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2023 – 2024 Edition

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# PANEL PC

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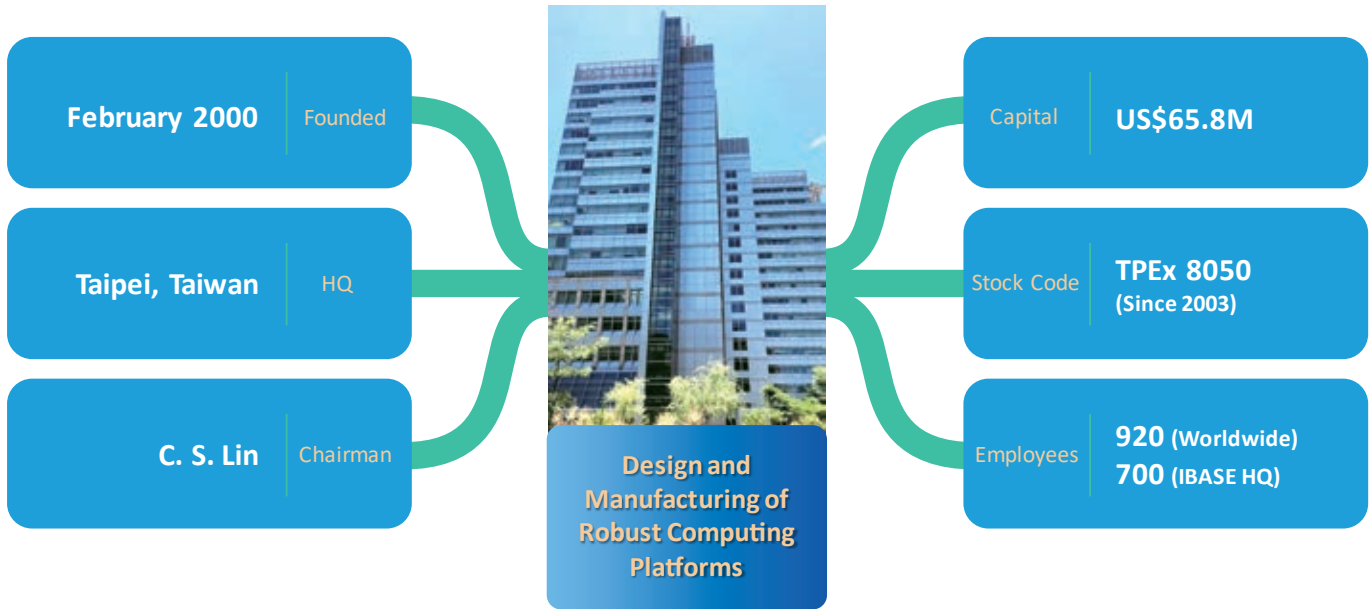


**iBASE**  
[www.ibase.com.tw](http://www.ibase.com.tw)

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# About IBASE



## Company Profile

IBASE Technology specializes in the design and manufacture of robust industrial PC, products since its establishment in 2000. IBASE carries out manufacturing and quality control at its own facilities in Taiwan that are certified with ISO 9001, ISO 13485, ISO 14001 and ISO 27001 standards. Current offerings comprise x86 and RISC-based industrial motherboards, embedded systems, panel PCs, network appliances and digital signage players. The company is publicly listed in the Taipei Exchange (TPEX: 8050) and is now a leading global provider of innovative industrial and embedded computing solutions.



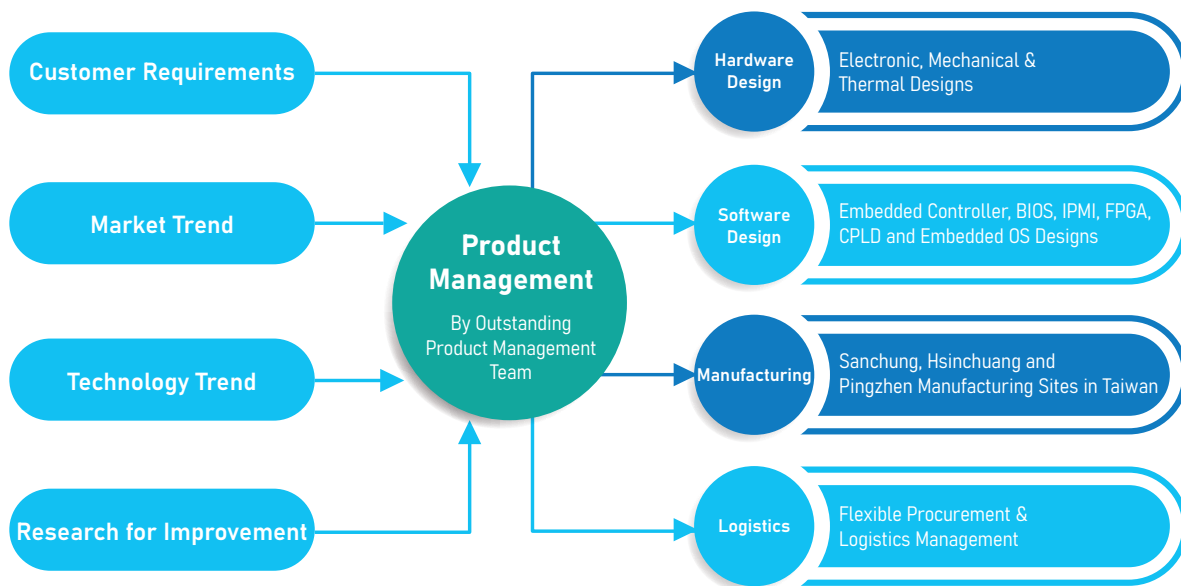
## Core Competence

IBASE has three manufacturing sites in Taiwan, with two in New Taipei City and another one in Taoyuan City. We manufacture and implement strict quality control to supply excellent industrial computer products that are 100% made in Taiwan. In addition to off-the-shelf products, IBASE also specializes in OEM/ODM/JDM services, tailoring products to fully meet customers' expectations and the needs of various applications. With manufacturing and quality control capabilities recognized by major international companies, IBASE boasts of strong innovative R&D teams and flexible and timely products delivery.



# Design<sup>+</sup>, Manufacture<sup>+</sup>, Service<sup>+</sup>

Set up to become a global leading provider of embedded board and system solutions, IBASE manufacturer and supplies cutting-edge products based on the latest technologies to match market demands. Our R&D and product management teams have the expertise to design and develop innovative products that meet customers' requirements and design specifications. We attach great importance to research and development, investing heavily in manpower and resources to continuously provide high-quality innovative products. IBASE is also committed to compliance with environmental policies by working to prevent pollution with non-use of banned or restricted substances in our production process and products, helping our customers respond to their environmental challenges.



## IBASE Manufacturing Sites

Design & Manufacturing in Taiwan

**SANCHUNG**

- Board Production
- Validation

3,124 m<sup>2</sup> / 945 Ping

**HSINCHUANG**

- System Assembly
- Validation

6,070 m<sup>2</sup> / 1,840 Ping

**New**

**PINGZHEN**

- Board Production
- System Assembly
- Validation

18,481 m<sup>2</sup> / 5,591 Ping

### Total Size

**297,891 Square-feet**  
(27,675 m<sup>2</sup> / 8,376 Ping)

### Capacity

- SMT Line x 5
- DIP Assembly Line x 4
- System Assembly Line x 10
- Cleanroom x 2
- Burn-in Room x 13

**PCBA**  
80K/month (In-house Production)  
+ Outsourcing  
**System Assembly**  
50K/month (In-house Production)  
+ Outsourcing

### Certifications

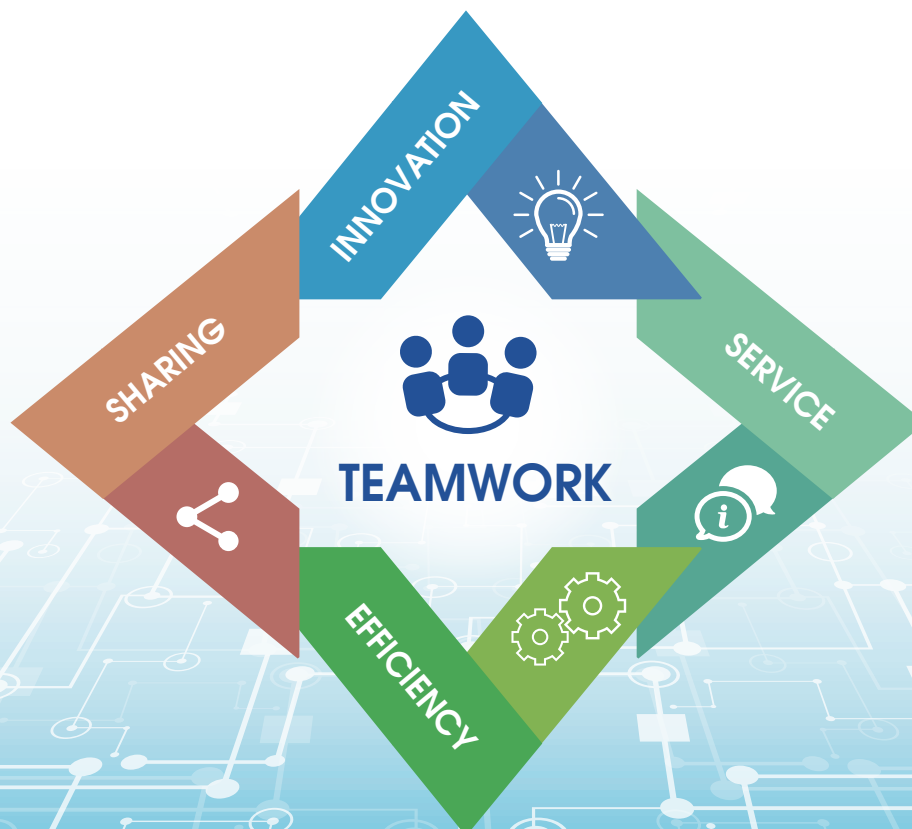


# Your Best Partner

IBASE is a worldwide leader in the manufacture of reliable and multi-functional industrial panel PC products. Product offerings include waterproof IP65 stainless steel panel PCs, EN50155-certified railway panel PCs, sunlight readable panel PCs, open-frame panel PCs, HMI and various all-in-one panel PCs for indoor and outdoor deployments in factory automation, transportation, retail, medical and other applications.

Aside from developing our standard products, IBASE also provides ODM (Original Design Manufacturer) and JDM (Joint Design Manufacturer) services and customized product solutions. With our highly-qualified expert engineers, IBASE can tailor products that meet customers' application-specific needs, ensuring high quality, reliability and longevity and provide one-stop shopping services to our valued clients.

IBASE has partnered with mainstream processor vendors such as Intel, AMD and NXP in product development to create embedded computing solutions with unprecedented levels of performance. We have built our reputation through dedication and commitment to deliver well-designed products and an outstanding level of customer service. To this day, IBASE continues to foster an unbreakable relationship with both customers and technology vendors, working hand-in-hand to form a lasting win-win partnership.



# Touch Technology



An analog signal output is produced with a finger touching the sensor. The touch controller translates the analog signal into digital signal. The controller senses the signal to determine the location of the touch on the screen. USB or RS-232 interface controllers are used to convert analog signals into digital signals. Various designs and functions can be added or changed with the use of touch controller drivers. Aside from these additional touch screen functionalities, software designs can be made based on customers' requirements. These requirements can include multiple languages, handwriting recognition, multi-screen system and computer game support.

## Types

	Resistive	Capacitive	Infrared
Technologies			
Sensing Method	Voltage sensing	Human body as electrical conductor	Optical sensing
Price	Cheap	Expensive	Very Expensive
Hardness	3H	7H	7H
Durability	1 million times	150 million times	Limitless
Transparency	70~90%	90%	98%
Input	Fingertip/Pen	Fingertip/conductor	Fingertip/Pen
Accuracy	Good	Good	Good
Features	Not scratch-proof Low transparency	Stain/scratch resistant, fast response, multi-point identification	Scratch-proof, fire-proof
Applications	HMI, Smart phone, GPS, Tablets, Self service ordering system, Inventory machine, POS, Medical monitor	Smart phone, GPS, Tablets, Navigation system, ATM, POS, Ticket vending machine, Gaming console, Medical monitor	Ticket vending machine, POS, Medical monitor, Office business machine, Industrial equipment
Size	2"~19"	3"~42"	6"~80"

## Comparison of Resistive Touch Panel and Capacitive Touch Panel

### Surface Hardness

The top layer of the resistive touch panel uses PET films with 3H hardness. Even with 3H hardness, the top layer is prone to pick up fine scratching over long period of use or be affected by sudden changes in temperature, which increases maintenance costs. Capacitive touch panel, on the other hand, uses glass with different thickness and hardness of up to 7H.

### Operating and Storage Temperature

Resistive touch panels have storage temperature and operating temperature ranges from  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$  and from  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$  respectively. Theoretically, capacitive touch panel, which has a glass surface, should have a somewhat higher operating temperature range.

### How They Work

Resistive touch panel works under 'pressure.' When pressure is applied from a finger or stylus, it makes contact with the conductive layer beneath that causes a voltage drop. It would not work when there is not enough pressure. On the other hand, capacitive touch panel works with just a light finger touch on the panel.

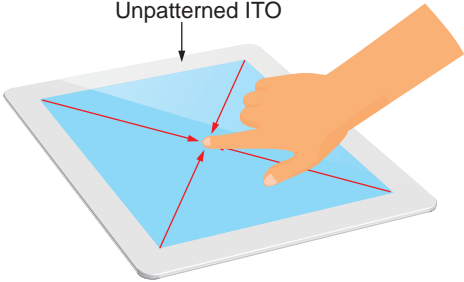
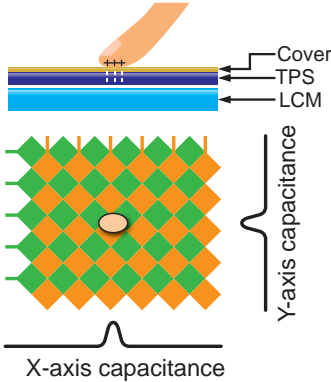
### Limitations in Usage and Environment

Resistive touch panel has a PET surface; it may start to wear and become unresponsive when used in outdoor environments for a period of time. Capacitive touch panel, on the other hand, can only be used with objects with conductive properties and not work properly when liquids may be present. Furthermore, capacitive touch panels are sensitive to electro-magnetic (EMI) and radio frequency interference (RFI).

### Accuracy

The two touch screen technologies have a high level of accuracy. However, the surface of resistive touch panels have a lower hardness scale and can be damaged over time, degrading the accuracy of the touches.

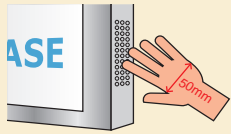
## Surface VS. Projected Capacitance

	Surface capacitance	Projected capacitance (PCT or PCAP)
Touch action	Single touch	Multi touch
Suitable TP size	Big size	Middle & small size
Calibration	Required	Not Required
Construction	Glass	Glass type Film type
Diagram		

# IP (Ingress Protection) Ratings Guide

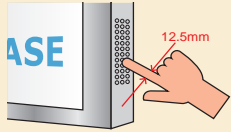
## SOLIDS

1



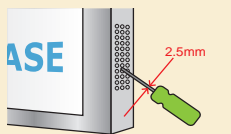
Protected against a solid object greater than 50mm, such as a hand.

2



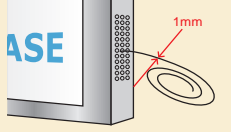
Protected against a solid object greater than 12.5mm, such as a finger.

3



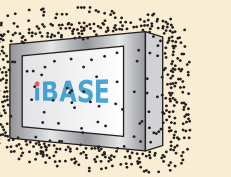
Protected against a solid object greater than 2.5mm, such as a screwdriver.

4



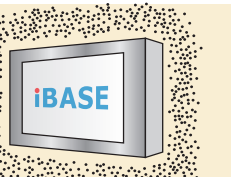
Protected against a solid object greater than 1mm, such as wire.

5



Dust protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment. Two to eight hours.

6



Dust tight. No ingress of dust. Two to eight hours.

Rating Example:

**IP 65**

**INGRESS PROTECTION**

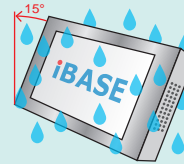
## WATER

1



Protected against vertically falling drops of water. Limited ingress permitted.

2



Protected against vertically falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.

3



Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted for three minutes.

4



Protected against water splashed from all directions. Limited ingress permitted.

5



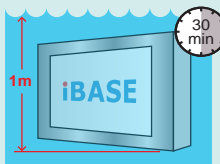
Protected against jets of water. Limited ingress permitted.

6



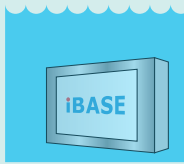
Water from heavy seas or water projected in powerful jets shall not enter the enclosure in harmful quantities.

7



Protection against the effects of immersion in water between 15 cm and 1 m for 30 minutes.

8



Protection against the effects of immersion in water under pressure for long periods.

9



Protection against high temperature, high pressure water and steam.



# IBASE Panel PC Standard Validation Plan

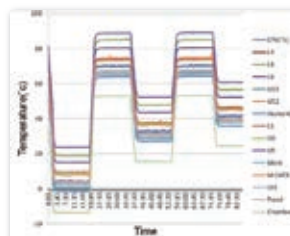
IBASE provides a complete series of validation plan for both IBASE standard products and OEM/ODM products, during the design phase. The validation process includes basic functional test, thermal analysis, environmental test, low temperature test, random vibration test, shock test, package drop test, IP rating test, power consumption test, bench mark report, panel brightness measurement, EMI pre-scan and ESD test. For some special cases, IBASE can also furnish battery (UPS) support report, unpackaged drop test, and acoustical noise report. In addition, EYE diagram testing is made to ensure signal integrity requirements are fulfilled. Once products have passed the validation process, they can then move to the next phase of the project. Otherwise, products go back to the re-design phase. This way, IBASE earns the confidence of customers by providing good quality and reliable products

The following table shows our standard validation items (for reference):

Item	Reference
Basic Functional Test	Based on product functions
EMI Pre-scan	EN55022, could be specified
Thermal Analysis	Product specified maximum working temperature, add 5°C for 4 hours
Random Vibration Test	IEC60068-2-64 ed2.0 2008-04
Package Drop Test	MIL-HDBK-304C, ISTA 2A, ASTM D1469 & CNS 10033 standard
Environmental Test	Temperature cycling, product specified working high and low temperature +3°C/-5°C for 81 hours
Power Consumption Test	Load maximum rating to evaluate worse case of system
Bench Mark	Perform Passmark benchmarking tool
Acoustical Noise	Clause 8 of ISO 7779
Low Temperature Startup Test	Product specified lowest working temperature, reduce 10°C for 4 hours
ESD Test	EN 61000-4-2, could be specified
UPS (Battery) Support	Verify the support time of the battery in system in maximum configurations.
Unpackaged Drop Test	MIL-STD-810G Method 516 Procedure IV, transit drop.
Brightness Test	To evaluate the system display brightness data and compare with specification
Shock Test	MIL-STD-810G 516.6
IP Rating Test	IEC 60529 Edition 2.1: 2001-02

## Thermal Test and Environmental Test

Compared to other companies, IBASE monitors not only some key parameters, such as processor, memory, chipset, but also other heat sources, such as those from serial port transceiver and receiver, audio chip, eDP converter, LAN MAC, storage device, power choke, etc. The number of our basic measure points is 30, which can be increased based on customer requirements. IBASE uses a data recorder and not just a thermostat. We get results and analyze all temperature data during testing. Therefore, not only does IBASE report the final results, IBASE also explains what had occurred during testing. Our specified system working temperature should give our customers more confidence.



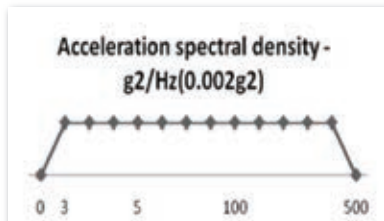
Environmental Test



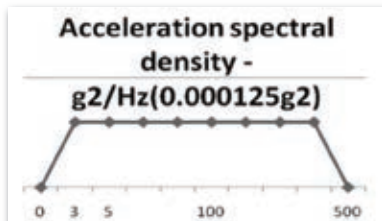
Thermal Test

## Random Vibration Test and Shock Test

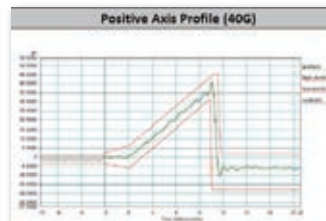
Random vibration and shock tests are IBASE standard validation methods for all products. We test our products under operating and non-operating environments. Random vibration tests verify the specified vibration pattern that products could sustain in specific applications, such as mobile application, etc. Shock tests are performed to provide a degree of confidence that products can withstand the relatively infrequent, non-repetitive shocks encountered in handling, transportation, and service environments. These two validation methods are very important for industrial-grade panel PCs.



Random Vibration Test (non-operating)



Random Vibration Test (operating)



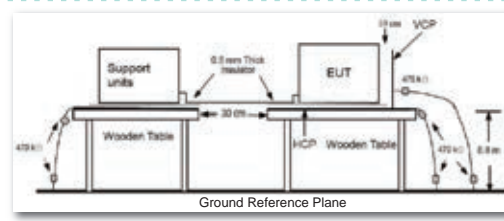
Shock Test (non-operating)



Shock Test

## EMI/ESD Pre-Scan

IBASE checks EMI/ESD results during the design phase. EMI pre-scan verifies if the terminal and peripherals conform to the requirements of any class of CE/FCC radiation. ESD pre-test are performed to evaluate whether the product will operate normally or be destroyed when subjected to electrostatic discharge during operation. Through this process, IBASE can ensure newly designed products are ready to go into the pilot run phase. If customers have their own designed applications for medical, railway, or marine applications, IBASE can also prepare specific EMI/ESD test plan for any special projects.



