

# 2020

## Smart Healthcare Solution

Integrating Smarter Solutions to Provide Better  
Healthcare Experiences



**Ai**

**iei**®

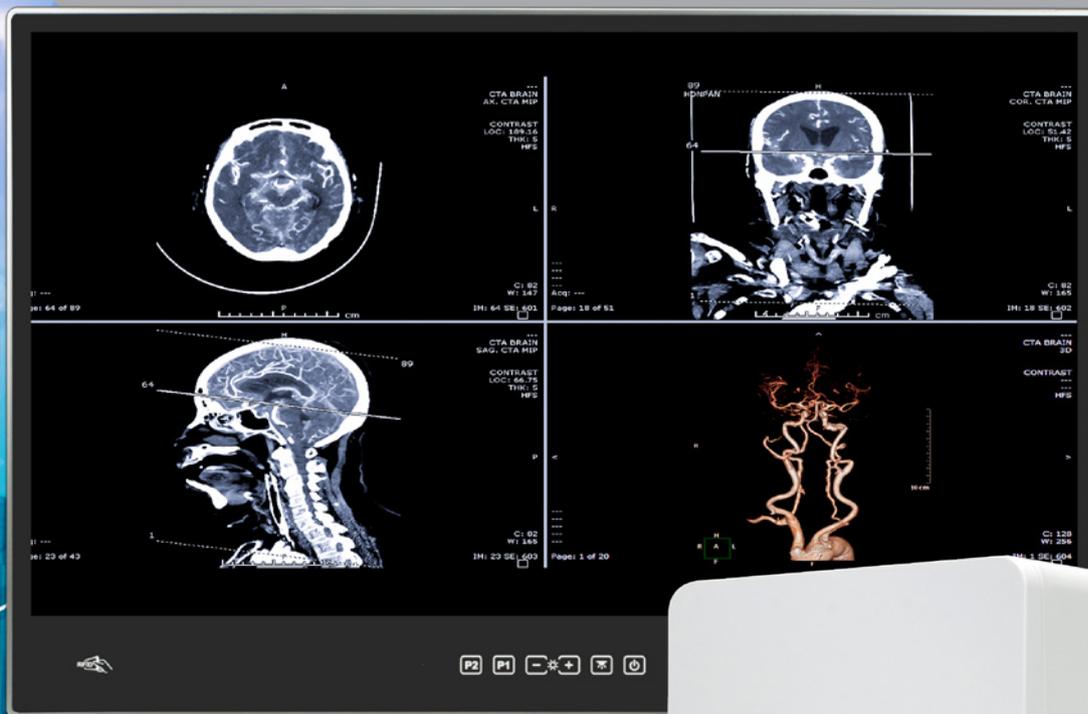


[www.ieiworld.com](http://www.ieiworld.com)

# Core competence

Based on ISO 13485 & ISO 14971 quality and risk management system, IEI not only has solid medical products manufacturing experience but also co-work with various field experts to ensure our products meet the unique requirements of hospital.

Supported by self-owned laboratory, IEI medical computing systems are designed to comply with the latest and strictest medical standards, including UL 60601-1, CE(EN 60601-1-2), FCC Part 18 Class B.



IEI medical solution not only offers powerful and useful devices but also provides practical total solution to advance medical technology. IEI healthcare solution aims at decreasing human error in the workflow and creating a paperless environment by utilizing IEI smart medical products. Highly modular design also helps the user manage various situations in a flexible way and enhance work efficiency in their daily routine.

**DICOM Optimized/  
Isolation Design/  
Antistatic/ Antibacterial**

**ODM/OEM**

**Compliant with ISO  
13485/ 14971 and EN//  
UL 60601-1**

**Certified Medical  
Electronic Device**

**Medical & Optical  
Design Team**



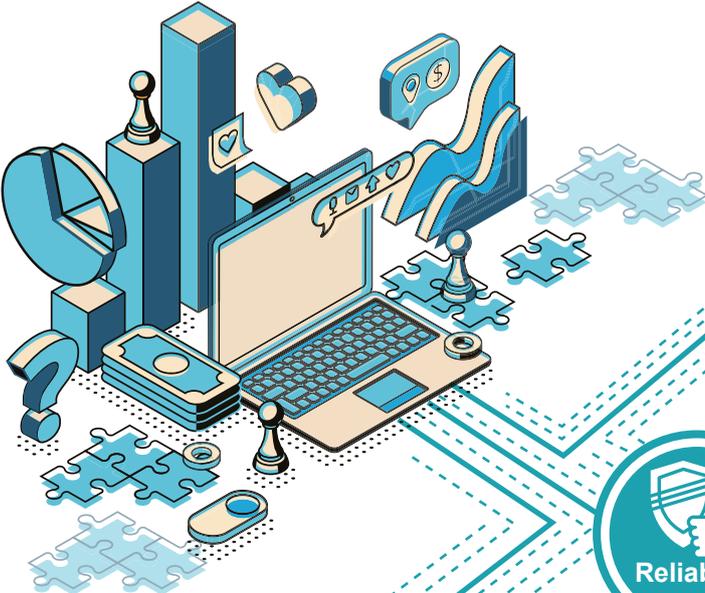


# Artificial Intelligence in Healthcare

Recently AI techniques have sent vast waves across healthcare industry. No one doubts that artificial intelligence has unimaginable potential. Within the next couple of years, it will revolutionize every area of our life. When it comes to our health, especially in matters of life and death, the promise of artificial intelligence (AI) to improve outcomes is very intriguing.

## » The Advantages of Edge Computing

The need for real-time decision making is pushing AI closer to the edge. Therefore, edge computing plays a crucial role in the AI implement. There are at least three benefits as follow:



**Efficiency**

Running applications at the edge cuts down network latency and produces faster responses

**Reliability**

By lowering the dependency on the corporate data center, edge computing removes the single point of failure in the infrastructure, hence reducing its susceptibility to attacks and bandwidth for data transmitting.

**Cost Effective**

Adding edge servers near user clusters is also likely to be a cheaper way to achieve scalability than fortifying the servers in the corporate data center and provisioning more network bandwidth for every user.

## ■ Medical Image

Medical Imaging & diagnostics are always the key applications in recent market trends. For instance FDA has approved AI software that screens patients for diabetic retinopathy without the need for a second opinion from an expert.



Endoscopy Surgery



Ultrasound Scanner



Microscope

The higher resolution input of a medical image, the better accuracy of an AI model could be. Therefore, we need an accelerator to facilitate the image processing. IEI proud to roll out Mustang series to meet the increasing demand of computing power.

