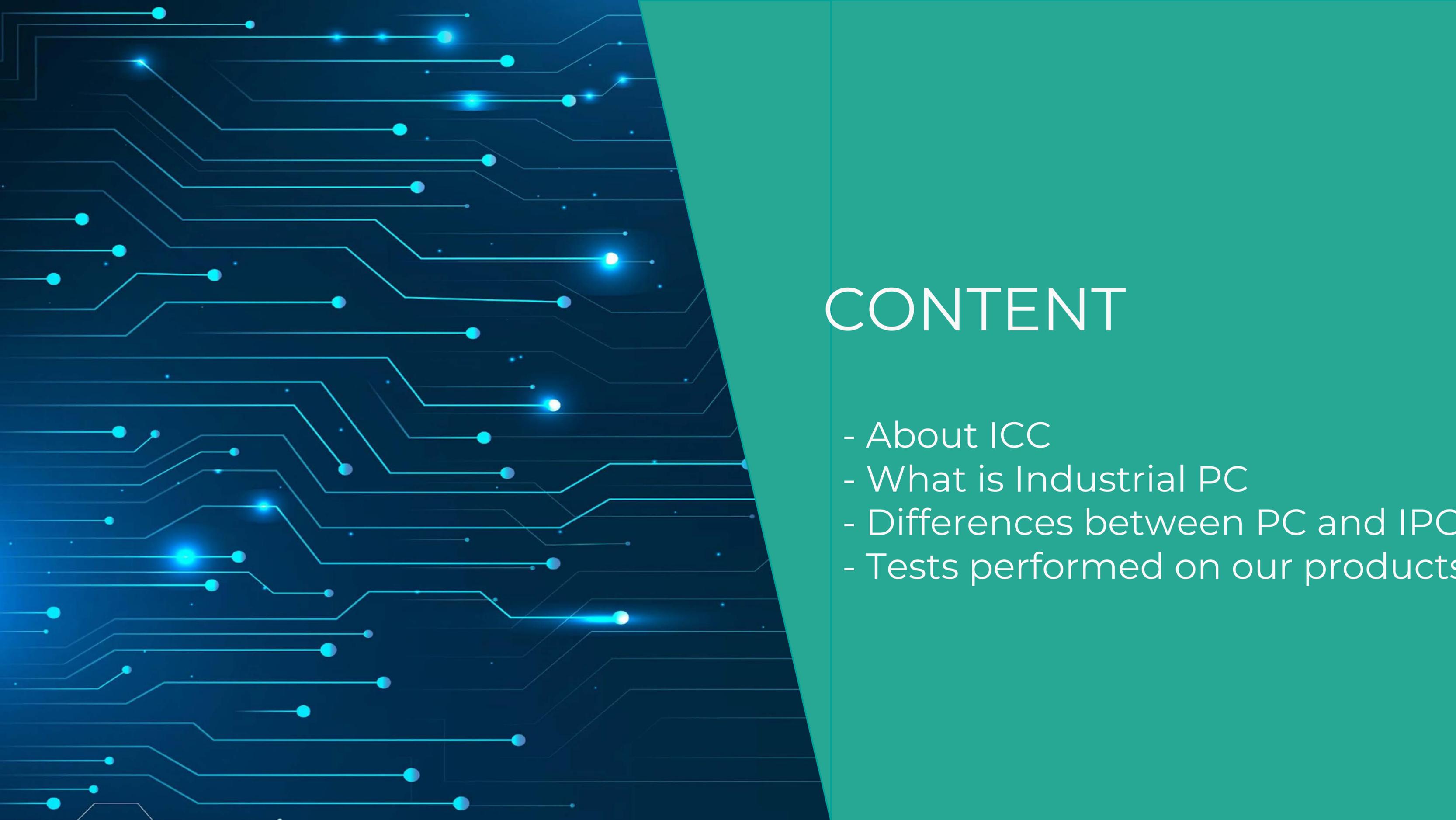


INDUSTRIAL COMPUTER





CONTENT

- About ICC
- What is Industrial PC
- Differences between PC and IPC
- Tests performed on our products

BRANDS AND DISTRIBUTORSHIPS

IPC4 and ECOIPC4

OUR OWN BRAND

- IPC4 and ECOIPC4 are ICC'S own brands. They offer consumers **a wide product range of industrial computers, monitors and keyboards.**
- All products are provided by an "industrial computer" supplier company, which produces the highest number of products in the Far East.
- All products **are tested and certified**, and they can also be **customized** according to the customer's needs.



BRANDS AND DISTRIBUTORSHIPS

AAEON by ASUS

THE BRAND WE DISTRIBUTE

- AAEON produces industrial computers, mainboards, IoT hardware, and artificial intelligence computers.
- AAEON is the brand belonging to the industrial division of the world-famous ASUS brand.
- ICC is the only authorized distributor of AAEON in Turkey.



PRODUCT RANGE

- Industrial Panel PC
- Industrial Box PC
- Industrial Workstation
- Digital Signage Players
- Industrial Keyboards
- Industrial Mainboards
- IoT Gateway
- Networks Appliances
- IoT Boards (Up-Board)
- EN505155 Rail System Computers
- EN505155 Rail System Computers
E-Mark Vehicle Computers



What is Industrial PC?