ESD Pre-Test

# IBASE Panel PC Ecosystem

Virtual Counter



VINO2100 Series



Office Service Center



IPPC Series



Door Sign



BYARM-181-PC



Workplace

Food Company



INOSP Series



Product Manufacturing



ASTUT Series



Home

Car Wash



INOSP Series



Parking



IDOOH Series



Transport

## Commercial Activity

### Self Ordering Kiosk



IKS2700 Series



### Crowd Control



VINO2100 Series



### Signage



UPC Series



### Ticketing/Vendor Machine



OFP Series



## Hospital

### Medical



UMT-7212



### Information



IDOOH Series



### Repair Center



IPPC Series



### Gate



BYTEM Series



### Information



BYARM-181-PC



# Comparison Table

Model No.	Models	OFP-W2700-PCI86	OFP-W2700-PCI50	OFP-W2700-PCV16	OFP-2100-PC
Display & Touch	Display Size	27"	27"	27"	21.5"
	Max. Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Luminance (cd/m <sup>2</sup> )	250 1000 (optinal)	250 1000 (optinal)	250 1000 (optinal)	250
	Contrast Ratio	1000:1	1000:1	1000:1	1000:1
	View Angle (H/V)	178/178	178/178	178/178	178/178
	Light Transmission (%)	85	85	85	89
	Touch Type	Projected capacitive IR cut solution (optional)	Projected capacitive IR cut solution (optional)	Projected capacitive IR cut solution (optional)	Projected capacitive
	Touch Interface	USB	USB	USB	USB
System	Processor	8th Gen Intel® Core™ i7-8665UE	Intel® Pentium® QC N4200	AMD Ryzen™ V1000	Intel® Pentium® QC N4200
	Chipset	N/A	N/A	N/A	N/A
	Graphics	Intel® UFD Graphics 620	Intel® HD Graphics 505	AMD Radeon™ HD GPU	Intel® HD Graphics 505
	Memory	2x DDR4 SO-DIMM	1x DDR3L SO-DIMM	2x DDR4 SO-DIMM	2x DDR3L SO-DIMM
	Max. Memory	Up to 32GB	Up to 8GB	Up to 32GB	Up to 8GB
I/O Interface	Display	1x DisplayPort 1x USB Type-C	1x HDMI	2x HDMI	1x DisplayPort 1x HDMI
	USB	4x USB3.2 Gen1	4x USB3.2 Gen1	4x USB3.2 Gen1	4x USB3.2 Gen1
	LAN	2x GbE	2x GbE	2x GbE	2x GbE
	Serial Port	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 (RJ45)
	Audio	N/A	N/A	N/A	N/A
	Digital I/O	N/A	N/A	N/A	N/A
	Power Button	1x 2-pin terminal block	1x 2-pin terminal block	1x 2-pin terminal block	1x 2-pin terminal block
Storage	SSD	1x 2.5" SATA III SSD	1x 2.5" SATA III SSD	1x 2.5" SATA III SSD	1x 2.5" SATA III SSD
	mSATA/M.2	1x M.2 (M-Key)	1x mSATA	1x M.2 (M-Key)	1x mSATA
Expansion	Expansion Slot	N/A	N/A	N/A	N/A
	Internal Expansion bus	1x M.2 M-key 2280	2x Mini PCI-E (1x full-size, 1x half-size)	1x M.2 M-key 2280 1x M.2 E-key 2230	1x mini PCI-E full-size 1x M.2 B-key 3042
Power	Power Input	9V~24V DC-in	12V~24V DC-in	12V~24V DC-in	9V~36V DC-in
	Power Connector	1x 3-pin terminal block	1x 3-pin terminal block	1x 3-pin terminal block	1x 3-pin terminal block
Mechanical	Dimensions (mm)	660.77 x 421.66 x 98	660.77 x 421.66 x 98	660.77 x 421.66 x 98	543 x 334 x 88.2
	Weight (kgs)	14.6	14.6	14.6	7.6
	Chassis Material	SGCC	SGCC	SGCC	SGCC
	IP Rating	Front panel IP65	Front panel IP65	Front panel IP65	Front panel IP65
	Mounting	open-frame design	open-frame design	open-frame design	open-frame design
Environmental	Operating Temperature	-10°C~50°C	-10°C~50°C	-10°C~50°C	0°C~50°C
	Storage Temperature	-20°C~70°C	-20°C~70°C	-20°C~70°C	-20°C~70°C
	Storage Humidity	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)
		N/A	N/A	N/A	CE/FCC Class-B
	Page No.	p.21 - 23	p.21 - 23	p.21 - 23	p.24 - 26

OFP-2101-PC	OFP-151-PC	UPC-7210	UPC-6210	IPPC1905-RE
21.5"	15"	21.5"	21.5"	19"
1920 x 1080	1024 x 768	1920 x 1080	1920 x 1080	1280 x 1024
250	420	250	250	350
1000:1	600:1	1000:1	1000:1	800:1
178/178	160/160	178/178	178/178	170/160
89	89	89	89	79
Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Resistive
USB	USB	USB	USB	USB
7th Gen Intel® Core™ U-series	Intel® Pentium® QC N4200	7th Gen Intel® Core™ U-series i7/i5/i3	Intel® Atom® Processor E3825 Intel® Celeron® Processor J1900	6th Gen Intel® Core™ i7/i5/i3
N/A	N/A	N/A	N/A	Intel® CM238 PCH Intel® HM175 PCH
Intel® HD Graphics 620	Intel® HD Graphics 505	Intel® HD Graphics 620	Intel® Atom® SoC integrated Gen7 graphics	Intel® HD Graphics 630
2x DDR4 SO-DIMM	2x DDR3L SO-DIMM	2x DDR4 SO-DIMM	1x DDR3L SO-DIMM	2x DDR4 SO-DIMM
Up to 32GB	Up to 8GB	Up to 32GB	Up to 8GB	Up to 32GB
1x DisplayPort 1x HDMI	1x DisplayPort 1x HDMI	1x DisplayPort 1x HDMI 1.4	1x DisplayPort 1x VGA	1x DisplayPort 1x DVI-D 1x HDMI 1.4
4x USB3.2 Gen1	4x USB3.2 Gen1	4x USB3.2 Gen1	1x USB3.2 Gen1 1x USB2.0	6x USB3.2 Gen1 1x USB2.0 front bezel
2x GbE	2x GbE	2x GbE	1x GbE	2x GbE
1x RS232/422/485	1x RS232/422/485 (RJ45)	1x RS232/422/485	1x RS232/422/485	1x RS232/422/485 1x RS232
N/A	N/A	1x Line-out, 1x MIC-in 1x Line-in	1x Line-out, 1x MIC-in 1x Line-in	1x Line-out, 1x MIC-in 1x Line-in
N/A	N/A	N/A	N/A	4-in/4-out (optional)
1x 2-pin terminal block	1x 2-pin terminal block	1x Rock switch	1x Rock switch	1x Rock switch
1x 2.5" SATA III SSD	1x 2.5" SATA III SSD	1x 2.5" SATA III SSD	1x 2.5" SATAIII SSD	2x 2.5" SATA III SSD
1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA 1x M.2 (M-Key)
N/A	N/A	N/A	N/A	2x PCI-E (x8)
1x mini PCI-E half size	1x mini PCI-E full-size 1x M.2 B-key 3042	1x Mini PCI-E full-size	3x Mini PCI-E (2x full-size, 1x half-size)	2x Mini PCI-E full-size 1x M.2 M-key
9V~24V DC-in	9V~36V DC-in	12V/24V DC-in	12V DC-in	12V/24V DC-in
1x 3-pin terminal block	1x 3-pin terminal block	1x DC Jack	1x DC Jack	1x 3-pin terminal block
543 x 334 x 88.2	375.2 x 289.6 x 60.9	529 x 321 x 59	529 x 321 x 59	480 x 415 x 127.6
7.7	5	9	9	10.4
SGCC	SGCC	AL 5052	AL 5052	Aluminum and SGCC
Front panel IP65	Front panel IP65	Front panel IP65	Front panel IP65	Front panel IP65
open-frame design	open-frame design	VESA 100x100 mm	VESA 100x100 mm	VESA 75x75 / 100x100 mm
0°C~50°C	-10°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C (with SSD) 0°C~40°C (with HDD)
-20°C~70°C	-20°C~70°C	-20°C~70°C	-20°C~70°C	-20°C~70°C
10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)
CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B
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# Comparison Table

Model No.	Models	IPPC1705-RE	IPPC1505-RE	IPPC1903-RE	IPPC1703-RE
Display & Touch	Display Size	17"	15"	19"	17"
	Max. Resolution	1280 x 1024	1024 x 768	1280 x 1024	1280 x 1024
	Luminance (cd/m2)	350	420	350	250
	Contrast Ratio	800:1	600:1	1000:1	1000:1
	View Angle (H/V)	160/140	160/160	170/160	178/170
	Light Transmission (%)	79	79	80	80
	Touch Type	Resistive	Resistive	Resistive	Resistive
	Touch Interface	USB	USB	USB	USB
System	Processor	6th Gen Intel® Core™ i7/i5/i3	6th Gen Intel® Core™ i7/i5/i3	Intel® Celeron® Processor J1900	Intel® Celeron® Processor J1900
	Chipset	Intel® CM238 PCH Intel® HM175 PCH	Intel® CM238 PCH Intel® HM175 PCH	N/A	N/A
	Graphics	Intel® HD Graphics 630	Intel® HD Graphics 630	Intel® Atom® SoC Integrated Gen7 graphics	Intel® Atom® SoC integrated Gen7 graphics
	Memory	2x DDR4 SO-DIMM	2x DDR4 SO-DIMM	2x DDR3L SO-DIMM	2x DDR3L SO-DIMM
	Max. Memory	Up to 32GB	Up to 32GB	Up to 8GB	Up to 8GB
I/O Interface	Display	1x DisplayPort 1x DVI-D 1x HDMI 1.4	1x DisplayPort 1x DVI-D 1x HDMI 1.4	1x DVI-D 1x VGA	1x DVI-D 1x VGA
	USB	6x USB3.2 Gen1 1x USB2.0 front bezel	6x USB3.2 Gen1 1x USB2.0 front bezel	1x USB3.2 Gen1 2x USB2.0 rear side 1x USB2.0 front bezel	1x USB3.2 Gen1 2x USB2.0 rear side 1x USB2.0 front bezel
	LAN	2x GbE	2x GbE	2x GbE	2x GbE
	Serial Port	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232
	Audio	1x Line-out, 1x MIC-in 1x Line-in	1x Line-out, 1x MIC-in 1x Line-in	1x Line-out, 1x MIC-in 1x Line-in	1x Line-out, 1x MIC-in 1x Line-in
	Digital I/O	4-in/4-out (optional)	4-in/4-out (optional)	N/A	N/A
	Power Button	1x Rock switch	1x Rock switch	1x Rock switch	1x Rock switch
Storage	SSD	2x 2.5" SATA III SSD	2x 2.5" SATA III SSD	1x 2.5" SATAIII SSD	1x 2.5" SATAIII SSD
	mSATA/M.2	1x mSATA 1x M.2 (M-Key)	1x mSATA 1x M.2 (M-Key)	1x mSATA	1x mSATA
Expansion	Expansion Slot	2x PCI-E (x8)	2x PCI-E (x8)	1x PCI-E (x1) 1x PCI	1x PCI-E (x1) 1x PCI
	Internal Expansion bus	2x Mini PCI-E full-size 1x M.2 M-key	2x Mini PCI-E full-size 1x M.2 M-key	1x Mini PCI-E full-size	1x Mini PCI-E full-size
Power	Power Input	12V/24V DC-in	12V/24V DC-in	12V/24V DC-in	12V/24V DC-in
	Power Connector	1x 3-pin terminal block	1x 3-pin terminal block	1x 3-pin terminal block	1x 3-pin terminal block
Mechanical	Dimensions (mm)	442 x 377 x 132.8	410 x 335 x 126.3	480 x 415 x 106.5	442 x 377 x 102.5
	Weight (kgs)	10	9.3	10.97	9.7
	Chassis Material	Aluminum and SGCC	Aluminum and SGCC	SGCC	SGCC
	IP Rating	Front panel IP65	Front panel IP65	Front panel IP65	Front panel IP65
	Mounting	VESA 75x75 / 100x100 mm	VESA 75x75 / 100x100 mm	Panel mount VESA 75x75 / 100x100 mm	Panel mount VESA 75x75 / 100x100 mm
Environmental	Operating Temperature	0°C~50°C (with SSD) 0°C~40°C (with HDD)	0°C~50°C (with SSD) 0°C~40°C (with HDD)	0°C~50°C (with SSD) 0°C~40°C (with HDD)	0°C~50°C (with SSD) 0°C~40°C (with HDD)
	Storage Temperature	-20°C~70°C	-20°C~70°C	-20°C~70°C	-20°C~70°C
	Storage Humidity	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)
	Certification	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B
	Page No.	p.36 - 38	p.36 - 38	p.39 - 43	p.39 - 43

IPPC1503-RE	IPPC1203-RE	IPPC1003-PC	IPPC1903-REN
15"	12.1"	10.4"	19"
1024 x 768	1024 x 768	1024 x 768	1280 x 1024
420	350	350	350
800:1	800:1	700:1	1000:1
160/160	170/170	150/150	170/160
79	79	85	80
Resistive	Resistive	Projected capacitive	Resistive
USB	USB	USB	USB
Intel® Celeron® Processor J1900	Intel® Celeron® Processor J1900	Intel® Atom® Processor E3815	Intel® Celeron® Processor J1900
N/A	N/A	N/A	N/A
Intel® Atom® SoC integrated Gen7 graphics	Intel® Atom® SoC integrated Gen7 graphics	Intel® Atom® SoC integrated Gen7 4EUs graphics	Intel® Atom® SoC integrated Gen7 graphics
2x DDR3L SO-DIMM	2x DDR3L SO-DIMM	1x DDR3L SO-DIMM	2x DDR3L SO-DIMM
Up to 8GB	Up to 8GB	Up to 8GB	Up to 8GB
1x DVI-D 1x VGA	1x DVI-D 1x VGA	1x DisplayPort 1x VGA	1x DVI-D 1x VGA
1x USB3.2 Gen1 2x USB2.0 rear side 1x USB2.0 front bezel	1x USB3.2 Gen1 2x USB2.0 rear side	1x USB3.2 Gen1 2x USB2.0	1x USB3.2 Gen1 2x USB2.0 rear side 1x USB2.0 front bezel
2x GbE	2x GbE	1x GbE	2x GbE
1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232
1x Line-out, 1x MIC-in 1x Line-in	1x Line-out, 1x MIC-in 1x Line-in	N/A	1x Line-out, 1x MIC-in 1x Line-in
N/A	N/A	N/A	N/A
1x Rock switch	1x Rock switch	1x Rock switch	1x Rock switch
1x 2.5" SATAII SSD	1x 2.5" SATAII SSD	1x 2.5" SATAII SSD	1x 2.5" SATAII SSD
1x mSATA	1x mSATA	1x mSATA	1x mSATA
1x PCI-E (x1) 1x PCI	1x PCI-E (x1) 1x PCI	N/A	N/A
1x Mini PCI-E full-size	1x Mini PCI-E full-size	3x Mini PCI-E (2x full-size, 1x half-size)	1x Mini PCI-E full-size
12V/24V DC-in	12V/24V DC-in	12V DC-in	12V/24V DC-in
1x 3-pin terminal block	1x 3-pin terminal block	1x DC Jack	1x 3-pin terminal block
410 x 335 x 105	320 x 270 x 101	286 x 236 x 51.5	480 x 415 x 80.5
8.7	7.5	2.2	10
SGCC	SGCC	SGCC	SGCC
Front panel IP65	Front panel IP65	Front panel IP65	Front panel IP65
Panel mount VESA 75x75 / 100x100 mm	Panel mount VESA 75x75 / 100x100 mm	Panel mount VESA 75x75 mm	Panel mount VESA 75x75 / 100x100 mm
0°C~50°C (with SSD) 0°C~40°C (with HDD)	0°C~50°C (with SSD) 0°C~40°C (with HDD)	-20°C~50°C	0°C~50°C (with SSD) 0°C~40°C (with HDD)
-20°C~70°C	-20°C~70°C	-20°C~70°C	-20°C~70°C
10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)
CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B
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# Comparison Table

Model No.	Models	IPPC1503-REN	ASTUT-W155-PC1S	BYTEM-121-PC	BYTEM-101-PC
Display & Touch	Display Size	15"	15.6"	12.1"	10.1"
	Max. Resolution	1024 x 768	1366 x 768	1024 x 768	1280 x 800
	Luminance (cd/m <sup>2</sup> )	420	300	350	350
	Contrast Ratio	800:1	500:1	800:1	800:1
	View Angle (H/V)	160/160	160/160	160/160	170/170
	Light Transmission (%)	79	85	85	85
	Touch Type	Resistive	Projected capacitive	Projected capacitive	Projected capacitive
	Touch Interface	USB	USB	USB	USB
System	Processor	Intel® Celeron® Processor J1900	7th /6th Gen Intel® Core™ U-series i7/i5/i3	Intel® Atom® Processor E3845	Intel® Atom® Processor E3845
	Chipset	N/A	N/A	N/A	N/A
	Graphics	Intel® Atom® SoC integrated Gen7 graphics	Intel® HD Graphics 620	Intel® Atom® SoC integrated Gen7 4EUs graphics	Intel® Atom® SoC integrated Gen7 4EUs graphics
	Memory	2x DDR3L SO-DIMM	2x DDR4 SO-DIMM	2x DDR3L SO-DIMM	2x DDR3L SO-DIMM
	Max. Memory	Up to 8GB	Up to 32GB	Up to 8GB	Up to 8GB
I/O Interface	Display	1x DVI-D 1x VGA	1x HDMI 1.4	1x DisplayPort	1x DisplayPort
	USB	1x USB3.2 Gen1 2x USB2.0 rear side 1x USB2.0 front bezel	4x USB3.2 Gen1	1x USB3.2 Gen1 1x USB2.0*	1x USB3.2 Gen1 1x USB2.0
	LAN	2x GbE	2x GbE	2x GbE	2x GbE
	Serial Port	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232
	Audio	1x Line-out, 1x MIC-in 1x Line-in	N/A	N/A	N/A
	Digital I/O	N/A	N/A	N/A	N/A
	Power Button	1x Rock switch	1x Rock switch	1x power button	1x power button
Storage	SSD	1x 2.5" SATAII SSD	1x 2.5" SATA III SSD (optional)	1x 2.5" SATAII SSD	1x 2.5" SATAII SSD
	mSATA/M.2	1x mSATA	1x M.2 (M-Key 2280)	1x mSATA	1x mSATA
Expansion	Expansion Slot	N/A	1x PCI-E (x4)	N/A	N/A
	Internal Expansion bus	1x Mini PCI-E full-size	1x Mini PCI-E full-size 1x M.2 E-key 2230	2x Mini PCI-E (1x full-size, 1x half-size)	2x Mini PCI-E (1x full-size, 1x half-size)
Power	Power Input	12V/24V DC-in	12V~24V DC-in	9V~30V DC-in	9V~30V DC-in
	Power Connector	1x 3-pin terminal block	1x 3-pin terminal block	1x 3-pin terminal block	1x 3-pin terminal block
Mechanical	Dimensions (mm)	410 x 335 x 79	468 x 260 x 54	317 x 255 x 59.6	285 x 204 x 59.6
	Weight (kgs)	7	7	4.3	3.3
	Chassis Material	SGCC	Aluminum silver	Aluminum and white steel	Aluminum and white steel
	IP Rating	Front panel IP65	Front panel IP65	Front panel IP65	Front panel IP65
	Mounting	Panel mount VESA 75x75 / 100x100 mm	Panel mount VESA 75x75 / 100x100 mm	VESA 75x75 mm	VESA 75x75 mm
Environmental	Operating Temperature	0°C~50°C (with SSD) 0°C~40°C (with HDD)	0°C~50°C	0°C~50°C	0°C~50°C
	Storage Temperature	-20°C~70°C	-20°C~70°C	-20°C~60°C	-20°C~60°C
	Storage Humidity	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)
	Certification	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class B	CE/FCC Class B
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BYTEM-W075	BYTEM-W072-PC	BYTEM-W071-PC	BYTEM200-121	BYTEM200-W156
7"	7"	7"	12.1"	15.6"
1024 x 600	1024 x 600	1024 x 600	1024 x 768	1920 x 1080
500	500	500	500	500
800:1	800:1	800:1	1000:1	1000:1
150/150	150/150	150/150	178/178	178/178
85	85	85	85	85
Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive
USB	USB	USB	USB	USB
Intel® Atom® Processor x6425E	Intel® Atom® Processor E3825	Intel® Atom® Processor E3845	Intel® Core™ i5-1145G7E Intel® Core™ i3-1115G4E	Intel® Core™ i5-1145G7E Intel® Core™ i3-1115G4E
N/A	N/A	N/A	N/A	N/A
Intel® Graphics Gen11, up to 32 EU	Intel® Atom® SoC integrated Gen7 4EUs graphics	Intel® Atom® SoC integrated Gen7 4EUs graphics	Intel® New Xe (Gen12) Gfx Engine with up to 96EU	Intel® New Xe (Gen12) Gfx Engine with up to 96EU
1x DDR4 SO-DIMM	1x DDR3L SO-DIMM	2x DDR3L SO-DIMM	1x DDR4 SO-DIMM	1x DDR4 SO-DIMM
Up to 16GB	Up to 8GB	Up to 8GB	Up to 32GB	Up to 32GB
1x HDMI	1x DisplayPort 1x VGA	1x DisplayPort	1x DisplayPort	1x DisplayPort
4x USB3.2 Gen1 1x USB2.0	1x USB3.2 Gen1 1x USB2.0	1x USB3.2 Gen1 1x USB2.0	2x USB3.2 Gen2	2x USB3.2 Gen2
2x GbE	1x GbE	2x GbE	2x GbE	2x GbE
1x RS232/422/485 1x RS232	1x RS232/422/485	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232
N/A	N/A	N/A	1x Line-out (MIC-in)	1x Line-out (MIC-in)
N/A	N/A	N/A	N/A	N/A
1x power button	1x power button	1x power button	1x power button	1x power button
N/A	N/A	N/A	1x 2.5" SATAIII SSD (optional)	1x 2.5" SATAIII SSD (optional)
1 x M.2 B-key 3042	1x mSATA	1x mSATA	1x M.2280 M-key (SATA + PCI-E (x4))	1x M.2280 M-key (SATA + PCI-E (x4))
N/A	N/A	N/A	N/A	N/A
1x full-sized mPCI-E(x1) w/ USB + PCI-E signal 1x M.2 E-key 2230 1x M.2 B-key 3042	3x Mini PCI-E (2x full-size, 1x half-size)	2x Mini PCI-E (1x full-size, 1x half-size)	1x M.2 E-key 2230 1x M.2 B-key 3042/52 1x M.2 M-key 2280	1x M.2 E-key 2230 1x M.2 B-key 3042/52 1x M.2 M-key 2280
12V DC-in	12V DC-in	9V~30V DC-in	9V~36V DC-in	9V~36V DC-in
1x 3-pin terminal block	1x DC Jack	1x DC Jack	1x 3-pin terminal block	1x 3-pin terminal block
211.5 x 143.5 x 52	211.5 x 143.5 x 52	211.5 x 143.5 x 52	316 x 247 x 55	TBD
1.6	1.5	1.5	TBD	TBD
Aluminum and white steel	Aluminum and white steel	Aluminum and white steel	Aluminum	Aluminum
Front panel IP65	Front panel IP65	Front panel IP65	Front panel IP66	Front panel IP66
Panel mount VESA 75x75 mm	Panel mount VESA 75x75 mm	Panel mount VESA 75x75 mm	VESA 100x100 mm	VESA 100x100 mm
-10°C~50°C	-10°C~50°C	-10°C~50°C	-20°C~50°C	-20°C~50°C
-20°C~60°C	-20°C~60°C	-20°C~60°C	-20°C~70°C	-20°C~70°C
10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)
CE/FCC Class B	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class B	CE/FCC Class B
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Model No.	Models	IDOOH-210-IR	INOSP-192-RE	INOSP-152-RE	UMT-7212
Display & Touch	Display Size	21.5"	19"	15"	21.5"
	Max. Resolution	1920 x 1080	1280 x 1024	1024 x 768	1920 x 1080
	Luminance (cd/m2)	Up to 1200nits, default @75%	350	500	300
	Contrast Ratio	1000:1	1000:1	800:1	1000:1
	View Angle (H/V)	140/120	170/160	160/160	178/178
	Light Transmission (%)	88	80	80	87
	Touch Type	IR touch	Resistive	Resistive	Projected capacitive
	Touch Interface	USB	USB	USB	USB
System	Processor	Intel® Atom® Processor E3845	Intel® Atom® Processor E3845	Intel® Atom® Processor E3845	7th /6th Gen Intel® Core™ U-series i7/i5/i3
	Chipset	N/A	N/A	N/A	N/A
	Graphics	Intel® Atom® SoC integrated Gen7 graphics	Intel® Atom® SoC integrated Gen7 graphics	Intel® Atom® SoC integrated Gen7 graphics	Intel® HD Graphics 620
	Memory	2x DDR3L SO-DIMM	2x DDR3L SO-DIMM	2x DDR3L SO-DIMM	2x DDR4 SO-DIMM
	Max. Memory	Up to 8GB	Up to 8GB	Up to 8GB	Up to 32GB
I/O Interface	Display	1x DisplayPort	N/A	N/A	1x DisplayPort
	USB	1x USB3.2 Gen1 1x USB2.0	1x USB3.2 Gen1 (optional) 1x USB2.0	1x USB3.2 Gen1 (optional) 1x USB2.0	2x USB3.2 Gen1 2x USB2.0
	LAN	2x GbE	1x GbE 2nd GbE (optional)	1x GbE 2nd GbE (optional)	2x GbE
	Serial Port	1x RS232/422/485	1x RS232/422/485 1x RS232	1x RS232/422/485 1x RS232	1x RS232/422/485 (isolated) 1x RS232 (isolated)
	Audio	N/A	N/A	N/A	N/A
	Digital I/O	N/A	N/A	N/A	N/A
	Power Button	1x Power button	N/A	N/A	1x Power button P-CAP type
Storage	SSD	1x 2.5" SATAII SSD	1x 2.5" SATAII SSD	1x 2.5" SATAII SSD	1x 2.5" SATAII SSD
	mSATA/M.2	1x mSATA	1x mSATA	1x mSATA	1x M.2 (M-Key 2280)
Expansion	Expansion Slot	N/A	N/A	N/A	1x PCI-E (x4)
	Internal Expansion bus	2x Mini PCI-E (1x full-size, 1x half-size)	2x Mini PCI-E (1x full-size, 1x half-size)	2x Mini PCI-E (1x full-size, 1x half-size)	1x Mini PCI-E full-size 1x M.2 E-key 2230
Power	Power Input	90V ~ 240V AC-in	10V~30V DC-in	10V~30V DC-in	90V ~ 240V AC-in
	Power Connector	AC inlet	1x M12	1x M12	IEC60320 C14
Mechanical	Dimensions (mm)	574 x 357 x 82.5	470 x 390 x 62.5	425 x 330 x 62.5	557 x 360 x 80
	Weight (kgs)	7.5	17	13.5	6.7
	Chassis Material	Aluminum and SGCC	304 stainless steel 316 stainless steel (option)	304 stainless steel 316 stainless steel (option)	Aluminum and Sheet metal
	IP Rating	Front panel IP65	IP65 / IP69K	IP65 / IP69K	Front panel IP65 Rear side IP54 (except I/O side)
	Mounting	VESA 200x200 mm/ 200x100 mm	VESA 75x75 / 100x100 mm	VESA 75x75 / 100x100 mm	VESA 100x100 mm
Environmental	Operating Temperature	0°C~50°C	0°C~50°C	0°C~50°C	0°C~40°C
	Storage Temperature	-20°C~70°C	-20°C~70°C	-20°C~70°C	-20°C~60°C
	Storage Humidity	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)	10%~90% @40°C (non-condensing)
	Certification	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B	CE/FCC Class-B and LVD EN 60601-1: 2006 + A1: 2013 (IEC 60601-1: 2012 reprint) EN 60601-1-2:2015 (IEC 60601-1-2:2014)
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# Open-Frame Panel PC for Self-Service Kiosk



## Flexible Modular Design

The IBASE OFP series fanless panel PCs are built with easy-to-mount, open-frame modular design with colored frame options. The computing platform, storage device, display panel and touchscreen can be easily changed and tailored to your needs.