**10X Higher Performance**

1 Trillion operations per second

**1 TOPS**  
1 Trillion operations per second of dedicated neural networks compute



**ULTRA Low power**

## » A Perfect Choice for AI Deep Learning Inference Workloads



### Mustang-V100-MX8

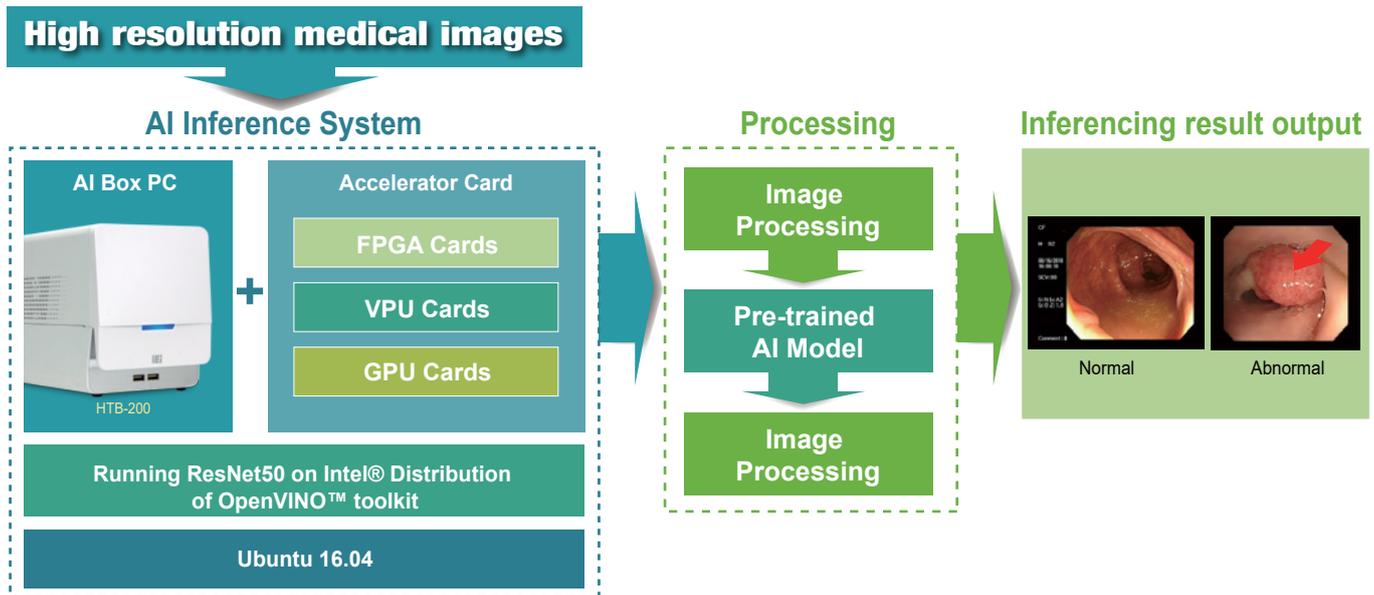
Intel® Vision Accelerator Design with Intel® Movidius™ VPU



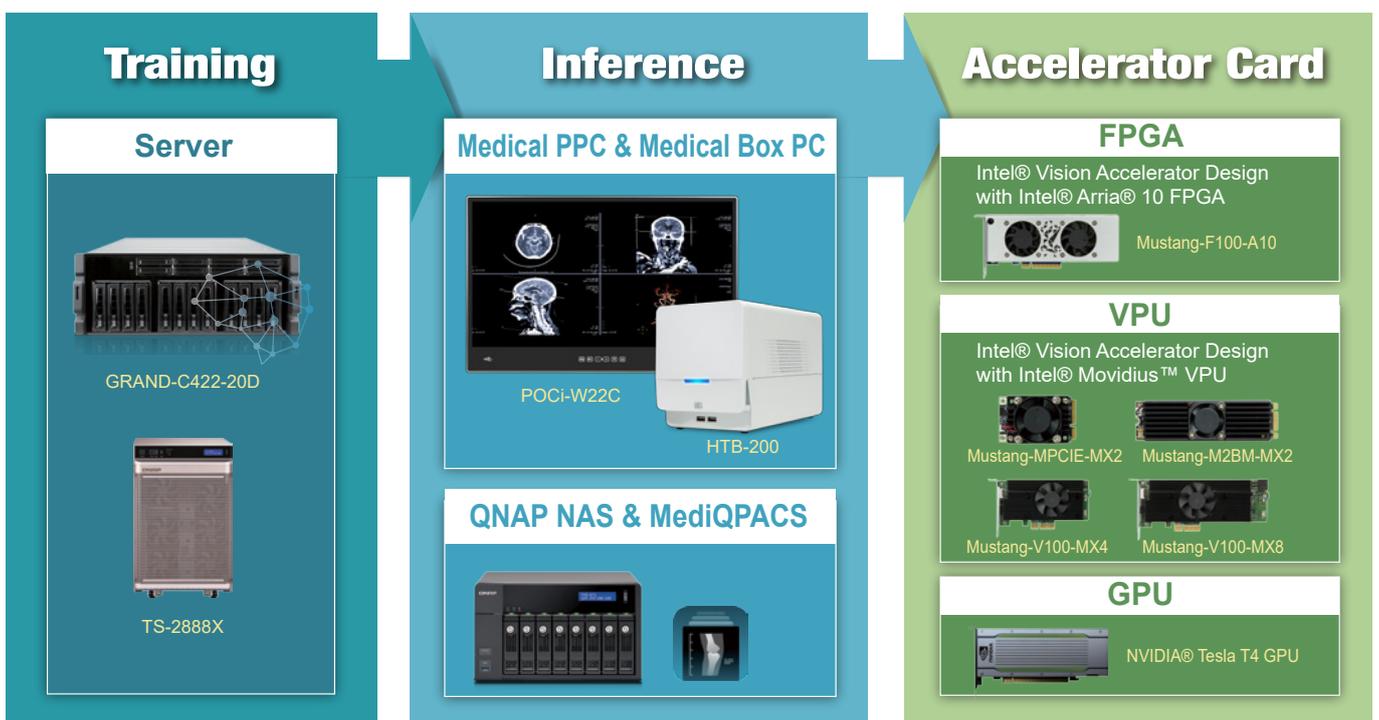
# » Intel® Distribution of OpenVINO™ Toolkit

Intel® Distribution of OpenVINO™ toolkit is based on convolutional neural networks (CNN), the toolkit extends workloads across multiple types of Intel® platforms and maximizes performance.

It can optimize pre-trained deep learning models such as Caffe, MXNET, and ONNX Tensorflow. The tool suite includes more than 20 pre-trained models, and supports 100+ public and custom models (includes Caffe, MXNet, TensorFlow, ONNX, Kaldi) for easier deployments across Intel® silicon products (CPU, GPU/Intel® Processor Graphics, FPGA, VPU).



