone		2-megapixel with low light function, digital microphone
Wireless & Bluetooth		IEEE 802.11a/b/g/n/ac & Bluetooth V4.1 via M.2 2230 A+E key slot (PCIe & USB signals)
OSD Function		Software OSD
Physical	Front Panel Construction	PC + ABS Plastic
	Mounting	Panel, Wall, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm
	Color	Black C
	Dimensions (W x H x D) (mm)	470 x 290 x 70
	Cut-out Dimensions (W x H)	443 x 261 mm
Net/Gross Weight (kgs)		7.3/10
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C~50°C
	Storage Temperature (°C)	-20°C~60°C
	Humidity	10% to 95% (non-condensing)
	IP Level	IP 64 compliant front panel
	Safety & EMC	CE / FCC
Thermal Solution		Fanless
Power	Power Requirement	9V ~ 30V DC
		12V@7.1A (Intel® Core™ i5-6300U CPU with 4GB 2133 MHz DDR4 memory)

► Thermal Camera Specifications



Accurate to within $\pm 0.3^{\circ}\text{C}$, with TAF accuracy test certification



Simultaneous detection of up to 30 targets at 30 fps



Long monitoring distance of up to 3 meters from camera.



Automatically capture face to measure temperature



Model	Camera 1	Camera 2		
Thermal Camera	Image Sensor	VOx Uncooled Thermal Sensor Technology	Uncooled VOx Microbolometer	
	Effective Pixels	256(H) x 192(V)	160(H) x 120(V)	
	Pixel Size		12 μm	
	NETD		<50mk@f/1.1	
	Spectral Range	8~14 μm	7~14 μm	
	Image Setting	Brightness/Sharpness/AGC/3D DNR		
Thermal Lens	Color Palettes	Rainbow		
	Lens Type	Fixed		
	Focus Control	6.0mm		
	Field of View	H:35°, V:27°		
Visible Camera	Image Sensor	1 / 2.9" 2MP Starlight Low Illumination CMOS Sensor		
	Effective Pixels	1920(H)x1080(V)		
	Electronic Shutter	1/1~1/30,000s		
	Min. Illumination	0.005Lux@F1.2 Color mode, 0.001Lux@F1.2(B/W)	Color: 0.005Lux@F1.2 / B/W: 0.001Lux@F1.2	
	IR No.	1 array infrared light		
	IR Distance	Longest distance: 35M		
Visible Lens	IR Control	Auto /Manual		
	Lens Type	Fixed		
	Focal Length	4.0mm		
	Max. Aperture	F2.0		
Temperature Measurement	Angle of View	Horizontal Angle: 84°, Vertical Angle: 45°		
	Measurement Range	30°C~+45°C		
	Measurement Accuracy	Max $\pm 0.3^{\circ}\text{C}$: (TAF Accuracy Certification)	Max $\pm 0.5^{\circ}\text{C}$	
Video	Measurement Mode	Support detection of all monitoring area or specified area	Supports whole area and regional temperature measurement	
	Compression	H.265/H.264		
	Frame Rate	Main Stream: 1920x1080 / 1280x720 Sub stream: 720x576 / 320x288		
	Bit Rate	640~8192Kbps		
	Day/Night	Auto(ICR)/Color/B/W		
	BLCMode	BLC/HLC/WDR		
	White Balance	Auto/Manual		
	WDR	$\geq 80\text{dB}$		
	Noise Reduction	2DNR3DNR	3D DNR	
	Motion Detetion	Off/ On (4 zones, Rectangle)		
	Defog	Off/ On		
	Flip	180°		
	Mirror	Off/ On		
	Privacy Masking	Off/ On (4 zone, Rectangle)		
Audio	Compression	G.711a		
	Audio Input	1CH		
	Audio Output	1CH		
Alarm	Alarm Input	NO		
	Alarm Output	1CH		
Network	Network Port	1 x RJ45 1CH 10/100 Base-T Ethernet		
	Protocol	Support RTSP, RTP, TCP, UDP, UPNP, DHCP, PPPoE protocol etc.		
Electrical	Power Supply	DC12V		
	Power Consumption	$\leq 5\text{W}$		
Environmental	Operating Condition	-20°C~+55°C		
	Storage Condition	10°C~+40°C		
	Protection Level	IP65		
Construction	Casing	Metal		
	Body Color	White		
	Dimensions	90(H)x80(W)x190(L) mm	81(H)x101(W)x246(L) mm (with stand)	
	Weight	<1Kg		
	Certification	CE, FCC, TAF Accuracy Certification		CE/FCC

Plug and play, easy and convenient



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