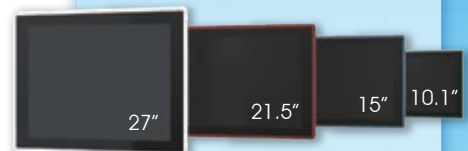


## We Do the Computing Platform — You Create the ID Design

The OFP series provides a flexible solution for seamless integration into kiosks, customized housings and wall mount environments. The systems support various bracket installations and assembly methods. Just concentrate on your ID design and leave the computing platform design to IBASE.

## We Make the Size You Want

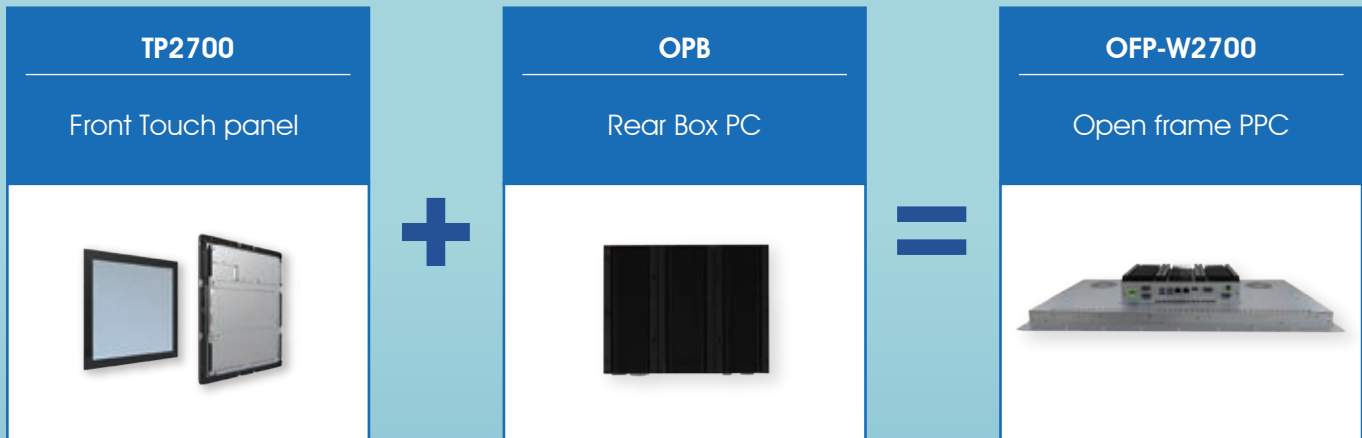
The IBASE OFP series supports 15-inch and 21-inch and 27-inch touchscreen displays with resolutions of 1024 x 768 and 1920 x 1080 respectively. Only a small minimum order is required for other panel sizes from 10.1" to 27".



# Retail Panel PC Solution for Self-Service Kiosk

## We Do the Computing Platform — You Create the ID design

OFP series with bezel-free touch display provides flexibility for customers to design the front bezel according their environmental application. The system provides Flexible Modular Design to enhance integration with high product flexibility



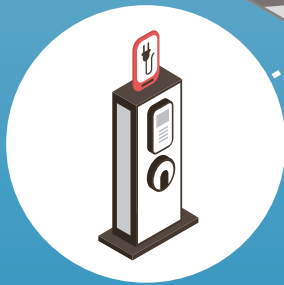
### UPC-7210

Interactive Kiosk for Product Information and Self-Ordering Services



### OFP-2100

Semi-Outdoor Kiosk with High Brightness Display for Entertainment Systems



### OFP-W2700

Outdoor Kiosk with IR Solution for Electric Vehicle Charging Stations

## Open-Frame Panel PC 27"



### Features

- 27" wide-screen open-frame panel pc with excellent performance
- 1920 x 1080 resolution and 250-nit & 1000-nit brightness
- Projected capacitive touch
- Supports both portrait and landscape display modes
- Supports IR cut-off solution



OFP-W2700-PCI86



OFP-W2700-PCI50



OFP-W2700-PCV16

### Specifications

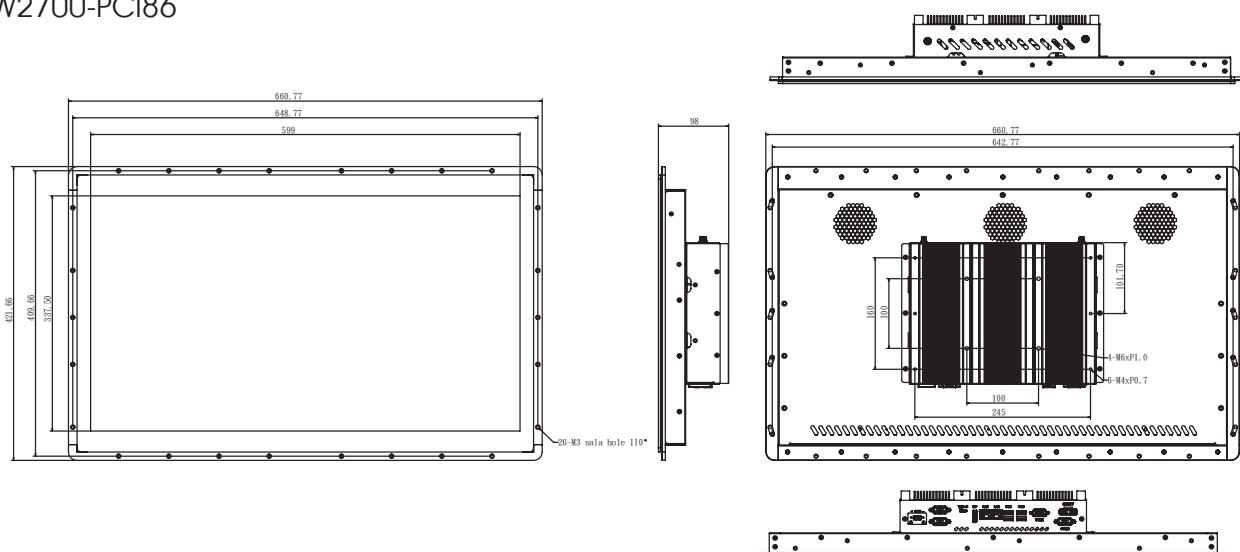
Model No.		OFP-W2700-PCI86	OFP-W2700-PCI50	OFP-W2700-PCV16
Display & Touch Screen	Display Size	27" TFT-LCD		
	Max. Resolution	1920 x 1080		
	Luminance (cd/m2)	Default: 250 Option: 1000		
	Contrast	1:1000		
	Max. Color	16.7M		
	View Angle (H/V)	178/178		
	Backlight Lifetime(hrs)	30,000		
	Touch Type	Projected capacitive touch IR cut solution (optional)		
	Touch Interface	USB		
	Light Transmission (%)	85		
	Point of touch	10		
System	Processor	8th Gen Intel® Core™ i7-8665UE Processor	Intel® Atom® x7-E3950 Processor	AMD Ryzen™ V1605B
	Memory	2x DDR4 SO-DIMM Up to 32GB, 1x 4GB (default)	1x DDR3L SO-DIMM Up to 8GB, 1x 4GB (default)	2x DDR4 SO-DIMM Up to 32GB, 1x 4GB (default)
	Thermal Design	3x fan for IR cut off solution (Reserved)		
	Membrane Control	None		
	Built-in Speaker/MIC	None		

# OFP-W2700-PCI86 / OFP-W2700-PCI50 / OFP-W2700-PCV16

I/O Interface	USB 3.0	4 (USB3.1)	4	4 (USB3.1)
	USB 2.0		0	
	RS-232/422/485 Selectable in BIOS		1	
	RS-232		1	
	LAN		2	
	Additional Graphics	1x DisplayPort 1x USB Type-C	1x HDMI	2x HDMI
	Audio		0	
	Digital I/O		0	
	Power Connector	1x 3-pin terminal block AC inlet for high brightness SKU		
	Power Button	1x 2-pin terminal block to power on/off pin		
Mechanical	Dimensions (mm)	660.77 x 421.66 x 98		
	Net Weight (kg)	14.6		
Expansion	Internal Expansion Bus	1x M2280 M.2 socket 1x E2230 M.2 socket	2x Mini PCI-E (1x full-size, 1x half-size)	1x M2280 M.2 socket 1x E2230 M.2 socket
	Expansion Slot	None		
	Wireless	optional		
Storage Space	HDD	1x 2.5" SATA III SSD space, 64G SSD (default) 1x M.2 (M-Key)	1x 2.5" SATA III SSD space, 64G SSD (default) 1x mSATA (via full-size Mini PCI-E)	1x 2.5" SATA III SSD space, 64G SSD (default) 1x M.2 (M-Key)
	Removable	None		
Power	Power Input Range	9V~24V DC (general SKU) 100V~240V AC (high brightness SKU)	12V~24V DC (general SKU) 100V~240V AC (high brightness SKU)	12V~24V DC (general SKU) 100V~240V AC (high brightness SKU)
Construction	Chassis Material	SGCC		
	Color (Front/Back)	Raw SGCC		
	IP Rating	Front side IP65		
	Mounting	open-frame design		
Environmental	Operating Temperature	-10°C~50°C		
	Storage Temperature	-20°C~70°C		
	Storage Humidity	10%~90% @40°C (non-condensing)		
	Certification	N/A		
	Supported Operating Systems	Windows 10, 64-bit, Linux Kernel 4+		

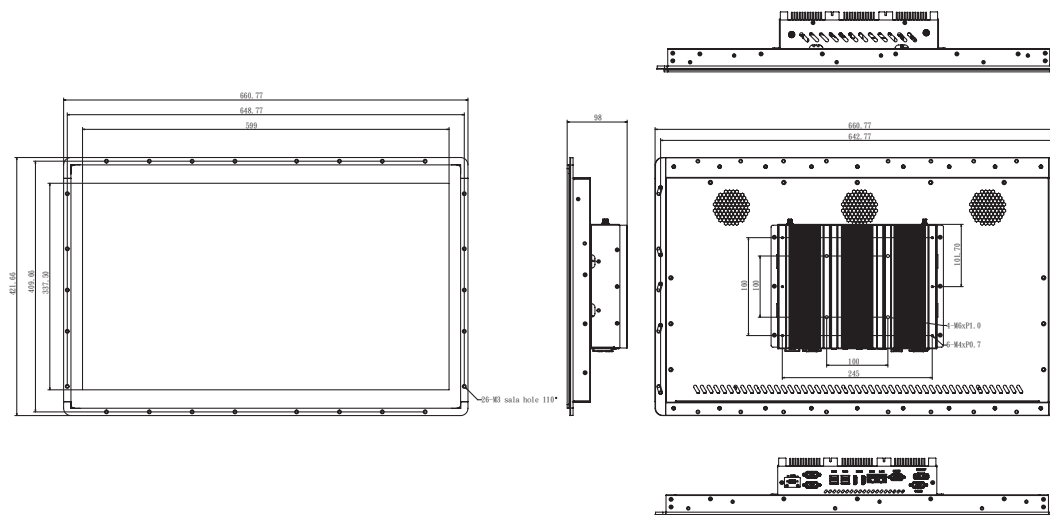
## Dimensions

OFP-W2700-PCI86

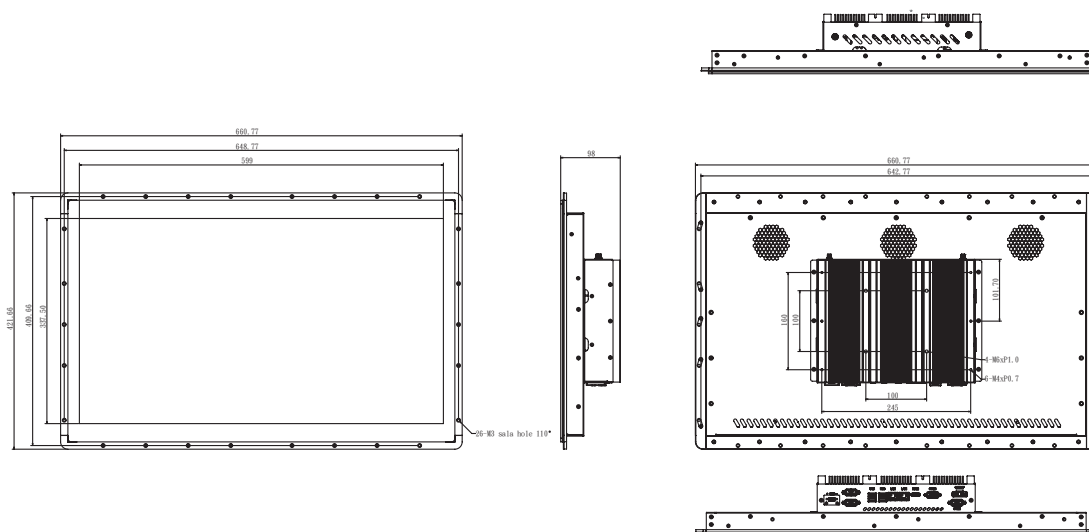


## Dimensions

OFP-W2700-PCV16



OFP-W2700-PCI50



## Ordering Information

OFP-W2700-PCI86H	27" Full HD open-frame Panel PC with IB919AF-8665, 8th Gen Intel® Core™ i7-8665UE processor, 4GB DDR4 memory, 64GB SSD, 1000nits high brightness, projected capacitive touch screen, 100V~240V AC Power input
OFP-W2700-PCI50H	27" Full HD open-frame Panel PC with IB818F-I50, Intel® Atom® x7-E3950 processor, 4GB DDR3L memory, 64GB SSD, 1000nits high brightness, projected capacitive touch screen, 100V~240V AC Power input
OFP-W2700-PCV16I	27" Full HD open-frame Panel PC, AMD V1605B processor, 4GB DDR4 memory, 64GB SSD, 1000nits high brightness, projected capacitive touch screen with IR cut solution, 100V~240V AC Power input
OFP-W2700-PCV16	27" Full HD open-frame Panel PC with IB918F-1605, AMD V1605B processor, 4GB DDR4 memory, 64GB SSD, 250nits brightness, projected capacitive touch screen, 12V~24V DC Power input

## Open-Frame Panel PC 15" 21"



OFP Series VIDEO



### I/O View



OFP-151-PC



OFP-2100-PC



OFP-2101-PC

### Features

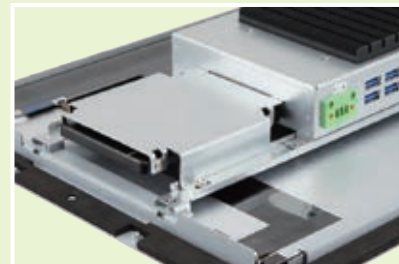
- Flat bezel open-frame design with optional colored frame
- IP65 front panel protection



- 9V~36V DC wide-range power input



- Modular design, upgradeable



- Easy to integrate with customized housing





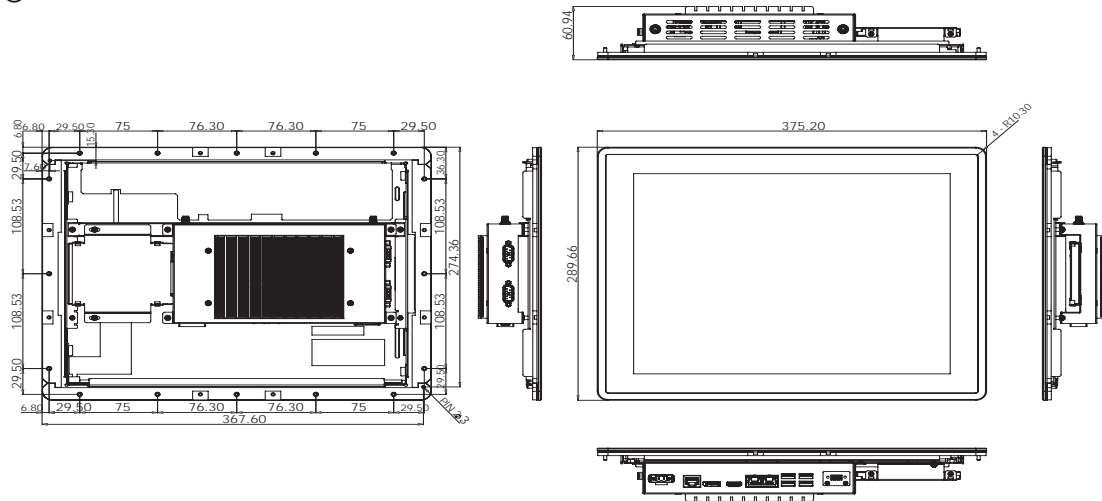
# OFP-151-PC / OFP-2100-PC / OFP-2101-PC

Model No.		OFP-151-PC	OFP-2100-PC	OFP-2101-PC
Display & Touch Screen	Display Size	15 TFT-LCD	21.5 TFT-LCD	21.5 TFT-LCD
	Max. Resolution	1024 x 768	1920 x 1080	1920 x 1080
	Luminance (cd/m2)	420	250	250
	Contrast	1:600	1:1000	1:1000
	Max. Color	16.2M	16.7M	16.7M
	View Angle (H/V)	160/160	178/178	178/178
	Backlight Lifetime(hrs)	30000	30000	30000
	Touch Type	Projected capacitive		
	Touch Interface	USB		
	Light Transmission (%)	89		
	Point of touch	10		
System	Processor	Intel® Pentium® QC N4200	Intel® Pentium® QC N4200	Intel® Core i7 7600U Intel® Core i5 7300U Intel® Core i3 7100U
	Memory	Max. 8GB DDR4, default 4GB	Max. 8GB DDR4, default 4GB	Max. 32GB DDR4, default 4GB
	Thermal Design	Fanless		
	Membrane Control	None		
	Built-in Speaker/MIC	None		
I/O Interface	USB 3.0	4		
	USB 2.0	0		
	RS-232/422/485 Selectable in BIOS	1 (RJ50 type)	1 (RJ45 type)	1 (DSUB9)
	RS-232	optional		
	LAN	2x GbE		
	Additional Graphics	1x HDMI 1x DP		
	Audio	None		
	Digital I/O	optional		
	Power Connector	1x 3-pin terminal block		
Power Button	1x 2-pin terminal block for remote			
Mechanical	Dimensions (mm)	375.2 x 289.6 x 60.9	543 x 334 x 88.2	543 x 334 x 88.2
	Net Weight (kg)	5	7.6	7.7
Expansion	Internal Expansion Bus	1x mini PCI-E for half-size mSATA 1x M.2 B-key	1x mini PCI-E for half size mSATA 1x M.2 B-key	1x mini PCI-E for full-size mSATA
	Expansion Slot	None		
	Wireless	optional		
Storage Space	HDD	1x 2.5" HDD space, default 64GB SSD		
	Removable	None		
Power	Power Input Range	9V~36V DC	9V~36V DC	9V~24V DC
Construction	Chassis Material	SGCC		
	Color (Front/Back)	Raw SGCC		
	IP Rating	Front side with IP65		
	Mounting	open-frame design		
Environmental	Operating Temperature	-10°C~50°C	0°C~50°C	0°C~50°C
	Storage Temperature	-20°C~70°C		
	Storage Humidity	10%~90% @40°C (non-condensing)		
	Certification	Based on chassis design		
	Supported Operating Systems	Windows 10, 64-bit, Linux Kernel 4+		

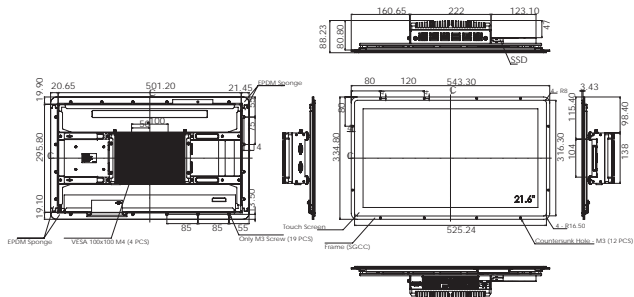
# OFP-151-PC / OFP-2100-PC / OFP-2101-PC

## Dimensions

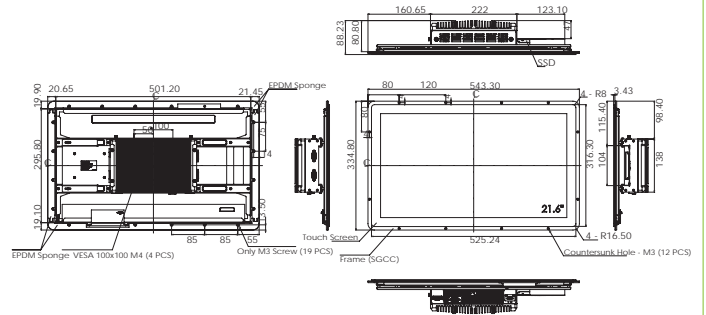
OFP-151-PC



OFP-2100-PC



OFP-2101-PC



## Ordering Information

OFP-151-PC-N42	15" open-frame panel PC, projected capacitive touch screen with IB811F-420, Intel® Pentium® QC N4200 processor, 4GB DDR4 memory, 64GB SSD, without power adaptor
OFP-2100-PC-N42	21.5" Full HD open-frame panel PC, projected capacitive touch screen with IB811F-420, Intel® Pentium® QC N4200 processor, 4GB DDR4 memory, 64GB SSD, without power adaptor
OFP-2101-PC-176	21.5" Full HD open-frame panel PC, projected capacitive touch screen with IB917AF-7600, 7th Gen Intel® Core™ i7 7600U processor, 4GB DDR4 memory, 64GB SSD, without power adaptor
OFP-2101-PC-173	21.5" Full HD open-frame panel PC, projected capacitive touch screen with IB917AF-7300, 7th Gen Intel® Core™ i5 7300U processor, 4GB DDR4 memory, 64GB SSD, without power adaptor
OFP-2101-PC-171	21.5" Full HD open-frame panel PC, projected capacitive touch screen with IB917F-7100, 7th Gen Intel® Core™ i3 7100U processor, 4GB DDR4 memory, 64GB SSD, without power adaptor