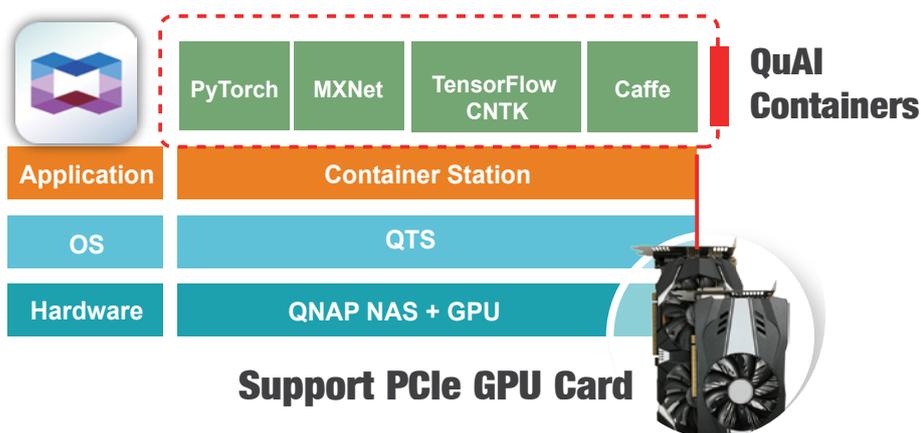
# » IEI AI-Ready Platform



Moreover, IEI medical team leverages the ample SW RD resources from QNAP to come up with the QuAI, a free app built on our QTS operating system to facilitate the evolving of AI.

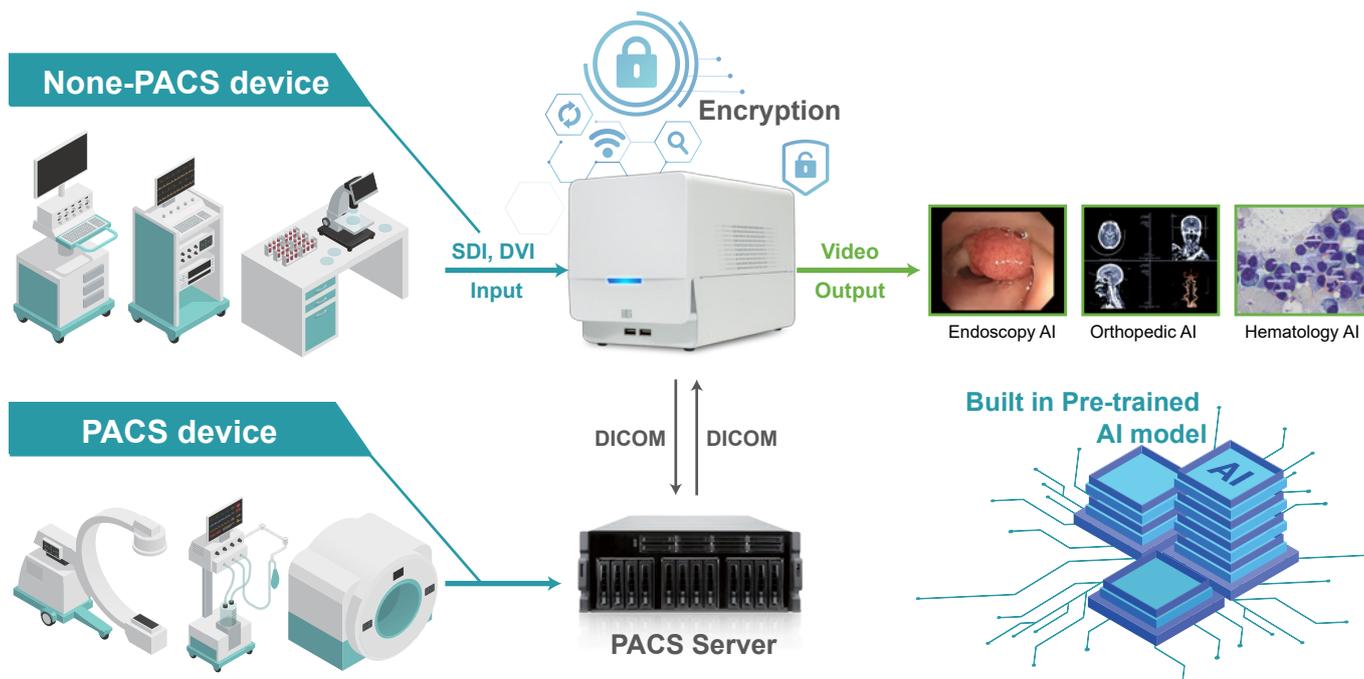


IEI group provides total solution for AI application, from big data management (NAS) , AI training (AI training platform, training machine and accelerator card) to AI inference (web based platform, inference machine both stand alone and embedded system)



## » Workflow of Medical AI

IEI offers a perfect platform for AI developing company. These AI companies need an encryption available platform to both integrate and protect their algorithms. HTB-200 is expected to integrated with different AI models and become a turn key solution for hospitals.





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# Smart Healthcare Solution

Healthcare that was once given only in the hospitals is now provided in diverse environments such as hospitals, communities or homes. Healthcare providers could be doctors, nurses, care-givers or patients themselves. With extensive experiences in researching and developing medical devices, IEI smart solutions helps our customers to provide high quality services and improve healthcare environment.



## • Mobile Nursing Solution

The ruggedized panel PC helps hospital to achieve paperless workflow. In the past, medical personnel spent lots of time on taking vital records manually. This may lead to human error and endanger patients' safety. Our worldwide solution partners have been using IEI products in wards, ICU and hemodialysis centers. Their solutions have successfully helped caregivers to spend more time with patients and improve the patient-doctor relationship.



## • Smart Outpatient Solution

In the past, waiting for long durations before seeing a doctor is quite common in the hospital. Hence, numerous hospitals have adopted smart outpatient services to increase operational efficiency, improve visitation convenience, and reduce patient wait times. IEI works with our field partners to enhance the patient satisfaction for outpatient department.



## • Operating Room Solution

In the OR, the surgical team has to be aware of all kinds of information such as vitals, surgical navigation or even patient's medical history. However, this information is usually provided by different machines or systems, making it difficult for the surgical team to catch them all at once. The integrated information platform assists the surgical team in accessing all information they need from one device to further optimize their work.