# UPC-7210 UPC-6210

## Smart Retail Panel PC

21.5" Panel PC with 7th Gen Intel® Core™ i3/i5/i7 / Celeron® / Atom® Processor

UPC Series 21.5"

### I/O View

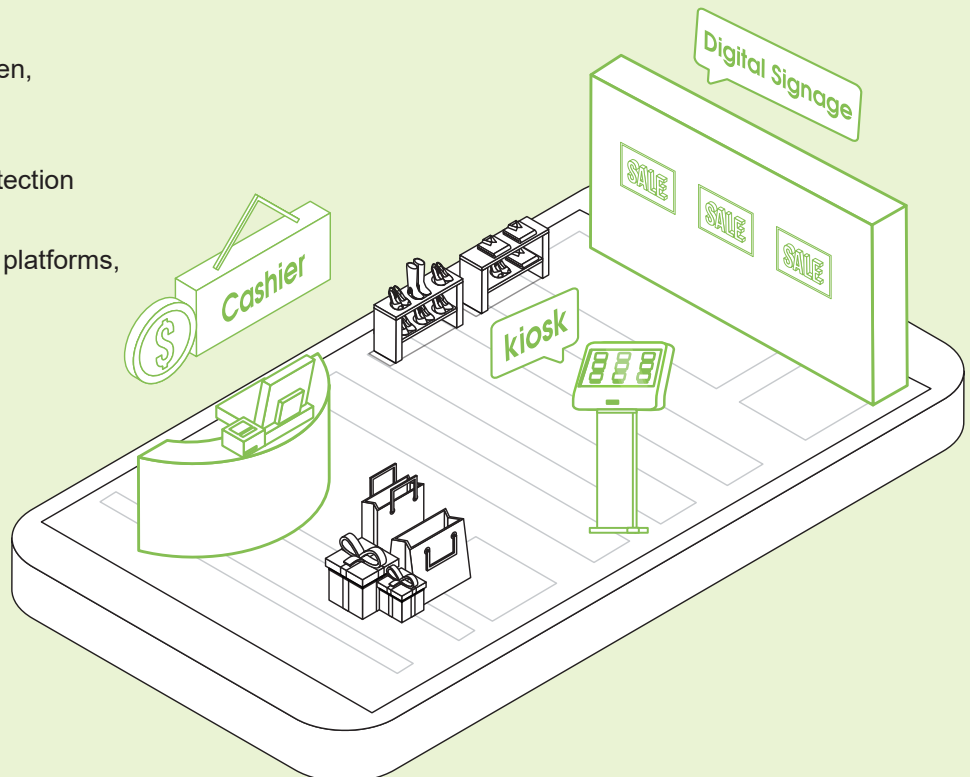


UPC Series VIDEO



## Features

- 21.5" IPS LCD, 1920 x1080
- Projected capacitive touch screen, supports multi touch
- IP65 front-panel waterproof protection
- Supports a variety of processor platforms, from entry to performance level
- Optional wireless solution



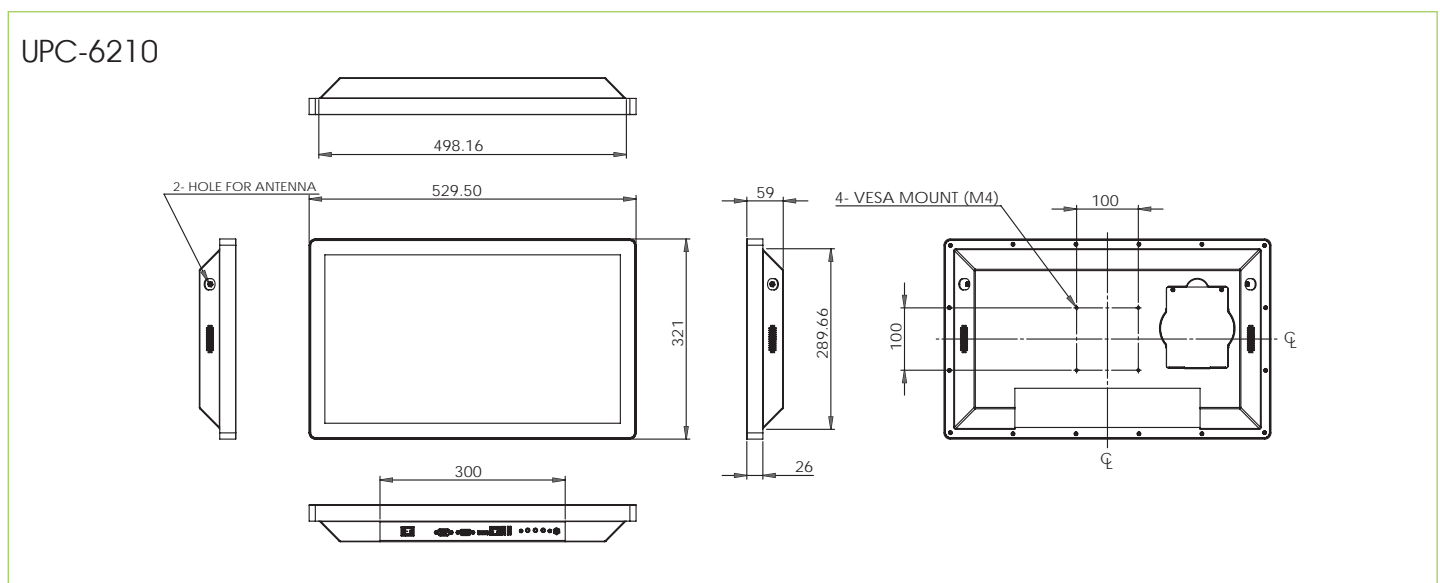
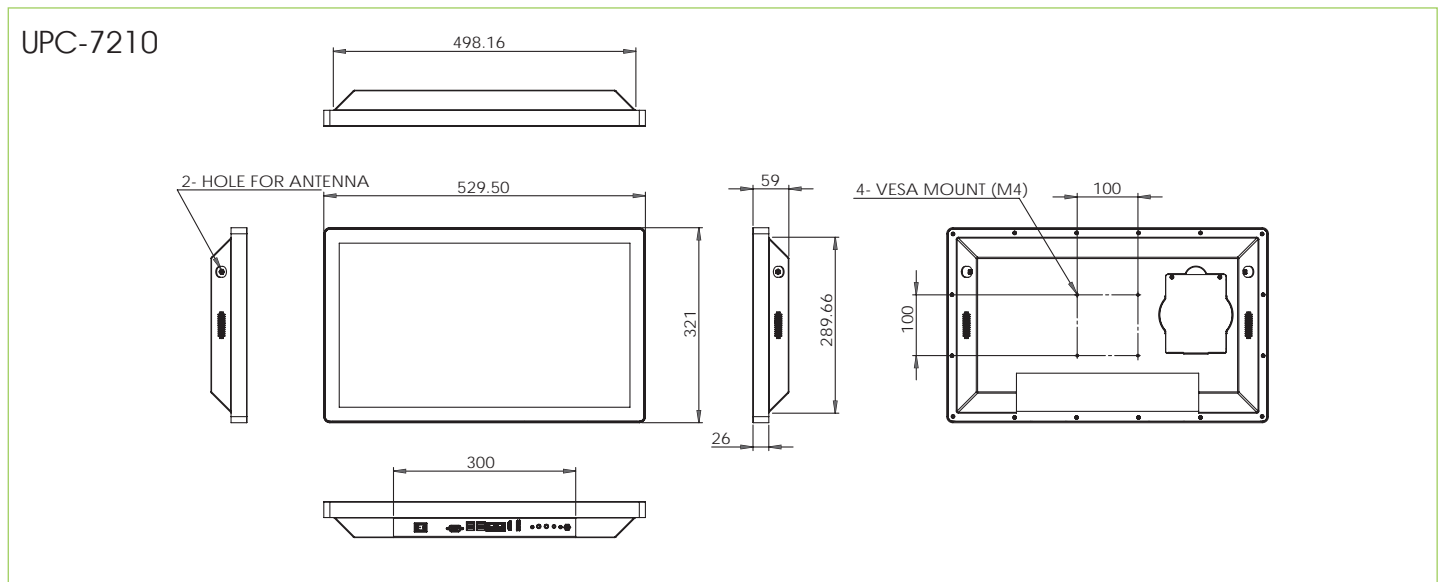
# UPC-7210 / UPC-6210

## Specifications

Model No.		UPC-7210	UPC-6210
Display & Touch Screen	Display Size	21.5" TFT-LCD	
	Max. Resolution	1920 x 1080	
	Luminance (cd/m2)	250	
	Contrast	1:1000	
	Max. Color	16.2M	
	View Angle (H/V)	178/178	
	Backlight Lifetime(hrs)	30000	
	Touch Type	Projected capacitive	
	Touch Interface	USB	
	Light Transmission (%)	89	
	Point of touch	10	
System	Processor	Intel® i7 7600U (2.8GHz~3.9GHz, 4MB cache) UPC-7210 -I76 Intel® i5 7300U (2.6GHz~3.5GHz, 3MB cache) UPC-7210 -I73 Intel® i3 7100U (2.4GHz, 3MB cache) UPC-7210 -I71	Intel® Celeron J1900 (2.0GHz~2.4GHz, 2MB cache) UPC-6210 -J19 Intel® Atom® E3825 (1.33GHz, 1MB cache) UPC-6210 -I25
	Memory	Max. 32GB, default 4GB DDR4	Max. 32GB, and default 4GB DDR3L
	Thermal Design	Fanless	
	Membrane Control	None	
	Built-in Speaker/MIC	2x 2W 4Ω Speakers	
I/O Interface	USB 3.0	4	1
	USB 2.0	0	1
	RS-232/422/485 Selectable in BIOS	1	
	RS-232	0	
	LAN	2 x GbE	1 x GbE
	Additional Graphics	1x HDMI 1x DP	1x VGA 1x DP
	Audio	1x 3.5 mm phone jack for line -out	
	Digital I/O	None	
	Power Connector	Power jack	
	Power Button	Rock switch	
	Mechanical	Dimensions (mm)	529 x 321 x 59
Net Weight (kg)		9	
Expansion	Internal Expansion Bus	1x miniPCI-E Full-size, mSATA supports	1x miniPCI-E Full-size mSATA supports 1x miniPCI-E Full-size 1x miniPCI-E Half-size
	Expansion Slot	None	
	Wireless	optional	
Storage Space	HDD	1x 2.5" HDD space default 64GB SSD	
	Removable	None	
Power	Power Input Range	12V/24VDC	12V DC
Construction	Chassis Material	AL 5052	
	Color (Front/Back)	Black/Black	
	IP Rating	Front Side IP65	
	Mounting	VESA 100x100	
Environmental	Operating Temperature	0°C~50°C	
	Storage Temperature	-20°C~70°C	
	Storage Humidity	10%~90% @40°C (non-condensing)	
	Certification	CE/FCC Class-B +LVD	
	Supported Operating Systems	Windows 10, 64bits, Linux Kernel 4+	Windows 7, Windows 10, 32/64bits, Linux Kernel 3+

# UPC-7210 / UPC-6210

## Dimensions



## Ordering Information

UPC-7210 -I76	21.5" Fanless Panel PC with IB917AF-7600, 7th Gen Intel® Core™ i7 7600U, Projected capacitive touch screen, 4GB DDR4 memory, 64G SSD, 12V or 24V DC input, with 12VDC adaptor
UPC-7210 -I73	21.5" Fanless Panel PC with IB917AF-7300, 7th Gen Intel® Core™ i5 7300U, Projected capacitive touch screen, 4GB DDR4 memory, 64G SSD, 12V or 24V DC input, with 12VDC adaptor
UPC-7210 -I71	21.5" Fanless Panel PC with IB917AF-7100, 7th Gen Intel® Core™ i3 7100U, Projected capacitive touch screen, 4GB DDR4 memory, 64G SSD, 12V or 24V DC input, with 12VDC adaptor
UPC-6210 -J19	21.5" Fanless Panel PC with IB898-J19D1, Intel® Celeron J1900, Projected capacitive touch screen, 4GB DDR3L memory, 64G SSD, 12V DC input, with 12VDC adaptor
UPC-6210 -I25	21.5" Fanless Panel PC with IB898-I25, Intel® Atom® Processor E3825, Projected capacitive touch screen, 4GB DDR3L memory, 64G SSD, 12V DC input, with 12VDC adaptor



### Features

- Modular design for easy maintenance
- With printer, NFC, scanner, PIN pad, integrated camera
- Supports both portrait and landscape display modes
- Custom modifications to the color, shape, and surface treatment

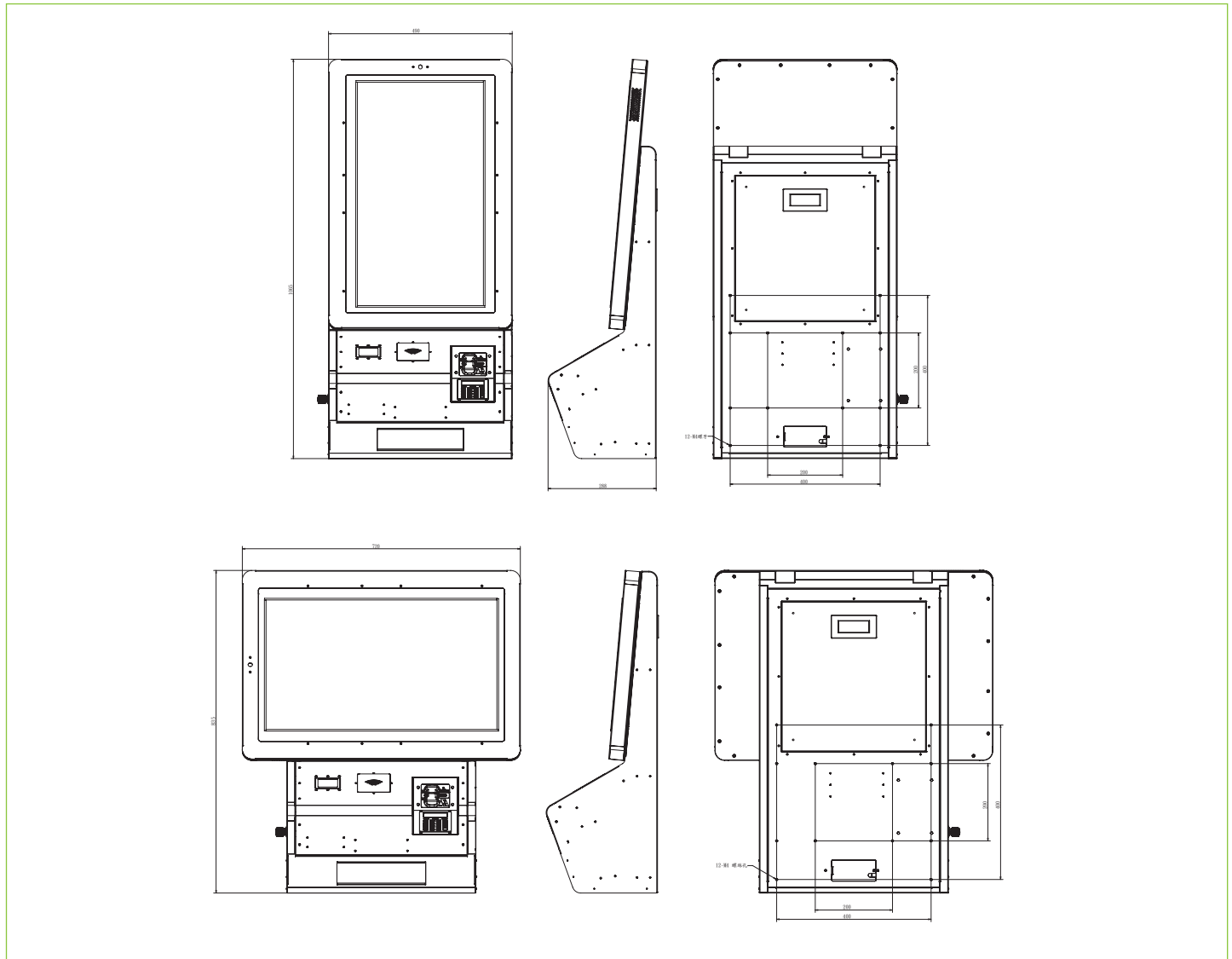
### System Specifications

Model No.		IKS2700I	IKS2700A
System Mainboard		IB919AF-8665	IB918F-1605
Processor		Intel® Core™ i7-8665UE (1.7GHz/4.4GHz)	AMD Ryzen™ V1605B QC APU (2.0GHz~3.6GHz)
Memory		2x DDR4 SO-DIMM, up to 32 GB, default 4GB	
Rear Panel External I/O		N/A	
Storage		2x 2.5" SATA III space (default 2x 64GB)	1x 2.5" SATA III space (default 64GGB) 1x M.2 M2280 (default 64GB)
Expansion Slots		1x M.2 M2280 socket 1x M.2 E2230 socket reserved for optional WiFi	1x M.2 E2230 socket reserved for optional WiFi
Power Supply		100V~240V AC	
LCD Panel	Panel Size	27" TFT-LCD	
	Max. Resolution	1920 x 1080	
	Luminance (cd/m2)	250	
	Max. Color	16.7M	
	View Angle (H°/V°)	178/178	
	Backlight Lifetime (hrs)	30,000	
Touch Screen	Touch Type	Projected capacitive touch	
	Touch Interface	USB	
	Light Transmission (%)	85	
Build-in Default	Printer	2" or 3" thermal printer w/ auto cutter	
	Scanner	1D/2D barcode scanner	
	Camera	2M camera with MIC	
	Speaker	2x 2W	
Build-in Options	WiFi	WiFi / Bluetooth module	
	EMV payment device	With PCI-certified PIN pad	
	NFC Reader	ISO/IEC 14443A Mifare	
Construction		Aluminum	
Chassis Color		White	
IP Rating		Front side IP4X	
Mounting		VEAS 400x200/200x200 Stand-Pole (option)	
Dimensions (mm)		1065 x 490 x 288 (portrait display mode) 720 x 835 x 288 (landscape display mode)	

# IKS2700I / IKS2700A

Weight	40kgs
Operating Temperature	-5°C~50°C
Storage Temperature	-20°C~70°C
Storage Humidity	10%~90% @40°C (non-condensing)
Vibration	IEC60068-2-64 ed2.0 2008-04
Shock	MIL-STD-810G 516.6
Certification	Meet CE/FCC Class-A +LVD
Operating Systems	Windows 10 IoT

## Dimensions



## Ordering Information

IKS2700I	27" 1920x1080 IBASE Kiosk System, Intel® i7 8665UE processor, 4GB DDR4 memory, 2x 64GB 2.5" SSD, thermal printer, NFC reader, barcode scanner, PIN Pad, integrated camera, projected capacitive touch screen, pre-installed Windows 10 IoT, 100V~240V AC power input
IKS2700A	27" 1920x1080 IBASE Kiosk System, AMD Ryzen™ V1605B QC APU, 4GB DDR4 memory, 1x 64GB 2.5" SSD, 1x 64G M2280 M.2, thermal printer, NFC reader, barcode scanner, PIN Pad, integrated camera, projected capacitive touch screen, pre-installed Windows 10 IoT, 100V~240V AC power input



## Features

- 21.5" LCD panel, 1920 x 1080
- Projected capacitive touch screen, supports multi touch
- Built-in webcam with digital microphone
- optional wireless solution
- Supports 2x speakers
- IP65 front-panel waterproof protection

## System Specifications

System Mainboard	IB917	
Processor	Intel® Core™ i7-7600U 2.8 GHz (VINO2100-I76) Intel® Core™ i5-7300U 2.6 GHz (VINO2100-I73) Intel® Core™ i3-7100U 2.4 GHz (VINO2100-I71)	
Memory	2x DDR4 SO-DIMM, up to 32 GB, default 4GB	
Construction	Aluminum	
Chassis Color	White	
Rear Panel External I/O	2x RJ45 Gigabit LAN 1x HDMI 1x DP 4x USB3.0 Type-A 1x D-SUB9 COM1 RS-232/422/485 1x Rock switch 1x Power jack	
Storage	1x 2.5" HDD space default 64GB SSD	
Camera	1x USB 1080P camera with digital microphone	
Speaker	2x speaker	
Expansion Slots	1x miniPCI-E Full-size	
Power Supply	DC 24V	
LCD Panel	Panel Size	21.5" TFT-LCD
	Max. Resolution	1920 x 1080
	Luminance (cd/m2)	1000
	Max. Color	16.2M
	View Angle (H°/V°)	178/178
	Backlight Lifetime (hrs)	50,000
Touch Screen	Touch Type	Projected capacitive
	Touch Interface	USB
	Light Transmission (%)	86

Mounting	VESA 100x100/200x100 Desktop stand & Stand pole (option)
Dimensions	537.8 x 329.26 x 71.95 mm 548.65 x 500 x 242 mm (with desktop stand) 1750 x 550 x 500 mm (with stand pole)
Weight	5.7kg
Operating Temperature	0°C~50°C
Storage Temperature	-20°C~70°C
Relative Humidity	10%~90% @40°C (non-condensing)
Vibration	IEC60068-2-64 ed2.0 2008-04
Shock	MIL-STD-810G 516.6
Certification	CE/FCC Class-A +LVD, VCCI
Operating Systems	Windows 10 64-bit

## Ordering Information

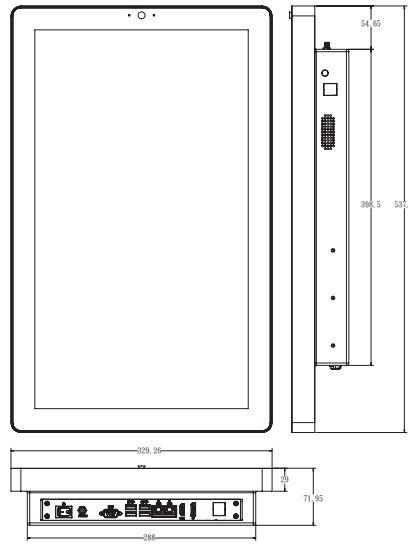
VINO2100-I76	21.5" 1920x1080 Fanless Panel PC, Intel® Core™ i7 7600U processor, 4GB DDR4 memory, 64GB SSD, projected capacitive touch screen w/ 24V 180W adaptor
VINO2100-I73	21.5" 1920x1080 Fanless Panel PC, Intel® Core™ i5 7300U processor, 4GB DDR4 memory, 64GB SSD, projected capacitive touch screen w/ 24V 180W adaptor
VINO2100-I71	21.5" 1920x1080 Fanless Panel PC, Intel® Core™ i3 7100U processor, 4GB DDR4 memory, 64GB SSD, projected capacitive touch screen w/ 24V 180W adaptor
VINODKM (option)	Desktop Mounting Stand for VINO2100 (SC2VINO21000A1100R)
ASP001 (option)	Stand Pole for VINO2100 (A018VINO210000100P)