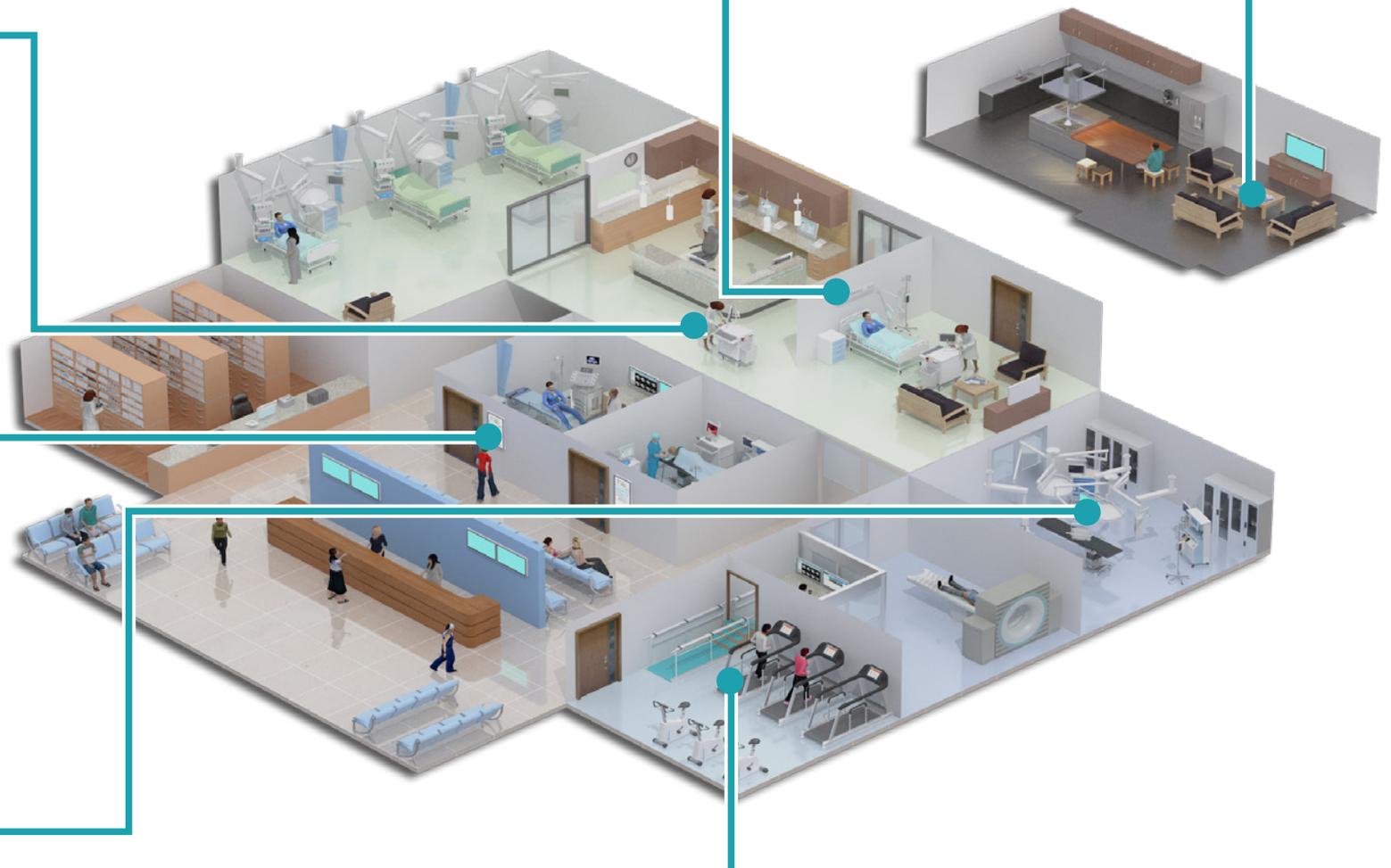
## • Bedside Infotainment Application

IEI's partners have integrated BIS-series, IOVU-series and POC-series with their bedside infotainment systems for a large number of hospitals worldwide, especially in Taiwan and USA. Bedside infotainment system has shown its value in improving patient-doctor relationship by assisting caregivers to provide necessary healthcare education to inpatients before and after treatments.



## • Homecare Solution

Population aging is becoming a worldwide issue. Therefore, IEI expands the healthcare market to the population aging field. By adapting the latest ICT technology, our smart devices not only help to connect people in an easier way but also could perform health management function. Medical staffs could interact with patient and check the home monitoring record in a remote site.



## • Rehabilitation Equipment



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# IEI Standard Medical Product

IEI has been developing and manufacturing industrial computers for almost two decades and medical devices for more than 10 years. The services we provide to our customers are with high quality and long-term support. Furthermore, the flexible OEM/ODM cooperation pattern is also the option for customers to choose products that are best fit to their requirements.

## » All-in-one Medical Grade Panel PC

User-friendly-oriented design is always the core value of us. IEI all-in-one medical grade panel PC series offers three product lines to accommodate all healthcare needs. All products are equipped with antibacteria chassis and IP65 front bezel for easy sterilization. The touch panel is easy to operate, even with multi-layer medical gloves. In addition, the products we designed support various communication functions, such as Bluetooth, 1D/2D barcode scanner, RFID, SCR and MSR. These units can provide clinician personnel conveniences and increase the work efficiency.



### POC Series

#### Point-of-care terminal

- Rich bottom I/O
- High performance with smart fan / fanless system
- Ambient light sensor for panel brightness adjustment



### POCm Series

#### Mobile point-of-care terminal

- Light weight design: under 6.8kg without battery
- High performance fanless system
- 3 hot swappable batteries with battery management utility design



### POCi Series

#### Intelligence point-of-care terminal

- Ultra slim front bezel
- High performance with fanless system
- PCIe x 4 expansion
- optional DICOM preset



Point-of-care terminal



Mobile point-of-care terminal



Bedside terminal

## • Anti-bacteria Cover



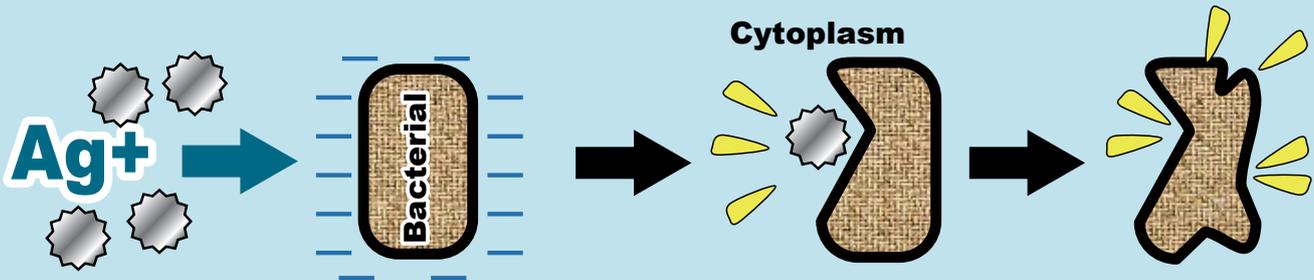
Anti-bacteria

The case contains silver ions anti-bacterial materials, effectively inhibiting the propagation of bacteria.



- Staphylococcus aureus
- Escherichia coli
- Pseudomonas aeruginosa
- Klebsiella pneumoniae
- MRSA

## • Antibacterial Mechanism of Silver Ions



Ag ions that have plus are drawn toward microbes, and disturb their electric balance.

The microbes are burst their cell wall and extinguished.

## • User-experience Design



Multi-layer medical glove



IP65 proofed front glass is easy to be cleaned with cleaners

## » RISC Panel PC & Mobile Solution

The IOVU RISC Based PC Series enables the great embedded flexibility for medical usage applications. Making use of the low power consumption RISC platform, the IOVU series adopts a fan-less and power efficient design, providing a cost-effective, stable, and easy to use solution to collect, transfer, process, access, and manage data. Power over Ethernet (PoE) is another key feature to deal with the troublesome work of cabling & power deployment. Mobile solution enhances the working efficiency of medical personnel and optimizes clinical workflow.



IOVU-210AD-RK39



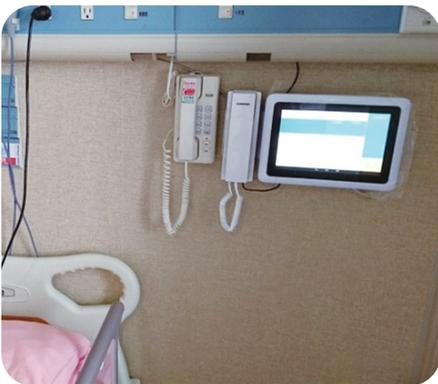
IOVU-210AR-RK39



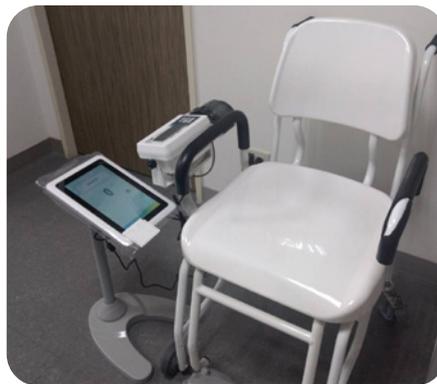
IOVU-207AR-RK39



MODAT-550A



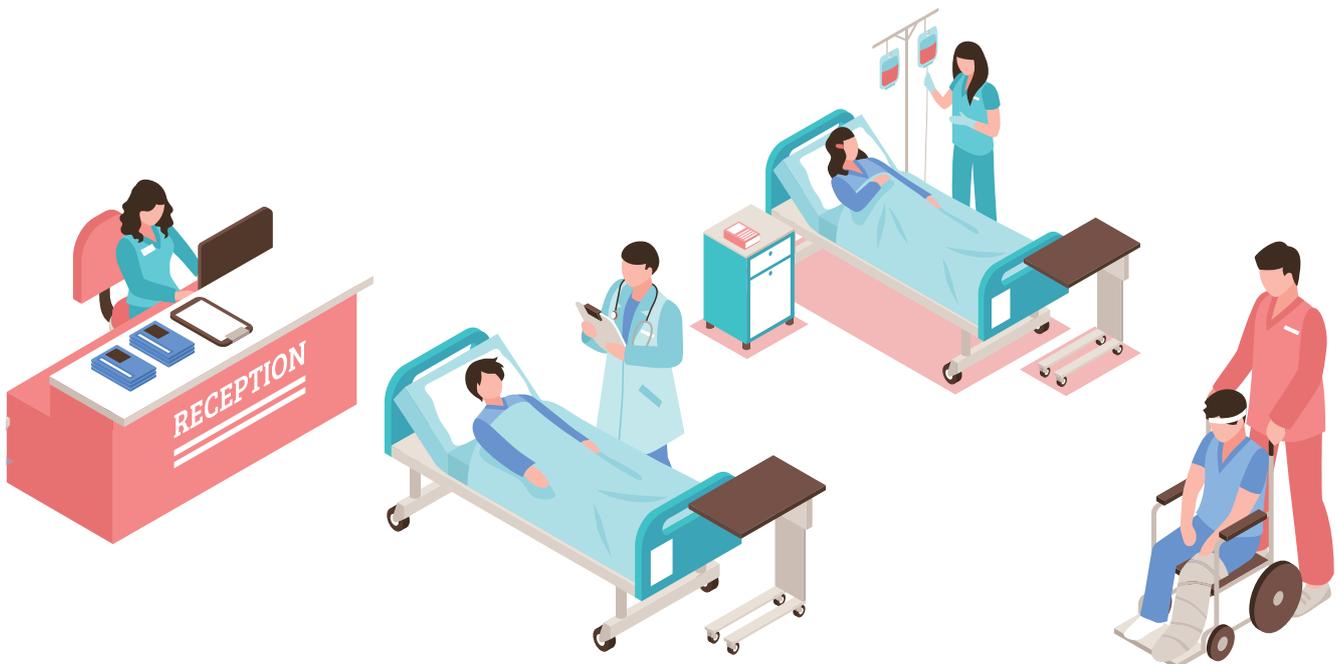
Integrated digital head board



Hemodialysis application



Mobile solution



## » Medical Embedded System

Our strong knowledge of market and technology innovation offers long-term support, high quality, reliable and flexibility for all of our products with choices of size, performance and feature for different applications. Our medical grade box PC can be used in operating room, nursing station, dialysis system or examination center, etc. IEI medical grade hardware solutions provide surgical team an integrated information platform so that they can perform the procedure more efficient, accurate and safe.



- **Compliant with medical standards**

The HTB-100 is compliant with medical standards, including IEC 60601-1 V3.1, IEC 60601-1-2 V4.0, IEC 62304, IEC 62366, ISO 14971 and FCC part 18 class B, making the medical environment more reliable.

- **Flexible expansion**

The flexible expansion is one of the advantages of the HTB-100 for medical applications. The HTB-100 reserves a PCIe x16 slot for add-on card expansions, such as capture card for medical imaging inspection during surgery.



- **Isolated COM ports for safety protection**

The COM ports support 2.5kV isolation that meets medical standard (IEC 60601-1-2 V4.0). The isolated ports can increase safety on device designed for medical environment, and provide comprehensive protection against electrical surges for patients and medical staffs.

- **Fanless and easy maintenance**

The HTB-100 is a fanless embedded system, and the heatsink is situated on the bottom side. The design makes the HTB-100 an easy-to-clean and reliable system for the medical environment.

- **Ground pin to prevent harm to patients and medical staffs**

The perfect grounding pin design can avoid current from the HTB-100 to vital devices which connect to patients, and to avoid the current damage from other devices.

- **Easy mounting design**

Various mounting methods such as desktop and wall mount are supported for easy use in medical environment. The provided flexible mounting bracket can be oriented 180 degrees to change from desktop to wall mount.



## » Surgical Monitor

The BriteMED® surgical monitor series is a versatile medical LCD monitor which supports a wide range of inputs and outputs from multiple modalities. The quality panel technology produces stable and artifact-free imaging required during an operation. The anti-glare glass design ensure accurate image viewing under strong lighting in the operation theater.



\* Stand is optional

**MMS-21C**



\* Stand is optional

**MMS-27C**

## » Medical Cart

The BriteMED® medical carts are designed with aluminum-alloy structure. Each metal sheet is joined together by electro-welding instead of screw, ensuring the strength and safety when moving around in the hospital. Integrated with the optional panel PCs and batteries, it provides a total solution for mobile health applications