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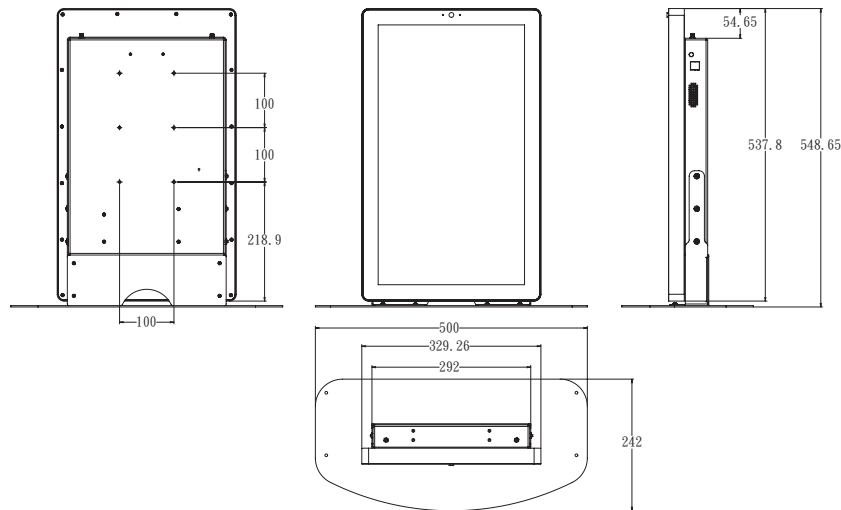


# VIN02100 Series

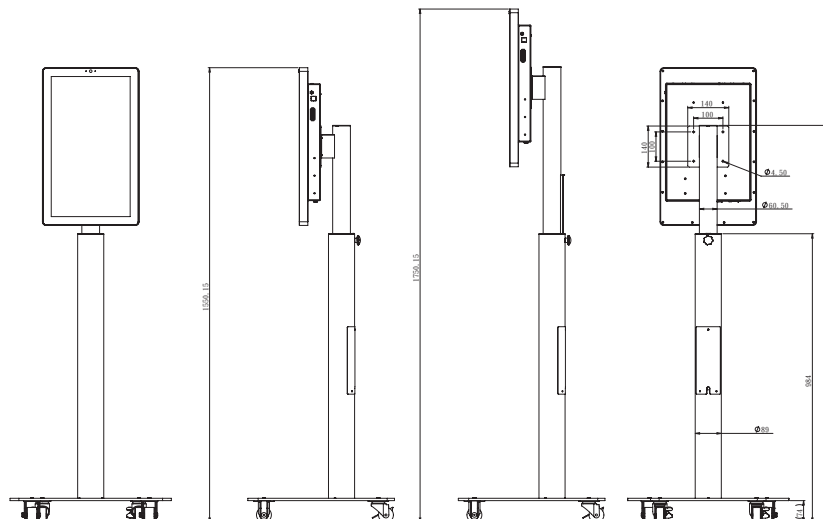
## System Dimensions



## System with Desktop Dimensions



## System with Stand Pole Dimensions



# ASTUT-W155-PC1S

## Heavy-duty Industrial Panel PC

All-in-One Panel PC with 7th/6th Gen Intel® Core™ i5 Processor and Riser Card Expansion

ASTUT Series 15.6"

### I/O View



ASTUT-W155-PC1S



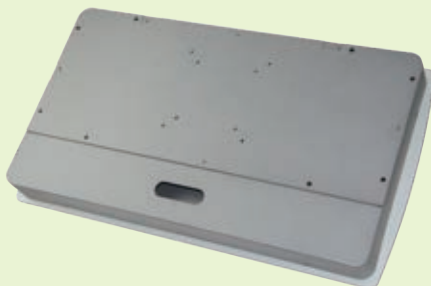
TAIWAN  
EXCELLENCE  
2016

### Features

- Optional digitizer touch pen support
- Optional wireless communication
- Full flat bezel design



- I/O cover for cable arrangement
- Aluminum housing, perfect thermal design



- With riser card expansion slot
- PCI-E (x4) for ASTUT-W155-PC1S



- 12V~24V DC wide-range power input

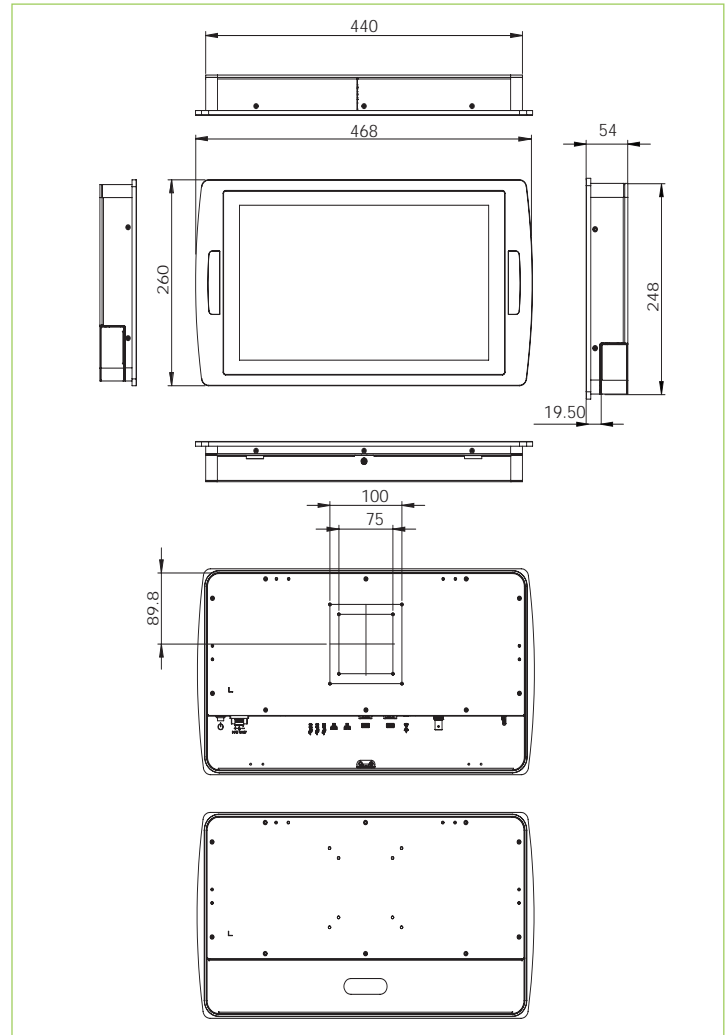


# ASTUT-W155-PC1S

## Specifications

Display & Touch Screen	Display Size	15.6" TFT-LCD
	Max. Resolution	1366 x 768
	Luminance (cd/m <sup>2</sup> )	300
	Contrast	500:1
	Max. Color	16.7M
	View Angle (H°/V°)	160/160
	Backlight Lifetime(hrs)	50,000
	Touch Type	Projected capacitive
	Touch Interface	USB
	Light Transmission (%)	85
Point of touch	2	
Expansion	Internal Expansion Bus	1x Mini PCI-E Half/Full size 1x M.2 22x30
	Expansion Slot	1x PCI-E(x4)
	Wireless	optional Wi-Fi/BT/LTE/3G/RFID
I/O Interface	USB 3.0	4
	USB 2.0	0
	RS-232/422/485 Selectable in BIOS	1
	RS-232	RS-485 only
	LAN	2x GbE
	Additional Graphics	1x HDMI
	Audio	None
	Digital I/O	None
	Power Connector	3-pin terminal block
	Power Button	Rock switch
Mechanical	Dimensions (mm)	468 x 260 x 54
	Net Weight (kg)	7
System	Processor	Intel® Core™ i5-6300U 2.4GHz Intel® Core™ i5-7300U 2.4GHz
	Memory	2x DDR4 2133 SO-DIMM, up to 16GB, default 4GB
	Thermal Design	Fanless
	Membrane Control	None
	Built-in Speaker/MIC	None
Storage Space	HDD	1x 2.5" M.2 22x80 default 64GB optional 2.5" HDD
	Removable	None
Power	Power Input Range	12V~24V DC
Construction	Chassis Material	Aluminum silver
	Color (Front/Back)	Silver / Silver
	IP Rating	IP65 front bezel
	Mounting	Panel mount and VESA 75x75, 100x100 mm
Environmental	Operating Temperature	0°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	Storage Humidity	10%~90% (non-condensing)
	Certification	CE/FCC Class-B and LVD
	Supported Operating Systems	Windows 10, Windows 8.1 64-bit Windows 7 (Intel® Core™ i5-6300U 2.4GHz SKU only)

## Dimensions



## Ordering Information

ASTUT-W155-PC1S-K73	15.6" Industrial Panel PC with IBP-900K-7300, 7th Gen Intel® Core™ i5 7300U processor, 64GB M.2 SSD, PCI-E(x4) riser card, projective touch screen, 12V~24V DC power input, w/o power adaptor
ASTUT-W155-PC1S-S63	15.6" Industrial Panel PC with IBP-900S-6300, 6th Gen Intel® Core™ i5 6300U processor, 64GB M.2 SSD, PCI-E(x4) riser card, projective touch screen, 12V~24V DC power input, w/o power adaptor
ASTUT-W155-PC1S-K76	15.6" Industrial Panel PC with IBP-900K-7600, 7th Gen Intel® Core™ i5 7600U processor, 64GB M.2 SSD, PCI-E(x4) riser card, projective touch screen, 12V~24V DC power input, w/o power adaptor
ASTUT-W155-PC1S-S66	15.6" Industrial Panel PC with IBP-900S-6600, 6th Gen Intel® Core™ i5 6600U processor, 64GB M.2 SSD, PCI-E(x4) riser card, projective touch screen, 12V~24V DC power input, w/o power adaptor
Power adaptor (optional)	AC 90V~240V input, 12V DC output 84W power adaptor, IBASE P/N: A005PS084W0050000P

IPPC Series 15" 17" 19"



### I/O View



### Features

- Fanless design



- Front side accessible USB port



- Two PCI-E(x8) expansion slots



- Rich and flexible I/O interface



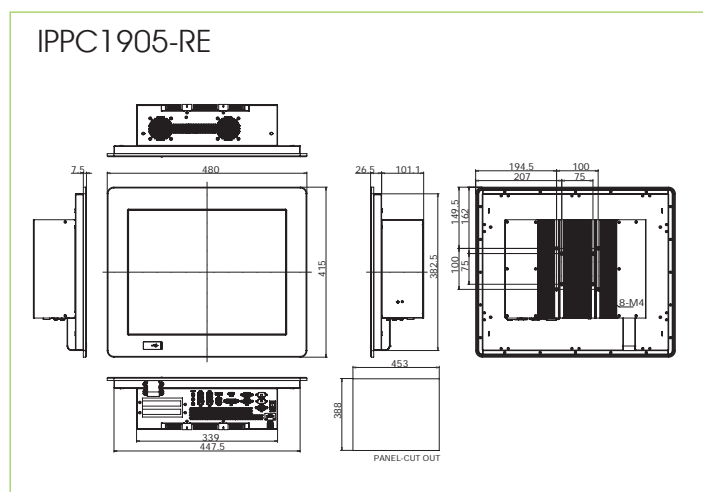
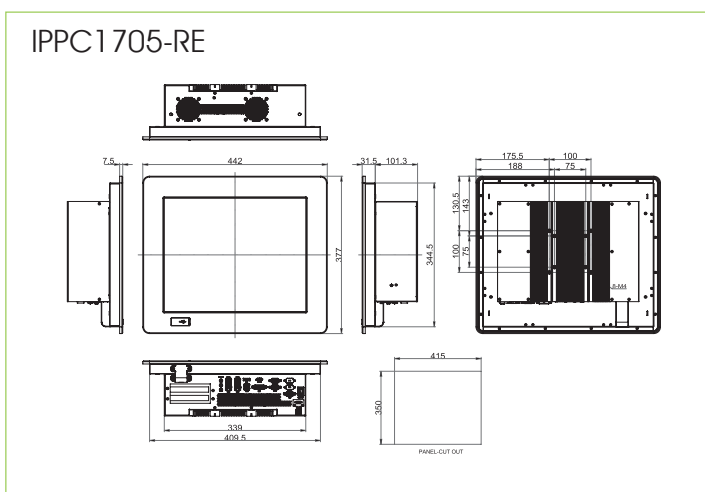
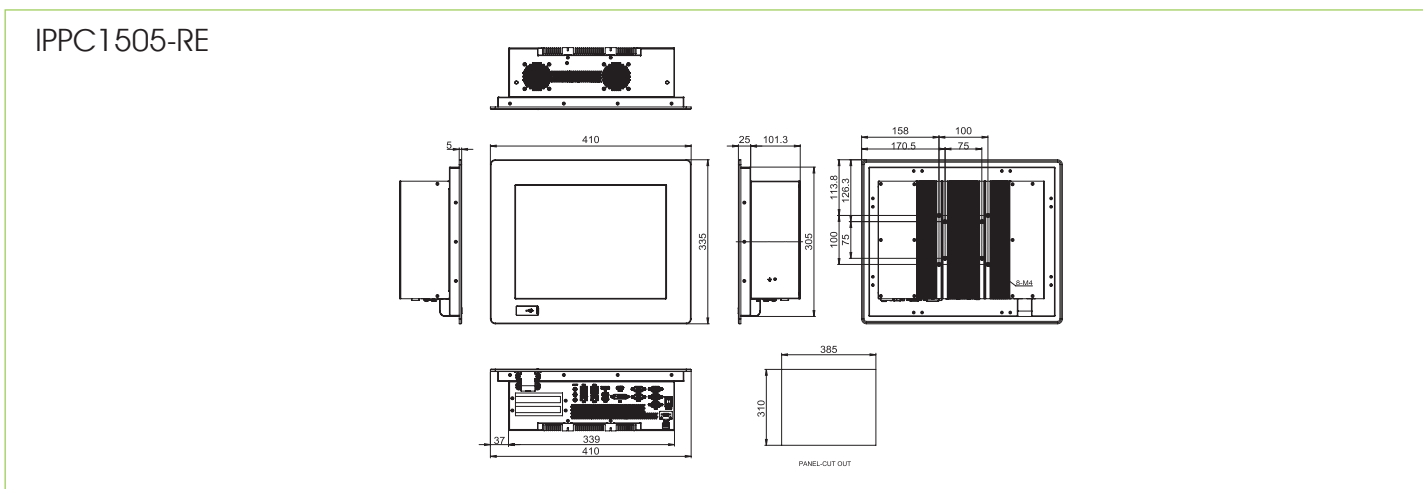
# IPPC1505-RE / IPPC1705-RE / IPPC1905-RE

## Specifications

Model No.		IPPC1505-RE	IPPC1705-RE	IPPC1905-RE
Display & Touch Screen	Display Size	15" TFT-LCD	17" TFT-LCD	19" TFT-LCD
	Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024
	Luminance (cd/m2)	420	350	350
	Contrast	600:1	800:1	1000:1
	Max. Color	16.2M	16.7M	16.7M
	View Angle (H/V)	160/160	160/140	170/160
	Backlight Lifetime(hrs)	50000	50000	50000
	Touch Type	Resistive		
	Touch Interface	USB		
	Light Transmission (%)	79		
	Point of touch	1		
System	Processor	Intel® Core™ i7-6822EQ/ Core™ i5-6442EQ/ Core™ i5-6440EQ/ Core™ i3-6100E		
	Memory	Max. 32GB, Default 4GB		
	Thermal Design	Fanless		
	Membrane Control	None		
	Built-in Speaker/MIC	None		
I/O Interface	USB 3.0	6		
	USB 2.0	1x at front bezel		
	RS-232/422/485 Selectable in BIOS	1		
	RS-232	1		
	LAN	2x GbE LAN		
	Additional Graphics	1x DVI-D 1x DP 1x HDMI (1.4)		
	Audio	1x 3.5 mm phone jack for line -out		
	Digital I/O	Optional 4-in/4-out GPIO		
	Power Connector	3-pin terminal block		
	Power Button	Rock switch		
Mechanical	Dimensions (mm)	410 x 335 x 126.3	442 x 377 x 132.8	480 x 415 x 127.6
	Net Weight (kg)	9.3	10	10.4
Expansion	Internal Expansion Bus	1x M.2 M Key 1x miniPCI-E full/half size, mSATA support		
	Expansion Slot	2x PCI-E x8		
	Wireless	optional		
Storage Space	HDD	2x 2.5" HDD space default one 64GB SSD		
	Removable	None		
Power	Power Input Range	12V/24VDC		
Construction	Chassis Material	Aluminum and SGCC		
	Color (Front/Back)	Black/Black		
	IP Rating	Front Side IP65		
	Mounting	VESA 75 x75 /100x100		
Environmental	Operating Temperature	0°C~ 40°C (with HDD) 0°C~ 50°C (with SSD)		
	Storage Temperature	-20°C~ 70°C		
	Storage Humidity	10%~90% @40°C (non-condensing)		
	Certification	CE/FCC Class-B + LVD		
	Supported Operating Systems	Windows 7, Windows 10, 32-bit/64-bit, Linux Kernel 3+		

# IPPC1505-RE / IPPC1705-RE / IPPC1905-RE

## Dimensions



## Ordering Information

IPPC1505-RE-17	15" Industrial Panel PC with MI992VF-6822, 6th Gen Intel® Core™ i7-6822EQ, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1505-RE-15	15" Industrial Panel PC with MI992VF-6442, 6th Gen Intel® Core™ i5-6442EQ, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1505-RE-13	15" Industrial Panel PC with MI992EF-6100, 6th Gen Intel® Core™ i3-6100E, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1705-RE-17	17" Industrial Panel PC with MI992VF-6822, 6th Gen Intel® Core™ i7-6822EQ, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1705-RE-15	17" Industrial Panel PC with MI992VF-6440, 6th Gen Intel® Core™ i5-6440EQ, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1705-RE-13	17" Industrial Panel PC with MI992EF-6100, 6th Gen Intel® Core™ i3-6100E, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1905-RE-17	19" Industrial Panel PC with MI992VF-6822, 6th Gen Intel® Core™ i7-6822EQ, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1905-RE-15	19" Industrial Panel PC with MI992VF-6440, 6th Gen Intel® Core™ i5-6440EQ, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor
IPPC1905-RE-13	19" Industrial Panel PC with MI992EF-6100, 6th Gen Intel® Core™ i3-6100E, 4GB DDR4 RAM, 64G SATA SSD, resistive touch, 2x PCI-E x8 slots, with power adaptor

**IPPC Series** 10" 12" 15" 17" 19"



**I/O View**



IPPC1003-PC



IPPC1203-RE



IPPC1503-RE

**Features**

- Cost effective
- Low power consumption
- IP65 front-panel waterproof protection



- PCI-E (x1) and PCI expansion  
(Not for IPPC1003-PC)



- Front-side access USB 2.0 port  
(IPPC1503-RE / IPPC1703-RE / IPPC1903-RE only)



- Projected capacitive touch screen  
(IPPC1003-PC only)



## Specifications

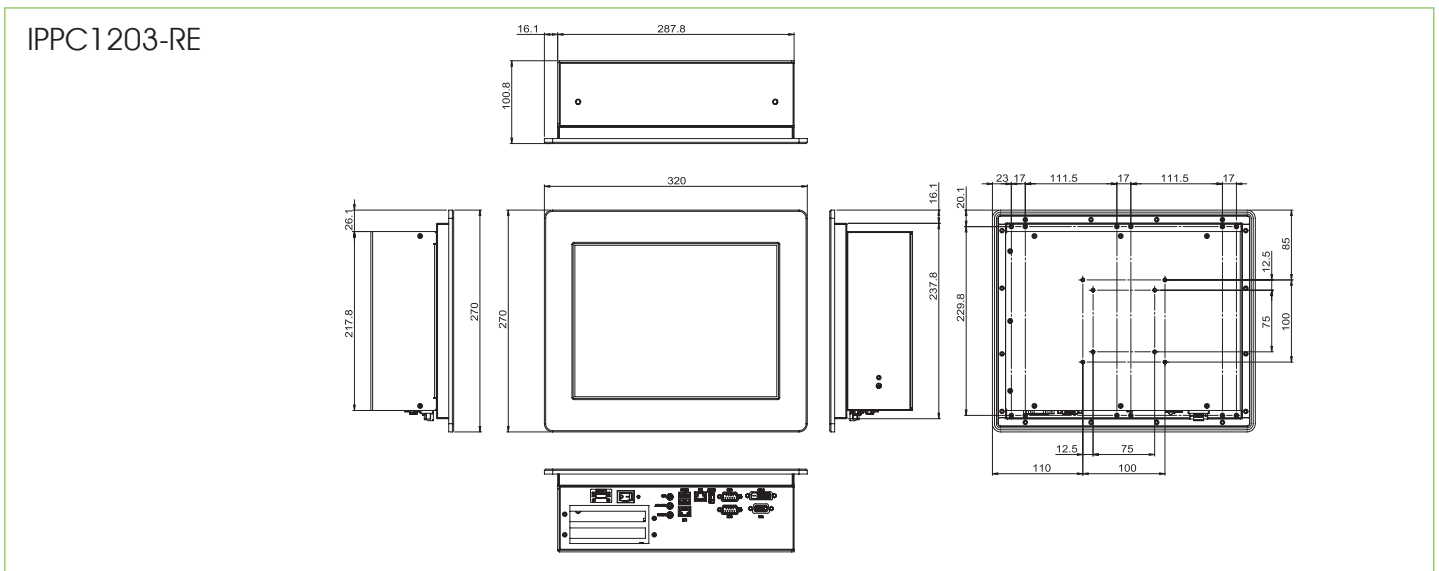
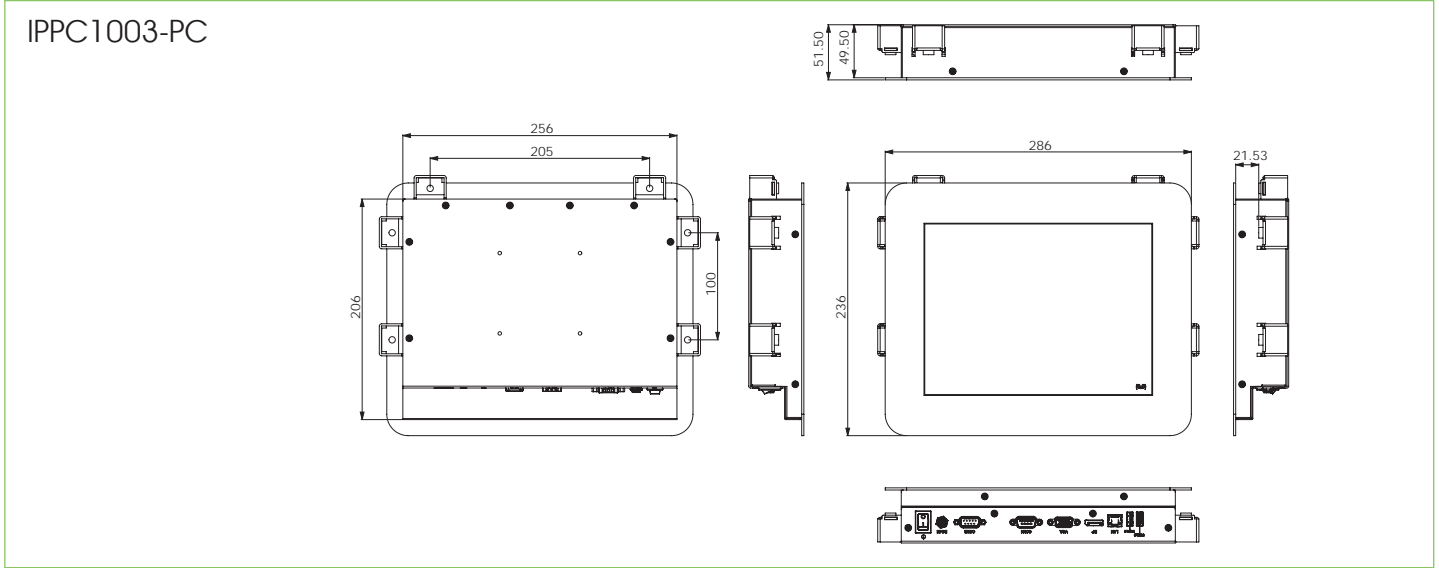
Model No.		IPPC1003-PC	IPPC1203-RE
Display & Touch Screen	Display Size	10.4" TFT-LCD	12.1" TFT-LCD
	Max. Resolution	1024 x 768	
	Luminance (cd/m <sup>2</sup> )	350	
	Contrast	700:1	800:1
	Max. Color	16.7M	
	View Angle (H°/V°)	150/150	170/170
	Backlight Lifetime(hrs)	30,000	
	Touch Type	Projected capacitive	Resistive
	Touch Interface	USB	USB
	Light Transmission (%)	85	79
	Point of touch	Up to 2	1
System	Processor	Intel® Atom® Processor E3815 1.46GHz	Intel® Celeron® Processor J1900 2.42GHz
	Memory	1x DDR3L SO-DIMM, up to 4GB, default 2GB	2x DDR3L SO-DIMM, up to 8GB, default 4GB
	Thermal Design	Fanless	
	Membrane Control	None	
	Built-in Speaker/MIC	None	
I/O Interface	USB 3.0	1	
	USB 2.0	1	2 at rear side
	RS-232/422/485 Selectable in BIOS	1	
	RS-232	1	
	LAN	1x GbE	2x GbE
	Additional Graphics	DP and VGA	1x VGA and DVI-D
	Audio	None	MIC in/ Line in/Line out phone jack
	Digital I/O	None	
	Power Connector	Power jack	Terminal block (Jack type option)
	Power Button	Rock switch	
Mechanical	Dimensions (mm)	286 x 236 x 51.5	320 x 270 x 101
	Net Weight (kg)	2.2	7.5
Expansion	Internal Expansion Bus	1x Mini PCI-E(x1) [full/half-size] 2x Mini PCI-E(x1) [half-size]	1x Mini PCI-E half size 1x Mini PCI-E full/half size, mSATA support
	Expansion Slot	None	1x PCI-E (x1) and 1x PCI
	Wireless	Optional	
Storage Space	HDD	1x 2.5" SATA	1x 2.5" SATA HDD, default 2.5" 64G MLC SSD
	Removable	None	
Power	Power Input Range	12V DC	12V/24V DC input
Construction	Chassis Material	SGCC with aluminum heat-sink, Black	SGCC
	Color (Front/Back)	Black / Black	
	IP Rating	IP65 rated front bezel	Front IP65/Back IP30
	Mounting	Panel mount and VESA 75x75mm	VESA 75x75 / 100x100, panel mounting
Environmental	Operating Temperature	-20°C ~ 50°C	0°C ~ 50°C (with SSD) 0°C ~ 40°C (with HDD)
	Storage Temperature	-30°C ~ 80°C	-20°C~60°C
	Storage Humidity	10%~90% (non-condensing)	10%~90% (non-condensing) at 40°C
	Certification	CE/FCC Class-B and LVD	CE/FCC Class-B and LVD/CB/CCC
	Supported Operating Systems	Windows 8 32/64-bit, Windows 7 Pro for Embedded 64-bit, WES7 64-bit	Windows 7 Professional/WES 7and 8/Windows 8.1/ Windows 10 Linux Kernel 3.X