pCART-N1



pCART-N3



pCART-D1

# » Selection Guide

## • All-in-one Medical Grade Panel PC



Series		POC		BIS
Model		POC-17C-ULT3	POC-W24C-ULT3	BIS-W19C-ULT4
LCD/Touch	LCD Size (inch)	17"	24"	18.5"
	Max. Resolution	1280 (W) x 1024 (H)	1920 (W) x 1080 (H)	1366 (W) x 768 (H) / 1920 (W) x 1080 (H)
	Brightness (cd/m <sup>2</sup> )	350	250	250 / 350
	Contrast Ratio	1000:1	1000:1	1000:1
	LCD Color	16.7M	16.7M	16.7M colors
	Viewing Angle (H-V)	170°/160°	178°/ 178°	170°/160°, 178°/178°
	Touchscreen	Projected capacitive type with USB interface	Projected capacitive type with 10-point multi-touch	Projected capacitive type with 10-point multi-touch
System	CPU	6th Generation Intel® mobile ULT Core™ i7/ i5/Celeron® processor	6th Generation Intel® mobile ULT Core™ i7/ i5/Celeron® processor 7th Generation Intel® mobile ULT Core™ i7/ i5/Celeron® processor (by project base)	7th Generation Intel® mobile ULT Core™ i5/ Celeron® processor
	Memory	Two 260-pin 2400/2133MHz dual-channel DDR4 SO-DIMM, 4GB pre-installed (system max.32GB)	Two 260-pin 2400/2133MHz dual-channel DDR4 SO-DIMM, 4GB pre-installed (system max.32GB)	Two 260-pin 2400/2133MHz dual-channel DDR4 SODIMM, 4GB pre-installed (system max.32GB)
	I/O Ports	1 x RJ-11 for 1D/2D barcode reader 4 x USB 2.0 (2 on the side) 4 x USB 3.2 Gen 1 port 1 x HDMI output 2 x GbE LAN port 1 x RS-232/422/485 1 x 12~28V DC jack	1 x RJ-11 for 1D/2D barcode reader 4 x USB 2.0 (2 on the side) 4 x USB 3.2 Gen 1 port 1 x HDMI output 2 x GbE LAN port 1 x RS-232/422/485 1 x 12~28V DC jack	Rear 1 x 1.5kV isolation COM port 1 x 12~28V DC Jack 1 x GbE LAN port 2 x USB 3.2 Gen 1 port Bottom 1 x RJ-11 for barcode scanner 1 x GbE LAN port 2 x USB 3.2 Gen 1 port 1 x HDMI output Side 1 x HDMI input (optional) 2 x USB 2.0 port 1 x Audio out 1 x Mic in
	Storage	2 x 2.5" SATA 6Gb/s accessible HDD bay 1 x mSATA (E-Window)	1 x 2.5" SATA 6Gb/s HDD/SDD bay 1 x mSATA reserved (E-Window)	1 x 2.5" SATA 6Gb/s HDD/SDD bay 1 x mSATA reserved (E-Window)
	Audio	2 x 2W speaker, digital microphone	2 x 2W speaker, digital microphone	2 x 3W Speaker, digital microphone
	LED Function	RFID indicator	RFID indicator	RFID indicator
	OSD Function	1 x LCD on/off 1 x Brightness up 1 x Brightness down 1 x Volume up 1 x Volume down 1 x Touch lock button for cleaning Combinations: 1 x Lock/Unlock OSD 1 x Power on/off	1 x LCD on/off 1 x Brightness up 1 x Brightness down 1 x Volume up 1 x Volume down 1 x Touch lock button for cleaning Combinations: 1 x Lock/Unlock OSD 1 x Power on/off	1 x LCD on/off 1 x Brightness down 1 x Brightness up 1 x Volume up 1 x Volume down 1 x Touch lock (OSD lock included) Combinations: 1 x Auto-dimming on/off
	Auto-dimming	Yes	Yes	Yes
	Expansion	1 x E-Window slot (full-size PCIe Mini slot with PCIe/mSATA/USB)	1 x E-Window slot (full-size PCIe Mini slot with PCIe/mSATA/USB)	1 x E-Window slot (full-size PCIe Mini slot with PCIe/mSATA/USB)
	Wireless	Wi-Fi and Bluetooth IEEE 802.11 a/b/g/n/ac 2T2R module with Bluetooth V4.1 1 x 2230 A/E key (PCIe x 1/USB 2.0)	Wi-Fi and Bluetooth IEEE 802.11 a/b/g/n/ac 2T2R module with Bluetooth V4.1 1 x 2230 A/E key (PCIe x 1/USB 2.0)	Wi-Fi and Bluetooth IEEE 802.11 a/b/g/n/ac 2T2R module with Bluetooth V4.1 (M.2 2230 A-E key module)
Physical	Construction Material	ABS+PC plastic with antibacterial material	ABS+PC plastic with anti-bacterial material	ABS + PC plastic with anti-bacterial material
	Mounting	Wall, Stand and Arm VESA 75/100	Wall, Stand and Arm VESA 75/100	Wall, Stand and Arm VESA 75/100
	Net Weight	6.0 kg	7.5 Kg	6.5 kg
	Dimensions (WxHxD) (mm)	435 x 376 x 65	595 x 380 x 61	478.6 x 317.3 x 60.1
Environment	Operating Temperature (°C)	0°C ~ 40°C		
	IP Level	IP65 compliant front panel	IP 65 compliant front panel	IP 65 compliant front panel
	Thermal Solution	Fanless	Fanless	Fanless
Power	Power Requirement	12V~28V DC input	12V~28V DC input	12~28V DC input
	Power Adapter	120W medical power adapter: Input: 90V~264V AC, Output: 19V DC	120W medical power adapter: Input: 90V~264V AC, Output: 19V DC	120W medical power adapter: Input: 90V~264V AC; Output: 19V DC
Certification	CE,FCC Class B Part18 IEC 60601-1:2005+AMD1:2012 ( Edition 3.1) IEC 60601-1-2: 2014 (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)	CE,FCC Class B Part18 IEC 60601-1:2005+AMD1:2012 ( Edition 3.1) IEC 60601-1-2: 2014 (Edition 4.0)	