## Specifications

Model No.		IPPC1503-RE	IPPC1703-RE	IPPC1903-RE
Display & Touch Screen	Display Size	15" TFT-LCD	17" TFT-LCD	19" TFT-LCD
	Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024
	Luminance (cd/m <sup>2</sup> )	420	250	350
	Contrast	800:1	1000 : 1	1000:1
	Max. Color	16.2M	16.7M	16.7M
	View Angle (H°/V°)	160/160	178/170	170/160
	Backlight Lifetime(hrs)	30,000	50,000	50,000
	Touch Type	Resistive		
	Touch Interface	USB		
	Light Transmission (%)	79	80	80
	Point of touch	1		
System	Processor	Intel® Celeron® Processor J1900 2.42GHz		
	Memory	2x DDR3L SO-DIMM, up to 8GB, default 4GB		
	Thermal Design	Fanless		
	Membrane Control	None		
	Built-in Speaker/MIC	None		
I/O Interface	USB 3.0	1		
	USB 2.0	2x at rear and 1x at front side with cover		
	RS-232/422/485 Selectable in BIOS	1		
	RS-232	1		
	LAN	2x GbE		
	Additional Graphics	1x VGA and DVI-D		
	Audio	MIC in/ Line in/Line out phone jack		
	Digital I/O	None		
	Power Connector	Terminal block (Jack type option)		
	Power Button	Rock switch		
Mechanical	Dimensions (mm)	410 x 335 x 105	442 x 377 x 102.5	480 x 415 x 106.5
	Net Weight (kg)	8.7	9.7	10.97
Expansion	Internal Expansion Bus	1x Mini PCI-E half size 1x Mini PCI-E full/half size, mSATA supports		
	Expansion Slot	1x PCI-E (x1) and 1x PCI		
	Wireless	Optional		
Storage Space	HDD	1x 2.5" SATA HDD, default 2.5" 64G MLC SSD		
	Removable	None		
Power	Power Input Range	12V/24V DC input		
Construction	Chassis Material	SGCC		
	Color (Front/Back)	Black / Black		
	IP Rating	Front IP65/Back IP30		
	Mounting	VESA 75x75 / 100x100, panel mounting		
Environmental	Operating Temperature	0°C ~ 50°C (with SSD) 0°C ~ 40°C (with HDD)		
	Storage Temperature	-20°C~60°C		
	Storage Humidity	10%~90% (non-condensing) at 40°C		
	Certification	CE / FCC Class-B and LVD		
	Supported Operating Systems	Windows 7 Professional/ WES 7 and 8/ Windows 8.1/ Windows 10 Linux Kernel 3.X		

## Dimensions

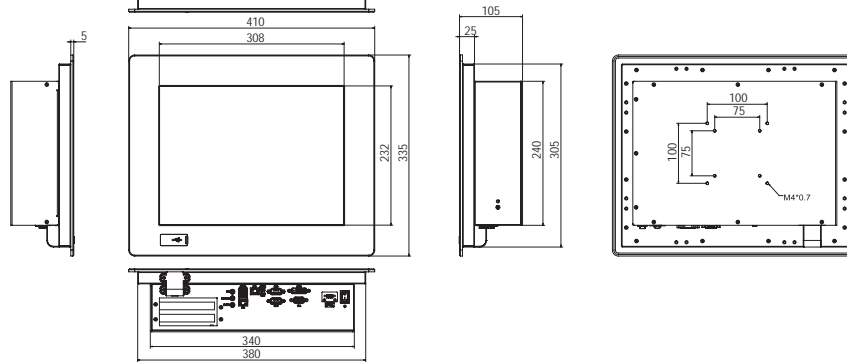


## Ordering Information

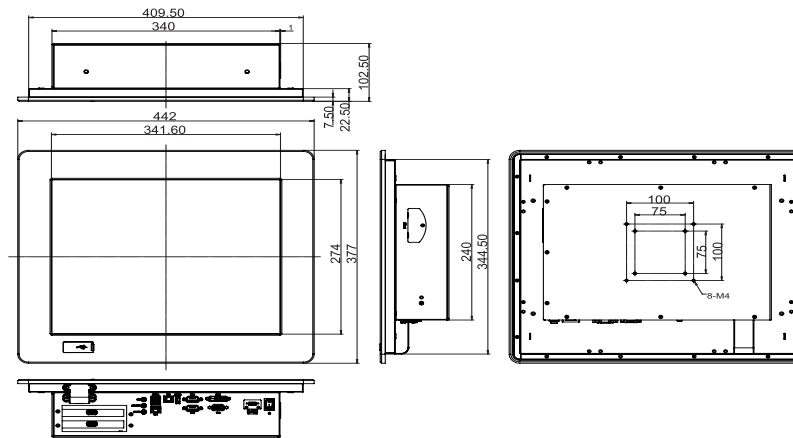
IPPC1003-PC	10.4" Industrial Panel PC with IB898-I15D1, Intel® Atom® Processor E3815 1.46GHz, 2GB DDR3L SO-DIMM, 64G SSD, projected capacitive touch, 60W power adaptor
IPPC1203-RE	12.1" Industrial Panel PC with MI805F-DPPC, Intel® Celeron® Processor J1900 2.42GHz, 4GB RAM, 64GB MLC SSD, PCI-E (x1) and PCI riser card, resistive touch screen, 12V or 24V DC power input, with power adaptor

## Dimensions

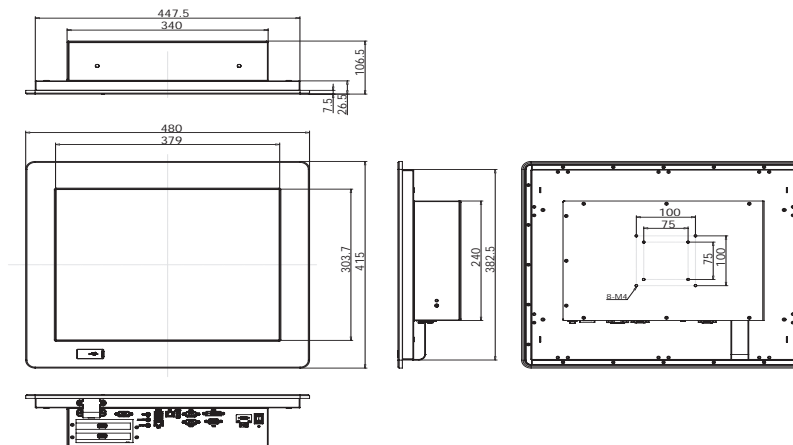
IPPC1503-RE



IPPC1703-RE



IPPC1903-RE



## Ordering Information

IPPC1503-RE	15" Industrial Panel PC with MI805F-DPPC, Intel® Celeron® Processor J1900 2.42GHz, 4GB RAM, 64GB MLC SSD, PCI-E (x1) and PCI riser card, resistive touch screen, 12V or 24V DC power input, with power adaptor
IPPC1703-RE	17" Industrial Panel PC with MI805F-DPPC, Intel® Celeron® Processor J1900 2.0GHz, 4GB DDR3L SO-DIMM, 64G SSD, resistive touch screen, 12V or 24V power input, with power adapter
IPPC1903-RE	19.1" Industrial Panel PC with MI805F-DPPC, Intel® Celeron® Processor J1900 2.42GHz, 4GB RAM, 64GB MLC SSD, PCI-E (x1) and PCI riser card, resistive touch screen, 12V or 24V DC power input, with power adaptor

# IPPC1503-REN/IPPC1903-REN

## Heavy-duty Industrial Panel PC

Low-power All-in-One Panel PC with Intel® Celeron J1900

IPPC Series 15" 19"



### I/O View



IPPC1503-REN



IPPC1903-REN

### Features

- Cost effective
- Low power consumption
- IP65 front-panel waterproof protection



- Fanless design



- Front-side access USB 2.0 port



- Rich and flexible I/O interface



# IPPC1503-REN/IPPC1903-REN

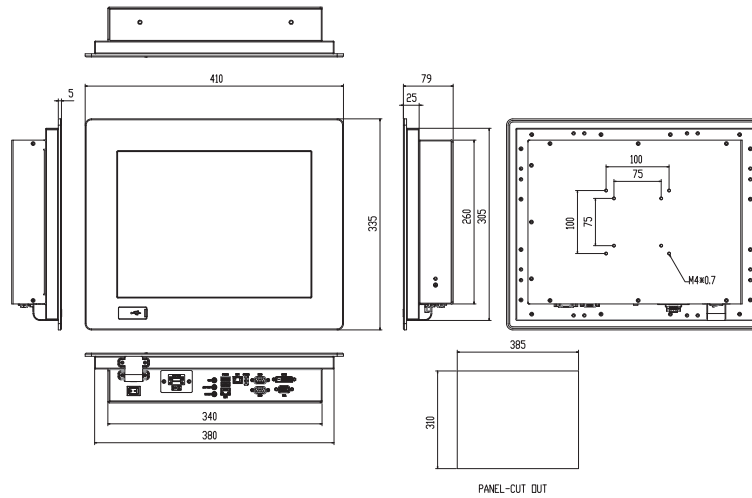
## Specifications

Model No.	IPPC1503-REN	IPPC1903-REN	
Display & Touch Screen	Display Size	15" TFT-LCD	19" TFT-LCD
	Max. Resolution	1024 x 768	1280 x 1024
	Luminance (cd/m2)	420	350
	Contrast	800:1	1000:1
	Max. Color	16.2M	16.7M
	View Angle (H/V)	160/160	170/160
	Backlight Lifetime(hrs)	30,000	50,000
	Touch Type	Resistive	
	Touch Interface	USB	
	Light Transmission (%)	79	80
	Point of touch	1	
	System	Processor	Intel® Celeron Processor J1900 2.42GHz
Memory		2x DDR3L SO-DIMM, up to 8GB, default 4GB	
Thermal Design		Fanless	
Membrane Control		None	
Built-in Speaker/MIC		None	
I/O Interface	USB 3.0	1	
	USB 2.0	2x at rear and 1x at front side with cover	
	RS-232/422/485 Selectable in BIOS	1	
	RS-232	1	
	LAN	2x GbE	
	Additional Graphics	1x VGA and DVI-D	
	Audio	MIC in/ Line in/Line out phone jack	
	Digital I/O	None	
	Power Connector	Terminal block (Jack type as option)	
	Power Button	Rock switch	
Mechanical	Dimensions (mm)	410 x 335 x 79	480 x 415 x 80.5
	Net Weight (kg)	7	10
Expansion	Internal Expansion Bus	1x Mini PCI-E half size 1x Mini PCI-E full/half size, mSATA support	
	Expansion Slot	None	
	Wireless	Optional	
Storage Space	HDD	1x 2.5" SATA HDD, default 2.5" 64G MLC SSD	
	Removable	None	
Power	Power Input Range	12V/24V DC Input	
Construction	Chassis Material	SGCC	
	Color (Front/Back)	Black/Black	
	IP Rating	Front IP65/Back IP30	
	Mounting	VESA 75x75/100x100, panel mounting	
Environmental	Operating Temperature	0°C ~ 50°C (with SSD) 0°C ~ 40°C (with HDD)	
	Storage Temperature	-20°C~60°C	
	Storage Humidity	10%~90% (non-condensing) at 40°C	
	Certification	CE / FCC Class-B and LVD	
	Supported Operating Systems	Windows 7 Professional/ WES 7and 8/ Windows 8.1/ Windows 10 Linux Kernel 3.X	

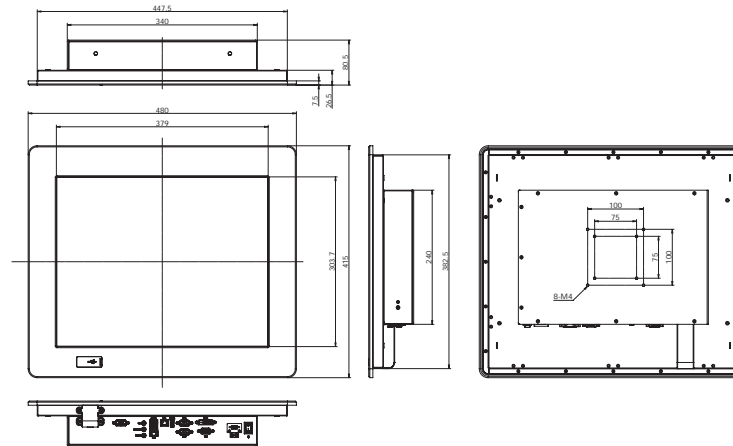
# IPPC1503-REN/IPPC1903-REN

## Dimensions

IPPC1503-REN



IPPC1903-REN



## Ordering Information

IPPC1503-REN	15" Industrial Panel PC with MI805F-DPPC, Intel® Celeron® Processor J1900 2.42 GHz, 4GB RAM, 64GB MLC SSD, resistive touch screen, 12V or 24V DC power input, w/o power adaptor
IPPC1903-REN	19.1" Industrial Panel PC with MI805F-DPPC, Intel® Celeron® Processor J1900 2.42 GHz, 4GB RAM, 64GB MLC SSD, resistive touch screen, 12V or 24V DC power input, w/o power adaptor

**BYTEM Series**   



**I/O View**

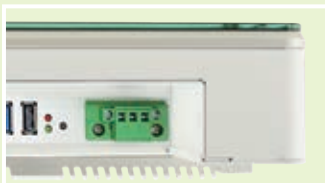


**Features**

- Supports Intel® Atom® Processor
- Very low power consumption
- Fanless design



- 9V~30V DC wide-range power input  
(for BYTEM-101-PC / BYTEM-121-PC)



- Flat panel design with projected capacitive touch
- IP65 front-panel waterproof protection



- Easily accessible 2.5" HDD storage



- Compact size



# BYTEM-W071-PC / BYTEM-W072-PC / BYTEM-W075 BYTEM-101-PC / BYTEM-121-PC

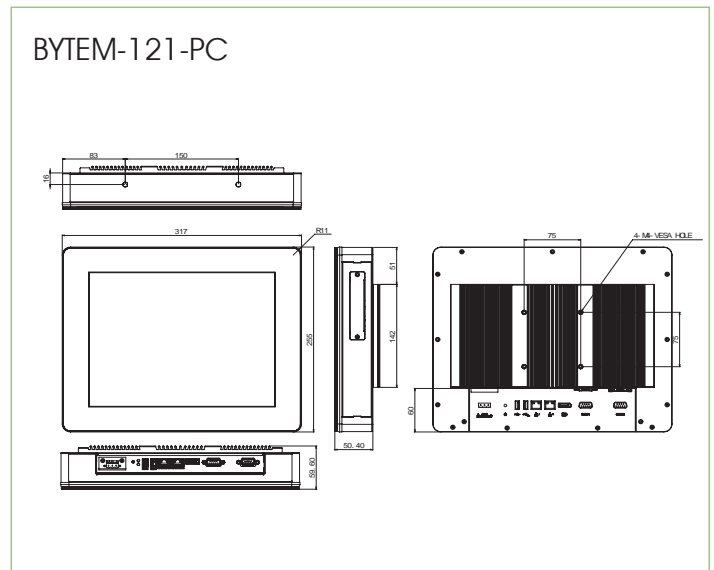
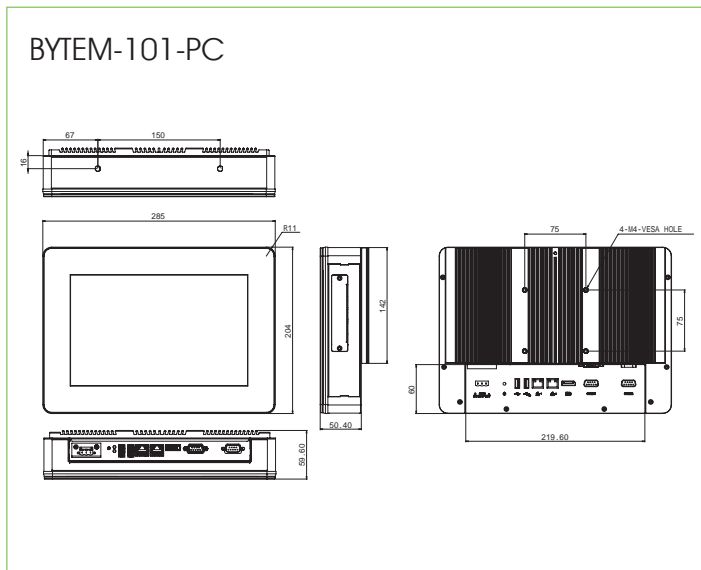
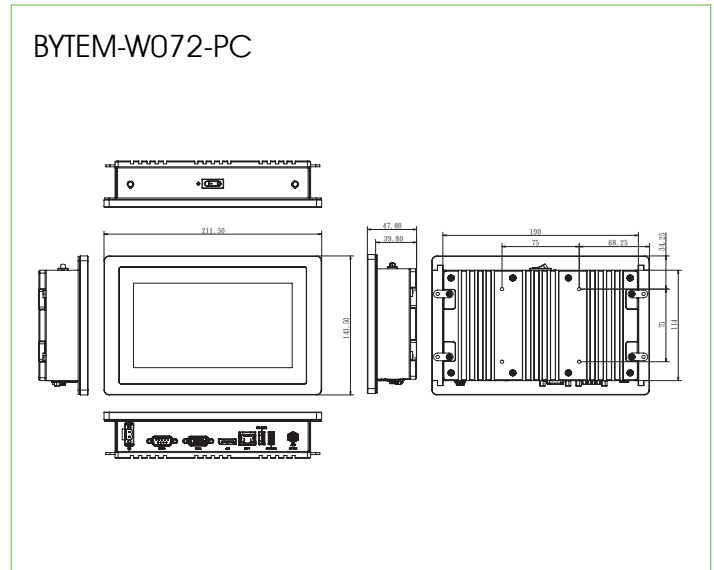
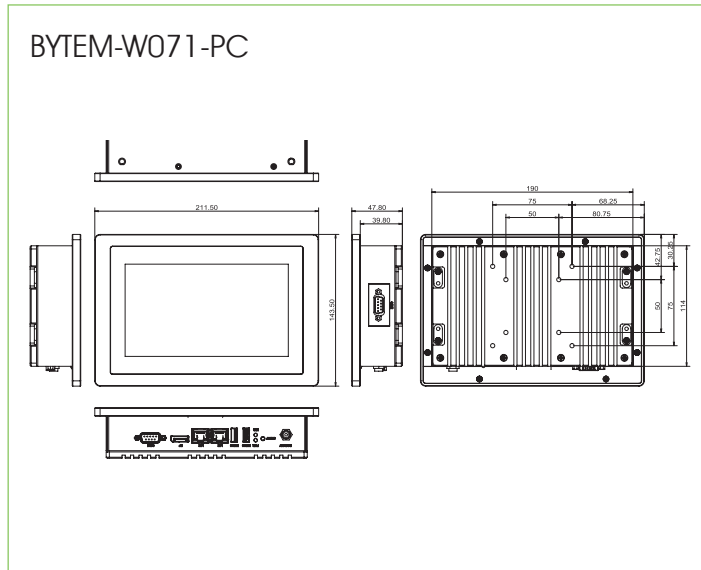
## Specifications

Model No.	BYTEM-W071-PC	BYTEM-W072-PC	BYTEM-W075	BYTEM-101-PC	BYTEM-121-PC
Display & Touch Screen	Display Size	7" TFT-LCD		10.1" TFT-LCD	12.1" TFT-LCD
	Max. Resolution	1024 x 600		1280 x 800	1024 x 768
	Luminance (cd/m <sup>2</sup> )	500		350	
	Contrast	800:1		800:1	
	Max. Color	16.7M		262K	16.7M
	View Angle (H°/V°)	150/150		170/170	160/160
	Backlight Lifetime(hrs)	50000		15000	30000
	Touch Type	Projected capacitive		Projected capacitive	
	Touch Interface	USB		USB	
	Light Transmission (%)	85		85	
Point of touch	10		2		
System	Processor	Intel® Atom® Processor E3815 (Single-Core @ 1.46GHz)	Intel® Atom® Processor E3825 (Dual Cores @ 1.33 GHz)	Intel® Atom® Processor x6425E (Quad Cores @ 1.8 GHz)	Intel® Atom® Processor E3845 (Quad-Core @ 1.91GHz)
	Memory	2x DDR3L SO-DIMM, up to 4GB, default DDR3L 2GB (2GBx1)	1x DDR3L SO-DIMM, up to 4GB, default DDR3L 2GB (Non-ECC)	1x DDR4 SO-DIMM, up to 16GB, default DDR4 4GB (1BECC)	2x DDR3L SO-DIMM, up to 8GB, default DDR3L 4GB (4GBx1)
	Thermal Design	Fanless		Fanless	
	Membrane Control	None		None	
	Built-in Speaker/MIC	None		None	
I/O Interface	USB 3.0	1	1	4	1
	USB 2.0	1	1	0	1
	RS-232/422/485 Selectable in BIOS	1		1	
	RS-232	1		1	
	LAN	2x GbE	1x RJ45 with GbE LAN	2x GbE	2x GbE
	Additional Graphics	DP		HDMI	DP
	Audio	None		None	
	Digital I/O	None		None	
	Power Connector	Power jack		3-pin terminal block	3-pin terminal block
	Power Button	Reset button	1x Power rocker switch	1x power remote switch	Reset button
Mechanical	Dimensions (mm)	211.5 x 143.5 x 52	221.5 x 143.5 x 45.8	211.5 x 143.5 x 52	285 x 204 x 59.6 / 317 x 255 x 59.6
	Net Weight (kg)	1.5		3.3	4.3
Expansion	Internal Expansion Bus	1x mPCI-E(x1) w/ USB signal [half-size] 1x mSATA/mPCI-E(x1) w/ USB signal and mSATA supports [full-size]	1x miniPCI-E [half-size]	1x full-size mPCI-E(x1) w/ USB + PCI-E signal 1x M.2 E-key 2230 1x M.2 B-key 3042	1x mPCI-E(x1) w/ USB signal [half-size] 1x mSATA/mPCI-E(x1) w/ USB signal and mSATA supports [full-size]
	Expansion Slot	None		None	
	Wireless	optional Wi-Fi/BT		optional Wi-Fi/BT	
Storage Space	HDD	1x 2.5" SATA	mSATA, default 64GB mSATA	1x 2.5" SATA	1x 2.5" SATA
	Removable	None		None	
Power	Power Input Range	12V DC input		9~30V DC input	
Construction	Chassis Material	Aluminum front bezel and white steel back cover with aluminum heat-sink	Aluminum front bezel	Aluminum front bezel and white steel back cover with aluminum heat-sink	Aluminum front bezel and white steel back cover with aluminum heat-sink
	Color (Front/Back)	Black / white		Black / white	
	IP Rating	IP65 front bezel		IP65 front bezel	
	Mounting	Panel mount and VESA 50x50, 75x75 mm	Panel mount and VESA 75x75 mm		VESA 75x75 mm
Environmental	Operating Temperature	-10°C ~ 50°C		0°C ~ 40°C (with HDD/CFast) 0°C ~ 50°C (with SSD)	
	Storage Temperature	-30°C~70°C		-20°C~60°C	
	Storage Humidity	10%~90% (non-condensing)			
	Certification	CE/FCC Class-B			
	Supported Operating Systems	Windows 8 32/64-bit, Windows 7 Pro for Embedded 64-bit, WES7 64-bit			



# BYTEM-W071-PC / BYTEM-W072-PC / BYTEM-W075 BYTEM-101-PC / BYTEM-121-PC

## Dimensions



## Ordering Information

BYTEM-W075	7" Flat Panel Design Panel PC with IB837, Intel® Atom® Processor x6425E 1.8GHz, 4GB DDR4 SO-DIMM, 64GB SSD, projected capacitive touch, w/ 60W power adaptor
BYTEM-W071-PC	7" Flat Panel Design Panel PC with IB897, Intel® Atom® Processor E3815 1.46GHz, 2GB DDR3L SO-DIMM, 32G SSD, projected capacitive touch, w/ 60W power adaptor
BYTEM-W072-PC	7" Flat Panel Design Panel PC with IB898, Intel® Atom® Processor E3825 1.33GHz, DDR3L SO-DIMM 2GB, with 64G mSATA, projected capacitive touch, with 12V power adaptor
BYTEM-101-PC	10.1" Flat Panel Design Panel PC with IB897, Intel® Atom® Processor E3845 1.91GHz, 4GB DDR3L SO-DIMM, 64G SSD, projected capacitive touch, w/o power adaptor
BYTEM-121-PC	12.1" Flat Panel Design Panel PC with IB897, Intel® Atom® Processor E3845 1.91GHz, 4GB DDR3L SO-DIMM, 64G SSD, projected capacitive touch, w/o power adaptor
Power adaptor (optional)	AC 90V~240V input, 12V DC output 84W power adaptor, IBASE P/N: A005PS084W0050000P

# BYTEM200-121 BYTEM200-W156

**Compact Panel PC**  
All-in-One Fanless Industrial Compact Panel PC  
with 11th Gen Intel® Core™ i5/i3 processors

BYTEM Series 12.1" 15.6"



## I/O View



BYTEM200-121

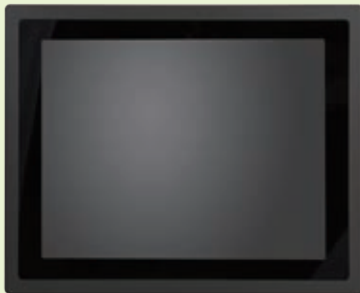


BYTEM200-W156



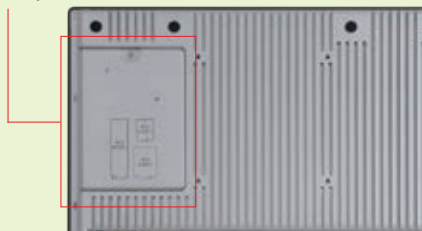
## Features

- 11th Gen Intel® Core™ i5/i3 processors
- 12.1"/15.6" projected capacitive touch screen
- True flat front bezel touch screen with IP66 front panel

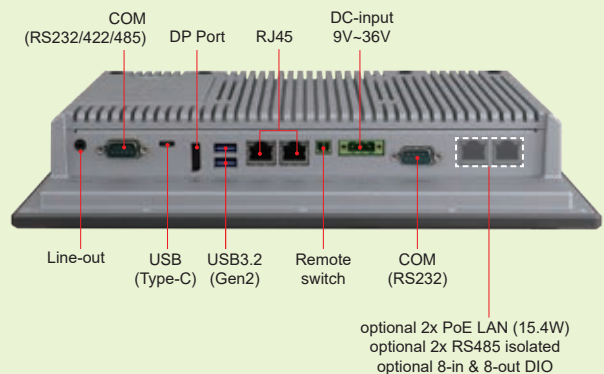


### Quick Opening for Accessible Expansion Slots

- 1x M.2 2230 E-Key socket for WLAN & BT
- 1x M.2 3042/52 B-Key socket for WWAN
- 1x M.2 2280 M-Key socket for NVMe SSD



- Modularized expansion I/O design
- 1x USB Type-C single cable with PD/DP/USB
- DC 9V~36V wide-range power input

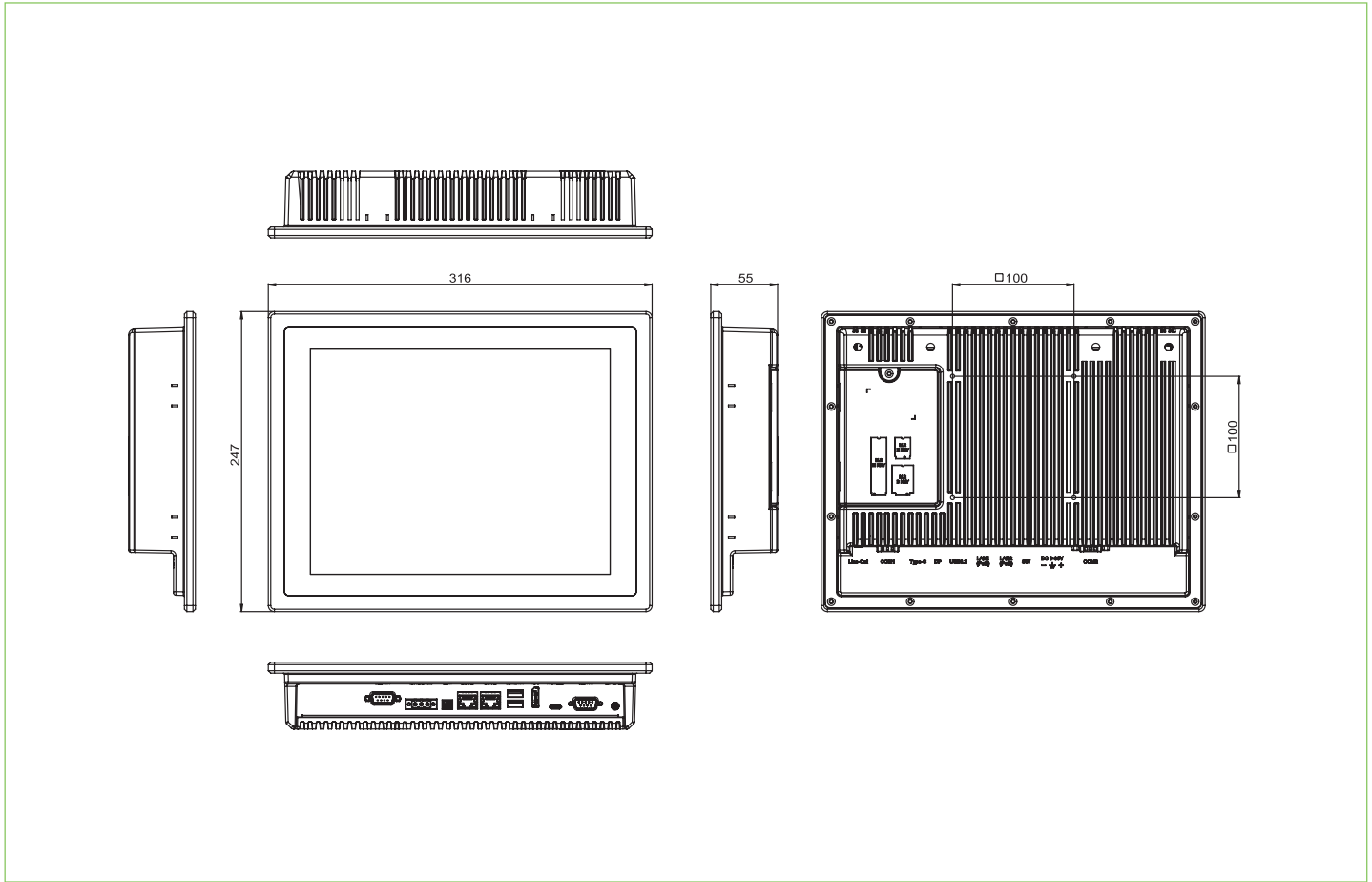


# BYTEM200-121 / BYTEM200-W156

## Specifications

Model No.		BYTEM200-121	BYTEM200-W156
Display & Touch Screen	Display Size	12.1" TFT-LCD	15.6" TFT-LCD
	Max. Resolution	1024 x 768	1920 x 1080
	Luminance (cd/m <sup>2</sup> )	500	
	Contrast	1000:1	
	Max. Color	16.2M	16.7M
	View Angle (H°/V°)	176/176	178/178
	Backlight Lifetime(hrs)	30,000	50,000
	Touch Type	Projected capacitive	
	Touch Interface	USB	
	Light Transmission (%)	86	
	Point of touch	10	
System	Processor	Intel® Core™ i5-1145G7E (1.5 GHz, 8MB cache) Intel® Core™ i3-1115G4E (2.2 GHz, 6MB cache)	
	Memory	1x DDR4 SO-DIMM, up to 32GB	
	Thermal Design	Fanless	
	Membrane Control	None	
	Built-in Speaker/MIC	None	
I/O Interface	USB 3.0	2	
	USB 2.0	0	
	RS-232/422/485 Selectable in BIOS	1	
	RS-232	1	
	LAN	2x GbE	
	Additional Graphics	DisplayPort	
	Audio	1x Line-out / MIC-in	
	Digital I/O	8-in/8-out GPIO (optional)	
	Power Connector	3-pin terminal block	
	Power Button	2-pin terminal block (remote)	
Mechanical	Dimensions (mm)	316 x 247 x 55	TBD
	Net Weight (kg)	TBD	TBD
Expansion	Internal Expansion Bus	1x M.2 E-key 2230 1x M.2 B-key 3042/52 1x M.2 M-key 2280	
	Expansion Slot	None	
	Wireless	Optional Wi-Fi/BT	
Storage Space	HDD	1x M.2 M-key 2280 (NVMe + SATA)	
	Removable	None	
Power	Power Input Range	9V~36V DC input	
Construction	Chassis Material	Aluminum	
	Color (Front/Back)	Gray / Silver	
	IP Rating	IP66 front bezel	
	Mounting	Panel mount VESA 100 x 100mm	
Environmental	Operating Temperature	-20°C ~ 50°C	
	Storage Temperature	-30°C~70°C	
	Storage Humidity	10%~90% (non-condensing)	
	Certification	CE (EN 62368 / EN55032 / EN55035) FCC Class B	
	Supported Operating Systems	Windows 10 (64-bits) Linux Ubuntu 16.04+	

## Dimensions



## Ordering Information

BYTEM200-121	12.1" Industrial Panel PC with MBP-200, 11th Gen Intel® Core™ i5-1145G7E Processor, 8GB DDR4 SO-DIMM, 128GB NVMe SSD, projected capacitive touch, w/o power adaptor
BYTEM200-W156	15.6" Industrial Panel PC with MBP-200, 11th Gen Intel® Core™ i5-1145G7E Processor, 8GB DDR4 SO-DIMM, 128GB NVMe SSD, projected capacitive touch, w/o power adaptor

# IDOOH-210-IR

## Outdoor Panel PC 21.5" Outdoor Sunlight Readable Panel PC with Intel® Atom® Processor E3845

### Outdoor Series 21.5"



### Specifications

Display & Touch Screen	Display Size	21.5" TFT-LCD
	Max. Resolution	1920 x 1080
	Luminance (cd/m <sup>2</sup> )	Up to 1200nits, default @75%
	Contrast	1000:1
	Max. Color	16.7M
	View Angle (H°/V°)	140/120
	Backlight Lifetime(hrs)	50000
	Touch Type	IR touch
	Touch Interface	USB
	Light Transmission (%)	88
Point of touch	1	
Expansion	Internal Expansion Bus	1x Mini PCI-E(x1) w/ USB signal [half-size] 1x mSATA/Mini PCI-E(x1) w/ USB signal and mSATA Supported [full-size]
	Expansion Slot	None
	Wireless	Optional Wi-Fi/BT
	USB 3.0	1
I/O Interface	USB 2.0	1
	RS-232/422/485 Selectable in BIOS	1
	RS-232	0
	LAN	2x GbE
	Additional Graphics	DP
	Audio	None
	Digital I/O	None
	Power Connector	AC inlet
	Power Button	Reset button
	Mechanical	Dimensions (mm)
Net Weight (kg)		7.5
System	Processor	Intel® Atom® Processor E3845 (Quad-Core @ 1.91GHz)
	Memory	2x DDR3L SO-DIMM, up to 8GB, default DDR3L 4GB (4GBx1)
	Thermal Design	Fan
	Membrane Control	None
	Built-in Speaker/MIC	None
	HDD	1x 2.5" SATA
Storage Space	Removable	None
	Power	Power Input Range 90V ~ 240V AC

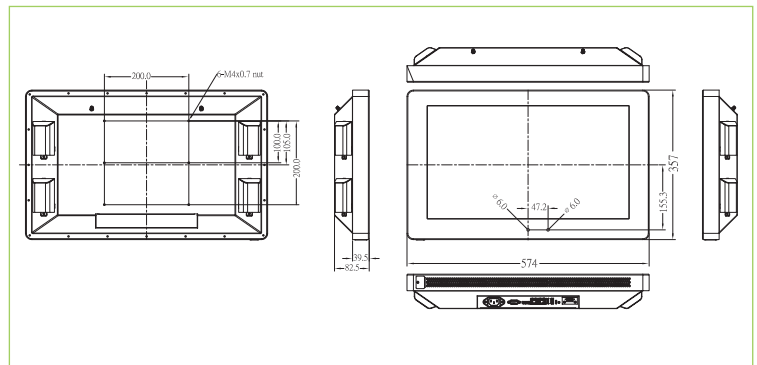
### Features

- Sunlight readable
- Vandal-proof IK06 glass protection
- Wireless support
- IP65 front-panel waterproof protection and IP33-rated chassis
- Automatic panel brightness, air flow speed and system temperature balance system



Construction	Chassis Material	Aluminum front bezel, black Black SGCC + Aluminum chassis
	Color (Front/Back)	Black/Black
	IP Rating	IP65 front-panel waterproof protection
Environmental	Mounting	open-frame rack mounting VESA 200x200 and 200x100 mm
	Operating Temperature	Low Temperature: -40°C with installed heater inside High Temperature: with 1120 W/m <sup>2</sup> solar energy: 44 °C
	Storage Temperature	-20°C~60°C
	Storage Humidity	5%~90% @ 50°C, (non-condensing)
	Certification	CE/FCC Class-B
	Supported Operating Systems	Windows 8 32-bit/64-bit, Windows 7 Pro for Embedded 64-bit, WES7 64-bit

### Dimensions



### Ordering Information

IDOOH-210-IR	21.5" Outdoor Panel PC with IB897, Intel® Atom® Processor E3845 1.91GHz, 4GB DDR3L SO-DIMM, 64G SSD, IR touch
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# INOSP-152-RE / INOSP-192-RE

**Stainless Steel Panel PC**  
Fanless Stainless Steel Panel PC  
with Intel® Atom® Processor E3845

INOSP Series 15" 19"



## I/O View



INOSP-152-RE-F/INOSP-192-RE-F  
(Full Function)

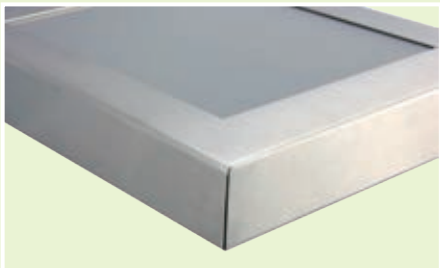


INOSP-152-RE/ INOSP-192-RE (Standard)

## Features

Special model-By request, MOQ 20pcs

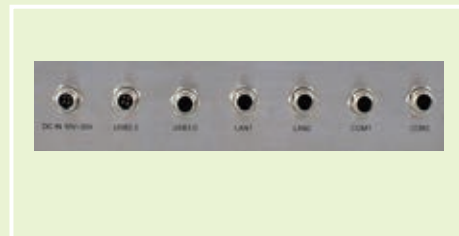
- Fanless design
- Resistive/ Projected capacitive (19" model) touch
- Durable stainless steel housing
- Low power consumption processor



- Wide-range 10V~30V DC power input
- USB 3.0 (optional)



- M12 I/O ports



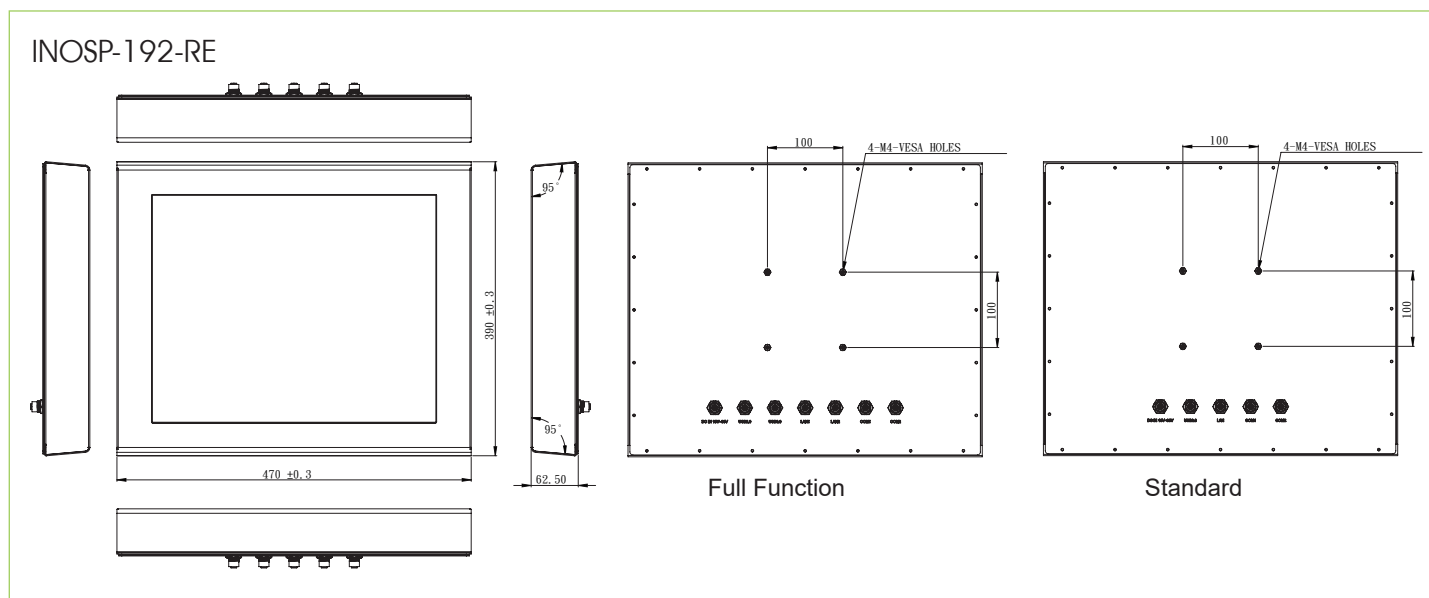
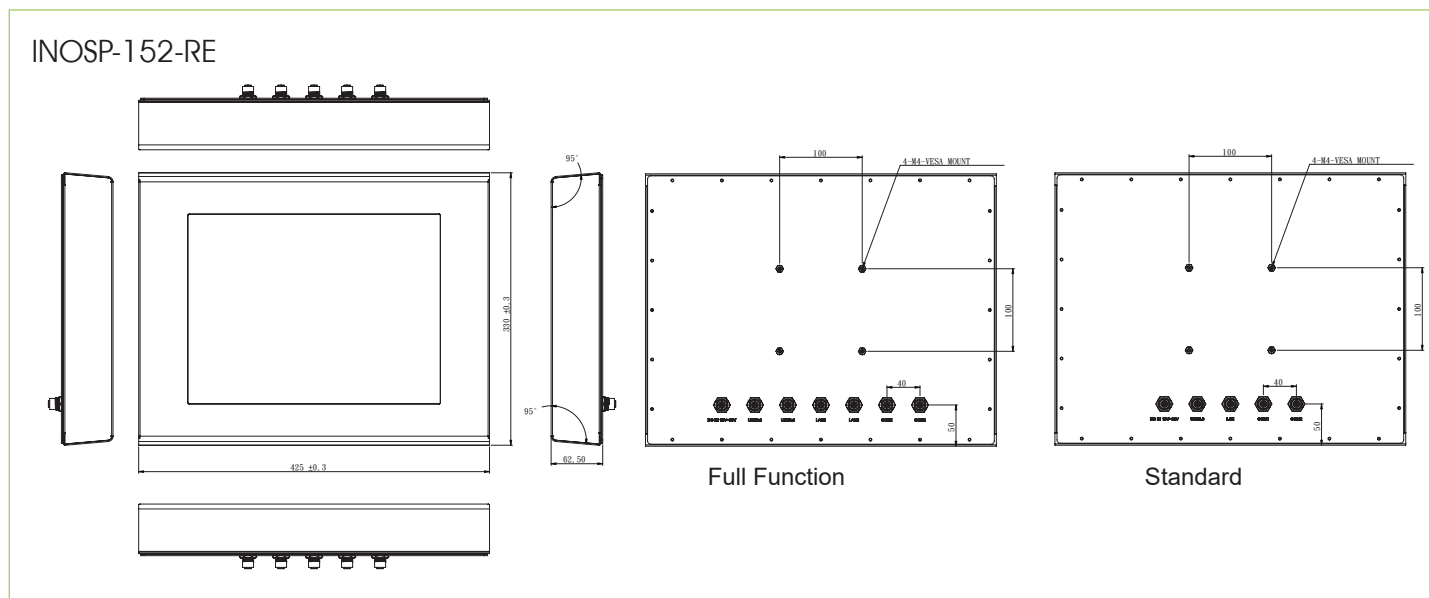
# INOSP-152-RE / INOSP-192-RE