# » Selection Guide

## • All-in-one Medical Grade Panel PC



Series		POCm		POCi
Model		POCm-W22C-ULT3	POCm-W24C-ULT3	POCi-W22C-ULT5
LCD Touch Specification	LCD Size (inch)	21.5"		23.8"
	Max. Resolution	1920 (W) x 1080 (H)		
	Brightness (cd/m <sup>2</sup> )	250		
	Contrast Ratio	1000:1		
	LCD Color	16.7M		
	Viewing Angle (H-V)	170°(H) / 160°(V)	178°(H) / 178°(V)	
	Touchscreen	Projected capacitive type with 10-point multi-touch		
System	CPU	6th Generation Intel® mobile ULT Core™ i7/i5/Celeron® processor		Intel® Core™ i7-8665UE (Whiskey Lake ULT platform) Intel® Core™ i5-8365UE (Whiskey Lake ULT platform)
	Memory	Two 260-pin 2400/2133MHz dual-channel DDR4 SO-DIMM, 4GB pre-installed (system max. 32GB)		DDR4 SODIMM up to 32GB
	I/O Ports	Bottom I/O 1 x DC Jack 2 x HDMI out 2 x GbE LAN port 2 x RS232/422/485 4 x USB 3.2 Gen 1 port 1 x RJ-11 for barcode module	Other 2 x USB 2.0 port (side) 1 x Audio out (side) + 1 x Mic in (side) 1 x Digital Mic (front, bottom)	Bottom I/O 1 x DC Jack 1 x HDMI 1.4 out 1 x Gigabit Isolated LAN (i219 support Intel vPro) 1 x Gigabit Isolated LAN (i211) 1 x Isolated 1.5KV RS232 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 bay 2 x 2280 M key (PCIe x 1/SATA) with RAID 1 x 1630/2230/3030 A/E key (PCIe x 1/USB 2.0)		1 x 2.5" Accessible SATA HDD/SSD bay 1 x M.2 2242/60/80 M key (PCIe x 4)
	Audio	2 x 3W Speaker, digital microphone		2 x 3W speaker
	LED	RFID indicator Battery indicator (color: blue/orange)		RFID indicator Dual LED reading light
	OSD Function	1 x System on/off 1 x Brightness down 1 x Brightness up 1 x Volume down 1 x Volume up 1 x LCD on/off and Touch lock for cleaning		Power on/off Reading light on/off Brightness + Brightness - P1: Backlight & touch lock on/off P2: DICOM Mode button (optional)
	Expansion	1 x E-Window slot (full-size PCIe Mini slot with PCIe/mSATA/USB)		1 x PCIe x4
	Wireless	Wi-Fi and Bluetooth		IEEE 802.11 a/b/g/n/ac 2T2R module with Bluetooth V4.1 M.2 2242 A/E key (PCIe x 1/USB 2.0)
Physical	Construction Material	ABS+PC plastic with anti-bacterial 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	6.8 kg without battery		6.9 kg
	Dimensions (WxHxD) (mm)	543 x 350 x 61	595 x 380 x 61	
Environment	Operating Temperature (°C)	0°C~40°C		
	IP Level	Front: IP65, Back: IP32 above		Front: IP66, Back: IP54
	Thermal Solution	Fanless		Fanless heatsink without fin
Power	Power Requirement	12V~28V DC input		19V DC input
	Power Adapter	150W medical power adapter		
Certification	CE, FCC Class B Part18 IEC 60601-1:2005+AMD1:2012 ( Edition 3.1) IEC 60601-1-2: 2014 (Edition 4.0)			

# » Selection Guide

## • RISC Based Panel PC



Series		RISC		
Model		IOVU-210AD-RK39-R10-TW	IOVU-207AR-RK39-R10-TW	IOVU-210AR-RK39-R10-TW
Chassis	Color	white		
	Dimensions (WxHxD)	293 x 209.5 x 44.5 (mm)	210.7 x 154.7 x 29.6 (mm)	282.5 x 174.3 x 26.8 (mm)
	System Fan	Fanless		
	Chassis Construction	PC + ABS plastic front, metal rear	PC + ABS plastic front, metal rear	PC + ABS plastic
Display	Size	10"	7"	10"
	Resolution	800 (RGB) x 1280	720 (RGB) x 1280	800 (RGB) x 1280
	Brightness (cd/m <sup>2</sup> )	350 cd/m <sup>2</sup> (typ.)	300 cd/m <sup>2</sup> (typ.)	350 cd/m <sup>2</sup> (typ.)
	Pixel Pitch (mm)	0.0564 (H) x 0.1692 (V)	0.1239 (H) x 0.119 (V)	0.0564 (H) x 0.1692 (V)
	Viewing Angle (H/V)	85/85/85/85 Deg.	70/70/70/70 Deg.	85/85/85/85 Deg.
	Touchscreen	Projected capacitive		
Motherboard	CPU	Rockchip RK3399 (Dual-core Cortex-A72 up to 1.8GHz + Quad-core Cortex-A53 up to 1.5GHz)		
	System Memory	On-board 2 GB LPDDR3-1866		
Storage	SD Card	1 x microSD Slot		
	Flash	On-board 16 GB eMMC		
Communication	WLAN	On-board Wi-Fi 802.11a/b/g/n/ac (2T2R)		
	Bluetooth	Bluetooth 4.1		
	RFID	13.56 MHz ISO4443 A/B, read-write capable (NXP PN553)	N/A	13.56 MHz ISO4443 A/B, read-write capable (NXP PN553)
I/O Interfaces	I/O interface	1 x 10/100/1000Mbps RJ-45 LAN w/ POE 1 x RS-232/422/485 1 x RS-232 1 x DIO 4-pin (2 in / 2 out) 1 x DC jack 1 x DC-in terminal block	1 x 10/100/1000Mbps RJ-45 LAN 1 x Terminal block (2-pin) for SOS key 1 x DC jack	1 x RS-232 (4-pin wafer connector) 1 x RS-232/422/485 (4-pin terminal block) 1 x 4-bit by terminal block (2 in, 2 out) 2 x 2-bit by 4-pin wafer connector (1 in, 1 out) 3 x I <sup>2</sup> C (4-pin wafer connector) 1 x 10/100/1000Mbps RJ-45 LAN w/ POE 1 x 10/100/1000Mbps RJ-45 LAN 1 x DC jack
	USB 3.1 Gen 1	1 x Type A 1 x Type C OTG	1 x Type A	1 x Type A
	USB 2.0	2 x Type A	1 x Type A	1 x Type A
	Others	2 x USB 2.0 (internal)	1 x Type C OTG (Internal) 2 x UART w/ 3V (internal) 2 x USB 2.0 (internal)	1 x Type C OTG (Internal) 2 x UART w/ 3V (internal) 2 x USB 2.0 (internal)
	Speaker / Mic	2 x Mic 1 x 2W speaker	1 x Mic 1 x 2W speaker	1 x Mic 2 x 1.5W speaker
LED Indicator & Button	Camera	5-megapixel		
	Indicator	1 x Power LED 1 x WiFi LED 1 x BT LED	1 x Power (green) 1 x Mail (blue) 1 x Phone (green) 1 x Exclamation Mark (red)	1 x Power LED 1 x RFID LED 3 x Key pad LED (Volume / SOS)
Power	Button	1 x Reset Button	1 x Reset Button 1 x SOS key (with red bar) 2 x Function key for AP operation (with green bar)	1 x Reset Button 1 x Volume up 1 x Volume down 1 x SOS Button
	Power Input	12V DC input (range : 9V ~ 30V) PoE: IEEE 802.3 at standard (Power Device)	12V DC input (range : 9V ~ 30V)	12V DC input (range : 9V ~ 30V) PoE: IEEE 802.3 at standard (Power Device)
Reliability	Consumption	12V @ 1.2A	12V @ 1.05A	12V @ 1.1A
	Mounting	VESA Mount 75mmx75mm	VESA Mount 75mmx75mm	Panel mount, In wall cage 110mmx100mm
	Operating Temperature	-10°C ~ 50°C with air flow		
	Storage Temperature	-20°C ~ 60°C		
	Humidity	10% ~ 90%, non-condensing		
OS	Safety/EMC	CE/FCC Class A compliant	CE/FCC Class B compliant	CE/FCC Class B compliant
	Supported OS	Android 7.1	Android 7.1 / Linux	Android 7.1 / Linux