## Specifications

Model No.		INOSP-152-RE(-F)	INOSP-192-RE(-F)
Display & Touch Screen	Display Size	15" TFT-LCD	19" TFT-LCD
	Max. Resolution	1024 x 768	1280 x 1024
	Luminance (cd/m <sup>2</sup> )	500	350
	Contrast	800 : 1	1000 : 1
	Max. Color	16.2M	16.7M
	View Angle (H°/V°)	160/160	170/160
	Backlight Lifetime(hrs)	50,000	
	Touch Type	Resistive	
	Touch Interface	USB	
	Light Transmission (%)	80	
	Point of touch	1	
System	Processor	Intel® Atom® Processor E3845 1.91GHz	
	Memory	2x DDR3L SO-DIMM, up to 8GB, default 4GB	
	Thermal Design	Fanless	
	Membrane Control	None	
	Built-in Speaker/MIC	None	
I/O Interface	USB 3.0	optional (M12)	
	USB 2.0	1 (M12)	
	RS-232/422/485 Selectable in BIOS	1 (M12)	
	RS-232	1 (M12)	
	LAN	1x GbE (M12) Second LAN (option)	
	Additional Graphics	None	
	Audio	None	
	Digital I/O	None	
	Power Connector	M12 connector	
	Power Button	None	
Mechanical	Dimensions (mm)	425 x 330 x 62.5	470 x 390 x 62.5
	Net Weight (kg)	13.5	17
Expansion	Internal Expansion Bus	1x Mini PCI-E(x1) [full/half-size] 1x Mini PCI-E(x1) [half-size]	
	Expansion Slot	None	
	Wireless	None	
Storage Space	HDD	1x 2.5" SATA	
	Removable	None	
Power	Power Input Range	10V~30V DC	
Construction	Chassis Material	304 stainless steel / 316 stainless steel (option)	
	Color (Front/Back)	Silver / Silver	
	IP Rating	IP65 / IP69K	
	Mounting	VESA 75x75mm and 100x100mm	
Environmental	Operating Temperature	0°C ~ 50°C	
	Storage Temperature	-20°C ~ 60°C	
	Storage Humidity	10%~90% (non-condensing)	
	Certification	CE/FCC Class-B and LVD	
	Supported Operating Systems	Windows 10/ Windows 8 32-bit/64-bit, Windows 7 Pro for Embedded 64-bit, WES7 64-bit	

# INOSP-152-RE / INOSP-192-RE

## Dimensions



## Ordering Information

INOSP-152-RE	15" Stainless Steel Panel PC with IB897-I45P, Intel® Atom® Processor E3845 1.91GHz, 4GB DDR3L SO-DIMM, 64G SSD, resistive touch
INOSP-192-RE	19" Stainless Steel Panel PC with IB897-I45P, Intel® Atom® Processor E3845 1.91GHz, 4GB DDR3L SO-DIMM, 64G SSD, resistive touch





### Edge I/O

- M23 connector AC input
- 4-pin M12 connector DC output (4-pin definition: +/-/G/earth ground)

### Power

Power Supply      90V ~ 240V AC input  
                          24V DC output @ 3.75mA

### Construction

Chassis              304 stainless steel / 316 stainless steel for optional  
 Mounting            Wall mount  
 Protection Class    Full IP56 protection

### Environmental

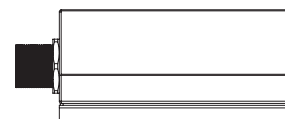
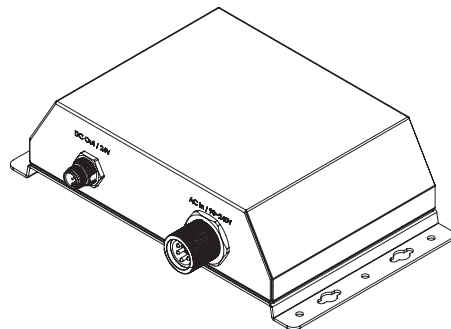
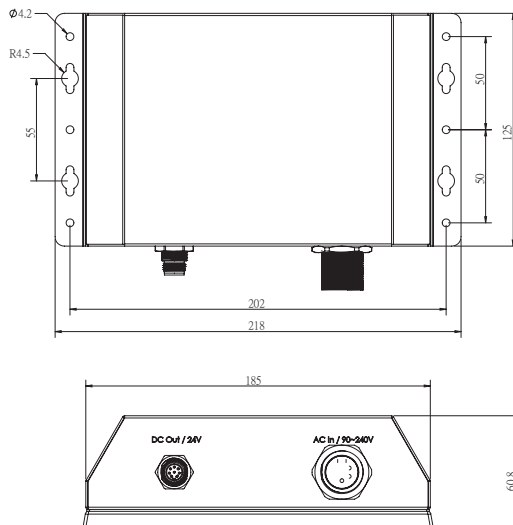
Temperature        Operating: 0°C~ 50°C (Max. 80W at 50°C)  
                          Storage: -40°C~85°C  
 Humidity            10%~90% (non-condensing)  
 Regulation         RoHS  
 Certification        CE/FCC Class-A

### Accessories

- Wall mount kits
- 1x power cable M23/3P L=5m
- 1x power cable M12 4P L=2m
- Power connector for U.S. regulation (optional)
- Power connector for EU regulation (optional)
- Power connector for Australian regulatory (optional)

### Dimensions

SSPA-24



# UMT-7212

## Medical Panel PC

21.5" Medical Panel PC  
with 6th Gen Intel® Core™ i5-6300U Processor

Medical Series

21.5"



### I/O View



### Features

- EN60601-1 Certified
- Projected capacitive touch screen



- Capacitive control keypad for power / brightness / volume



- PCI-E (x4) expansion card support



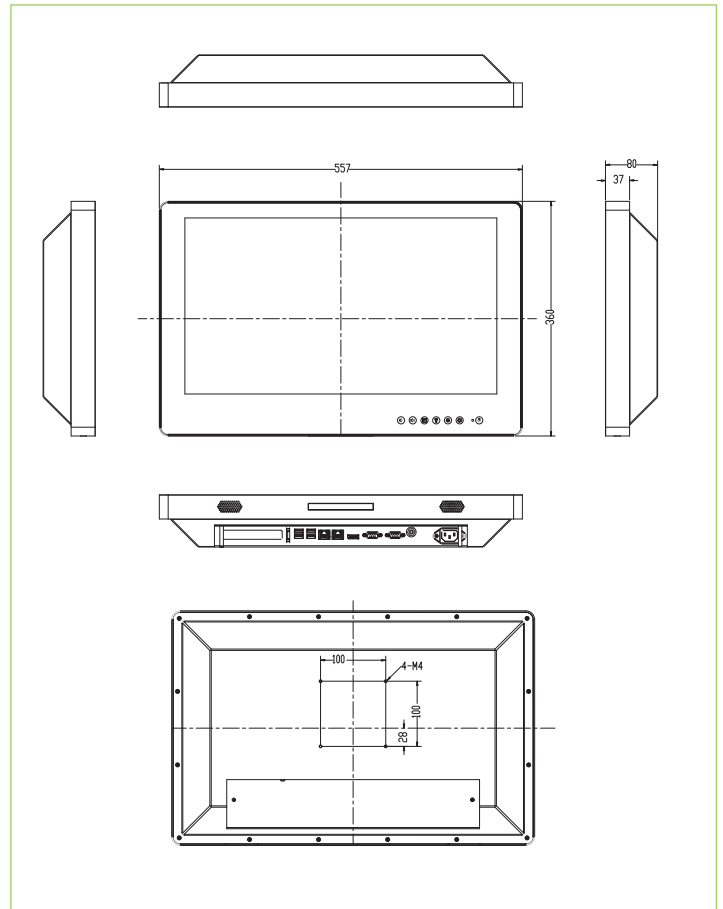
- IP65 front-panel waterproof protection



## Specifications

Display & Touch Screen	Display Size	21.5" TFT-LCD
	Max. Resolution	1920 x 1080
	Luminance (cd/m <sup>2</sup> )	300
	Contrast	1000:1
	Max. Color	16.7M
	View Angle (H/V)	178° /178°
	Backlight Lifetime(hrs)	30000
	Touch Type	Projected capacitive
	Touch Interface	USB
	Light Transmission (%)	87
System	Point of touch	Up to 10
	Processor	Intel® Core™ i5-6300U 2.4GHz
	Memory	2x DDR4-2133 SO-DIMM, default 4GB (1x 4GB)
	Thermal Design	Fanless
	Membrane Control	Capacitive keys for Power on-off/Brightness up/down/ Volume up/down/Touch on-off/ Reading light on-off
I/O Interface	Built-in Speaker/MIC	IP54 speaker
	USB 3.0	2
	USB 2.0	2
	RS-232/422/485 Selectable in BIOS	1 (4KV isolated)
	RS-232	1 (4KV isolated)
	LAN	2x GbE (4KV isolated)
	Additional Graphics	DP
	Audio	None
	Digital I/O	None
	Power Connector	IEC60320 C14
Mechanical	Power Button	Capacitive-type power button with LED indicator in front bezel
	Dimensions (mm)	557 x 360 x 80
Expansion	Net Weight (kg)	6.7
	Internal Expansion Bus	1x M.2 Type 2230 socket 1x Mini PCI-E full-size socket
Storage Space	Expansion Slot	1x PCI-E (x4)
	Wireless	Optional
	HDD	1x 2.5" SATA, default 64G SSD 1x M.2 SSD
Power	Removable	None
	Power Input Range	90V AC-240V AC optional internal backup battery for 15-min operation
Construction	Chassis Material	Aluminum + Sheet metal with white powder coating
	Color (Front/Back)	Medical White
	IP Rating	IP65 rated front bezel / IP54 (except I/O side)
	Mounting	VESA 100mm x 100mm
Environmental	Operating Temperature	0°C ~40°C
	Storage Temperature	-20°C ~ 60°C
	Storage Humidity	10%~ 95% (non-condensing)
	Certification	CE/FCC Class-B and LVD EN 60601-1: 2006 + A1: 2013(IEC 60601-1: 2012 reprint) EN 60601-1-2:2015 (IEC 60601-1-2:2014)
	Supported Operating Systems	Windows 10 64-bit

## Dimensions



## Ordering Information

UMT-7212	21.5" Medical Panel PC with MBM-7001, 6th Gen Intel® Core™ i5-6300U processor, 4GB DDR4 SO-DIMM, 64G SSD, projected capacitive touch, 90V~240V AC power input
optional battery	3S1P backup battery for 15-minute operation
optional LED light	IDM101 LED reading light
optional Wi-Fi set	optional Intel® M.2 7265 Wi-Fi module with external antenna

# BYARM-181-PC

**ARM-based Panel PC**  
ARM-Based All-in-One Panel PC  
with NXP i.MX6 Cortex Processor

BYARM Series 18.5"



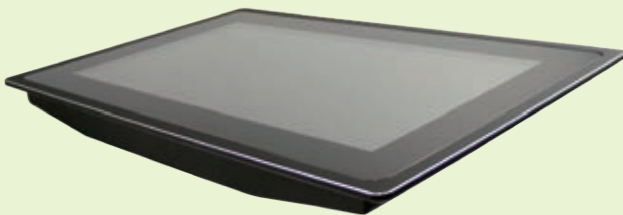
## I/O View



BYARM-181-PC

## Features

- NXP i.MX6 high performance processor
- Projected capacitive touch screen, flat bezel design



- 12V DC and PoE support
- Programmable LED light bar (rear)
- External SD card slot for storage expansion
- Supports Android 4.3x

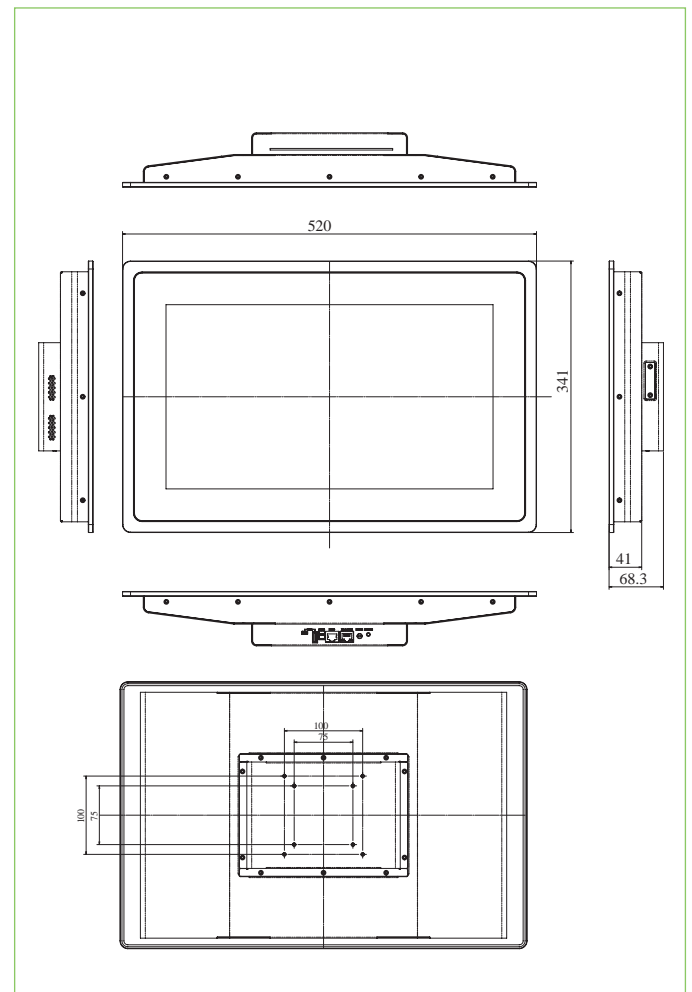


# BYARM-181-PC

## Specifications

Display & Touch Screen	Display Size	18.5" TFT-LCD
	Max. Resolution	1366 x 768
	Luminance (cd/m2)	300
	Contrast	1000:1
	Max. Color	16.7M
	View Angle (H°/V°)	170/160
	Backlight Lifetime(hrs)	50000
	Touch Type	Projected capacitive
	Touch Interface	USB
	Light Transmission (%)	85
	Point of touch	2
System	Processor	NXP i.MX6 Cortex A9 Solo 1 Core @ 1GHz
	Memory	1GB DDR3 on board
	Thermal Design	Fanless
	Membrane Control	None
	Built-in Speaker/MIC	2x speaker
I/O Interface	USB 3.0	0
	USB 2.0	1x USB (USB Host, A-Type) (Flag type) 1x USB OTG (mini AB type)
	RS-232/422/485 Selectable in BIOS	1
	RS-232	0
	LAN	1x GbE
	Additional Graphics	None
	Audio	None
	Digital I/O	None
	Power Connector	Power jack
	Power Button	Reset button
Mechanical	Dimensions (mm)	520 x 341 x 68.3
	Net Weight (kg)	6.1
Expansion	Internal Expansion Bus	1x Mini PCI-E slot (full/half size)
	Expansion Slot	None
	Wireless	optional Wi-Fi/BT
Storage Space	HDD	4GB eMMC on board
	Removable	1x SD slot
Power	Power Input Range	12V DC / PoE+
Construction	Chassis Material	Black aluminum front bezel and black steel back cover
	Color (Front/Back)	Black / Black
	IP Rating	IP65 front bezel
	Mounting	VESA 75x75, 100x100 mm
Environmental	Operating Temperature	0°C~50°C
	Storage Temperature	-20°C~60°C
	Storage Humidity	10%~90% (non-condensing)
	Certification	CE/FCC Class-B
	Supported Operating Systems	Android 4.3

## Dimensions



## Ordering Information

BYARM-181-PC	18.5" RISC Panel PC with projected capacitive touch, with iB102 i.MX6 Cortex A9 CPU, 1GB DDR3 on board, Android support, w/ 60W power adaptor
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## Specifications

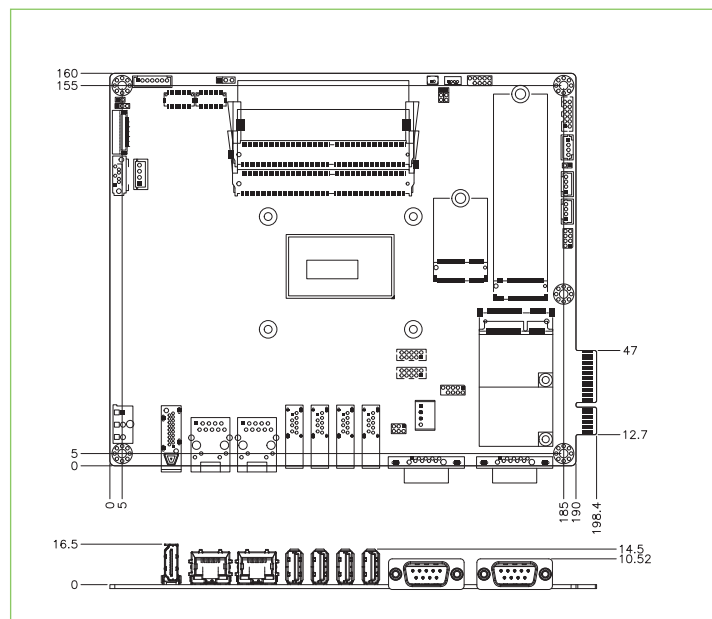
Processor	7th/6th Gen Intel® Core™ U series i7/i5/i3
PCH	Integrated in 7th/6th Gen Intel® Core™ U series processor
Memory Types	2x DDR4 SO-DIMM socket, Max. 16GB
BIOS	AMI
Watchdog Timer	256 level
H/W Monitor	Yes
Storage Device Interface	1x M.2 2280 (SATA III interface) 1x 7P SATA III connector
Mini Type Slots	1x miniPCI-E (full-size) 1x M.2 2230
Graphics Controller	Intel® SOC integrated 7th/6th Gen Core™ U graphics
Video Output	24-bit dual-channel LVDS/eDP 2 Lanes HDMI
Ethernet	1x Intel® I219LM GbE 1x Intel® I211AT GbE
I/O Chip	Fintek F81846AD
Serial Port	COM1:RS232/422/485 jumperless selection, isolated Ring-in power @500 mA selectable for 5V or 12V, non isolated COM2: RS232/422/485 jumper less selection, non isolated COM3/COM4: RS-232, box header
USB 2.0	2x USB2.0 box header
USB 3.0/ USB 3.1	4x USB3.0 flag type A
Serial ATA	2x SATA III
Audio	Realtek ALC283-CGT Line in/Line out/Mic-in/speaker-out (pin header)
TPM	Infineon SLB9665
Features	9V~30V DC-in with reverse protection, PCI-Ex4 expansion
Dimensions (L x W)	198.4mm x 160mm
Power Consumption	Intel® i7-7600U with 2x 4GB DDR4 -2133 @ 12V/3.5A
Operating Temperature	0°C~70°C
Storage Temperature	-20°C~80°C
Relative Humidity	0~90% (Non-condensing @ 60°C)

## Features

- 7th/6th Gen Intel® Core™ U platform
- Low profile and less cable design
- Onboard 1x miniPCI-E/M.2 22x30 socket and one PCI-E(x4) expansion
- Direct panel backlight driving, up to 12V DC with 3A(36W) power
- Dual 24-bit LVDS or eDP panel interface
- Isolated RS232/422/485



## Dimensions



## Ordering Information

IBP-900K-7300	7th Gen Intel® Core™ i5 7300U up to 3.5GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, 9V~30VDC power input
IBP-900S-6300	6th Gen Intel® Core™ i5 6300U up to 3.0GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, 9V~30VDC power input
IBP-900K-7600	7th Gen Intel® Core™ i7 7600U up to 3.9GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, 9V~30VDC power input
IBP-900S-6600	6th Gen Intel® Core™ i7 6600U up to 3.4GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, 9V~30V DC power input
IPP101	4x PCI-E expansion slot card for IBP-900 series



### Specifications

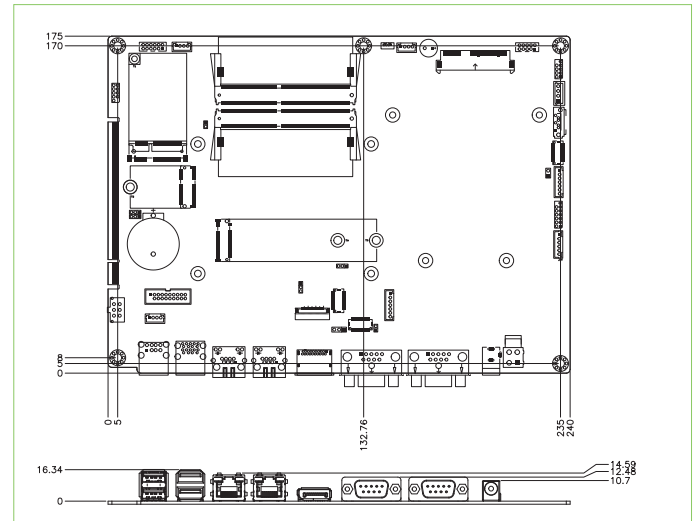
Processor	7th/6th Gen Intel® Core™ U series i7/i5/i3
PCH	Integrated in 7th/6th Gen Intel® Core™ U series processor
Memory Types	2x DDR4 SO-DIMM socket, Max. 16GB
BIOS	AMI
Watchdog Timer	256 level
H/W Monitor	Yes
Storage Device Interface	1x M.2 2260/80 (SATA III interface) 1x 7P SATA III connector 1x 22P SATA III connector
Mini Type Slots	1x miniPCI-E (full-size) 1x M.2 2230
Graphics Controller	Intel® SOC integrated 7th/6th Gen Core™ U graphics
Video Output	24-bit dual-channel LVDS/eDP 2 Lanes DP port
Ethernet	1x Intel® I219LM GbE 4KV isolation 1x Intel® I211AT GbE 4KV isolation
I/O Chip	Fintek F81846AD
Serial Port	COM1: RS232/422/485 jumper less selection, 4KV isolation COM2: RS232, 4KV isolation COM3: RS-232, box header
USB 2.0	One stack connector for 2x USB 2.0 at edge One onboard 4-pin connector with GPO power control
USB 3.0/ USB 3.1	One stack connector for 2x USB 3.0 at edge One 10-pin box header for 2x USB 3.0
Serial ATA	3x SATA III
Audio	Realtek ALC283-CGT Line in/Line out/Mic-in/speaker-out (pin header)
TPM	Infineon SLB9665
Features	19VDC-in with short protection, PCI-E x4 expansion, smart battery support
Dimensions (L x W)	240mmx 175mm
Power Consumption	Intel® i7-6600U with 2x 4GB DDR4 -2133 @ 12V/3.5A
Operating Temperature	0°C~60°C
Storage Temperature	-20°C~80°C
Relative Humidity	0~90% (Non-condensing @ 60°C)

### Features

- 7th/6th Gen Intel® Core™ U platform
- Low profile and less cable design
- Dual 24-bit LVDS or eDP panel interface
- Smart battery supports
- Dual 24-bit LVDS or eDP panel interface
- 4KV isolated RS232/422/485



### Dimensions



### Ordering Information

MBM-7001-6600	6th Gen Intel® Core™ i7 6600U up to 3.4GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, ATX /power jack 19VDC power input
MBM-7001-S-6600	6th Gen Intel® Core™ i7 6600U up to 3.4GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, ATX only 19V DC power input
MBM-7001	6th Gen Intel® Core™ i5 6300U up to 3GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, ATX /power jack 19V DC power input
MBM-7001-S	6th Gen Intel® Core™ i5 6300U up to 3GHz motherboard, with two DDR4 SO-DIMM, 2x Intel® GbE LAN, dual LVDS/eDP, ATX only 19V DC power input
IDM-101	LED reading light board, (must works with IDM-102)
IDM-102	Capacitive control keys board, brightness, volume, power on/off, touch on/off, reading light control Must work with MBM-7001
IB03	A034BATM4S1P0000P 4S1P 2500mAH battery, (for MBM-7001)

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