# » Selection Guide

## • Medical Box PC / AI Box PC / MODAT Series



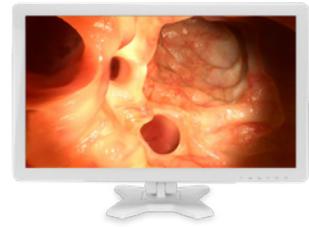
Series		Medical Box PC
Model		HTB-100-HM170
Physical	Color	Silver+Greyish blue
	Dimensions (WxDxH)	294 x 209 x 90.2
	Net Weight	2.2 kg
	System Fan	Fanless
	Chassis Construction	Extruded aluminum alloy
Motherboard	CPU	Intel® Core™ i7-6822EQ (2 GHz, quad-core, TDP=25) Intel® Core™ i5-6442EQ (1.9 GHz, quad-core, TDP=25)
	Chipset	Intel® HM170
	System Memory	2 x 260-pin DDR4 SO-DIMM, one 4 GB pre-installed (system max: 32GB)
Storage	Hard Drive	1 x 2.5" SATA 6Gb/s HDD/SSD bay
Power	Power Input	DC Jack: 12~28V DC
	Power Consumption	19V@4.4A (Intel® Core™ i7-6822EQ with 4 GB memory)
	Adapter	Adapter Power; Vin:90~264VAC; 150W; Dim:85*170*42.5mm; Plug=6.5mm; Cable=1200mm; MEDICAL; Vout:19VDC; Din 4Pin/lock; CCL; R10
Reliability	Mounting	Wall mounting
	Operating Temperature	0°C ~ 40°C with air flow (SSD), 10% ~ 95%, non-condensing
	Storage Temperature	-40°C ~ 70°C with air flow (SSD), 10% ~ 90%, non-condensing
	Operating Shock	Half-sine wave shock 5G; 11ms; 100 shocks per axis
	Operating Vibration	MIL-STD-810G 514.6 C-1 (with SSD)
	Safety / EMC	CE, FCC class B part 18, IEC 60601-1 V3.1, IEC 60601-1-2 V4.0, IEC 62304, ISO 14971
OS	Supported OS	Microsoft® Windows 8, Microsoft® Embedded Standard 7

Series		AI Box PC
Model		HTB-200
Chassis	Color	White
	Dimension	140 x 171 x 276.6 mm
	System Fan	Smart Fan
	Chassis Construction	Metal Housing (SECC)
Motherboard	CPU	Intel® Xeon E3-1268LV5,35W TDP Intel® Kabylake platform Core™ i5-7500T,35W TDP
	Chipset	Intel® C236 for Xeon
	System Memory	Two 260-pin 1600/2133MHz Dual-Channel DDR4 SODIMM ECC & non-ECC unbuffered Memory supported up to 68GB
I/O interfaces	Storage	2.5" SATA HDD or SSD
	USB	2 x USB 3.2 Gen 1 port, 2 x USB 2.0
	COM	1 x RS-232/422/485
	Ethernet	LAN1: Intel® I219LM Clarkville-V with Intel® AMT 11.0 support LAN2: Intel® I210 PCIe controller
	Display	1 x HDMI output (by iDP signal)
	Others	1 x Power Button 1 x Reset switch 1 x AT/ATX switch
	Expansions	PCIe PCIe Mini
Power	Power Input	19V DC in
	Power Consumption	180W power adapter
	Operating Temperature	0°C 95%, non-condensing
	Operating Shock	Half-sine wave shock 5G, 11ms, 100 shocks per axis
	Weight (Net/Gross)	2.8 kg
	Safety / EMC	FCC class B / CE
	Acceleration Card	NVIDIA Tesla P4 (50W/75W) NVIDIA Tesla T4 (75W) Mustang F100 (<60W) Mustang V100 (<30W)
Supported OS	Windows®10, Linux®	



Series		PDA MODAT	
Model		MODAT-550A-OA53-R10	MODAT-550A-OA53-ET-R10
Display	LCD size	5.5"	
	Brightness (cd/m²)	300 cd/m²	
	Max. Resolution	1080 x 1920 (Full HD)	
	Viewing Angle	80/80/80/80 Deg.	
	Touchscreen	5-point capacitive	
System	CPU	Octa-core 64-bit Cortex-A53 1.5 GHz processor	
	Operating System	Android 7.0	
	Memory	16GB eMMC 2GB LPDDR3	
	Storage	microSD slot up to 64GB	
Communication	Wi-Fi	802.11a/b/g/n	
	Bluetooth	4.0 LE	
	Modem (Optional)	GSM (850, 900, 1800, 1900) WCDMA (Band 1, 2, 5, 8) TDS-CDMA (Band 34, 39) LTE FDD (Band 1, 2, 3, 4, 5, 7, 8, 20) TDD (Band 38, 39, 40, 41b)	
	GPS	GPS/Glonass	

Data Collection	NFC	Yes	
	Barcode	1D/2D imager scan engine	N/A
	Camera	13-megapixel AF rear camera	
Indicators & Buttons	LED Indicators	Green/Red	
I/O Interface	Audio	1 x 0.5W speaker 1 x Headset/Mic-in	
	USB	1x High-speed Micro USB 2.0 OTG	
Power	Power Adapter	5V/3A	
	Battery	4000 mAh	
Environments	Operating Temperature	-10°C ~ 50°C	
	Storage Temperature	-20°C ~ 60°C	
	Humidity	10% ~ 95%, non condensing	
	Drop Survival	1.5m	
	Environmental Protection	IP 65	
	Physical	Dimensions (L x W x H)	160.9 mm x 85.4 mm x 28.85 mm
Weight		Under 380g	



Series		Surgical Monitor	
Model		MMS-27C	MMS-27CA
Description		High-brightness model with VGA, DVI inputs	High-brightness model with multiple analog inputs
Picture Performance	LCD Size	27" (16:9)	
	Resolution	1920 (W) x 1080 (H) pixels	
	Brightness (max.)	900 nits (typical)	
	Contrast Ratio	1000:1 (typical)	
	Viewing Angle (H/V)	178° / 178° (typical)	
General	Power Requirement	10V~28 : V DC input	
	Power Adaptor	Medical grade power adaptor: 100-240V AC 50-60Hz; output: 12V DC/7.5A	
	Dimensions (WxHxD)	657 x 400 x 60.5 mm	
	Weight	11 kg	
	Mounting Standard	VESA 100 x 100 mm / 200 x 100 mm	
Environment	Operating Temperature	0°C~40°C	
	Operating Humidity	10~90% (non-condensing)	
	Storage Temperature	-20°C ~60°C	
	Storage Humidity	10~90% (non-condensing)	
Certifications	Medical Certifications	CE, FCC Class B part 18, AAMI ES 60601-1 and EN 60601-1	



Series		Medical Cart		
Model		pCART-N1	pCART-N3	pCART-D1
Description		Ergonomic for medication use	Small and Compact for use in limited space	Elegant design for documentation purpose
Size (L x W x H)		54 x 68 x 101cm	51 x 46 x 94cm	52 x 54 x 150cm
Working Table Dimensions (L x W)		45 x 59cm		54 x 45cm
Side Table Loading Weight (max.)		8 kg		N/A
Supported Arm Loading Weight (max.)		12kg		10kg



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\*Specifications are subject to change without prior notice.

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