WHAT IS INDUSTRIAL COMPUTER

DIFFERENCES BETWEEN INDUSTRIAL PC AND STANDART PC

IPCs MUST BE RESISTANT TO EXTERNAL FACTORS

- ☐ Temperature
- ☐ Water
- ☐ Dust
- ☐ Humidity
- ☐ Pressure
- ☐ Vibration
- ☐ Electromagnetic compability



WHAT IS INDUSTRIAL COMPUTER

DIFFERENCES BETWEEN INDUSTRIAL PC AND STANDART PC

24/7 WORKING CAPACITY

- An industrial computer may need to be used without ever being shut down in factory conditions where production continues.
- Therefore, unlike standard computers, industrial computer products can work 365 days a year, 24/7, without interruption.

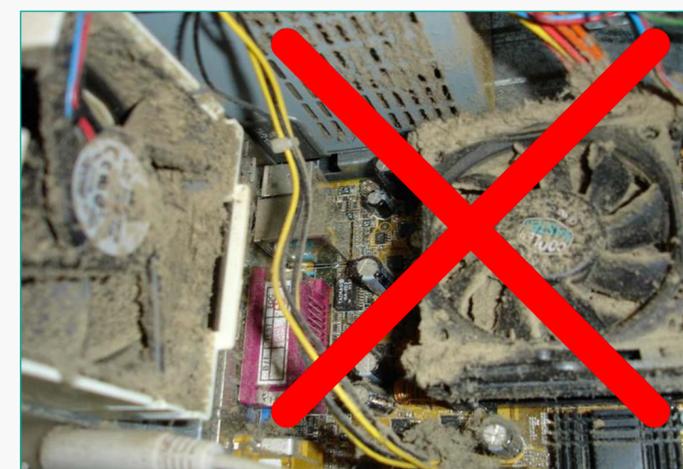


WHAT IS INDUSTRIAL COMPUTER

DIFFERENCES BETWEEN INDUSTRIAL PC AND STANDART PC

FANLESS COOLING SYSTEM

- In dusty industrial environments, fan cooling may collect dust inside the computer box. After a certain period, that may cause the processor to overheat, resulting in losses in production and data.
- **Fanless cooling system prevents the CPU from overheating** by successfully dissipating the heat in the processor without using a fan, thanks to the part called the 'cooling block' with a serrated and extended surface area.

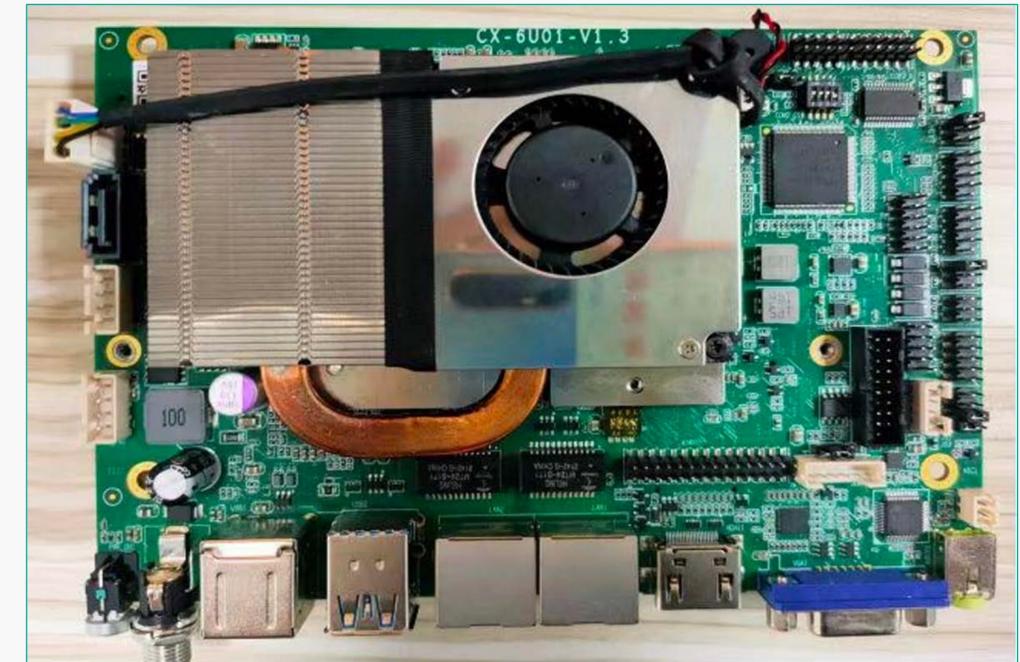


WHAT IS INDUSTRIAL COMPUTER

DIFFERENCES BETWEEN INDUSTRIAL PC AND STANDART PC

COMBINED COOLING SYSTEM

- Some configurations necessitate active cooling, particularly for CPUs with a TDP greater than 15 W.
- Here, ICC offers a combined cooling system that transfers the warmth of the CPU via a little fan to the metal back cover of the IPC. This way, cooling is done by the back cover.
- The advantage of this system over a fan system is that the combined cooling system runs in a closed system, which means it does not use air from outside the box..

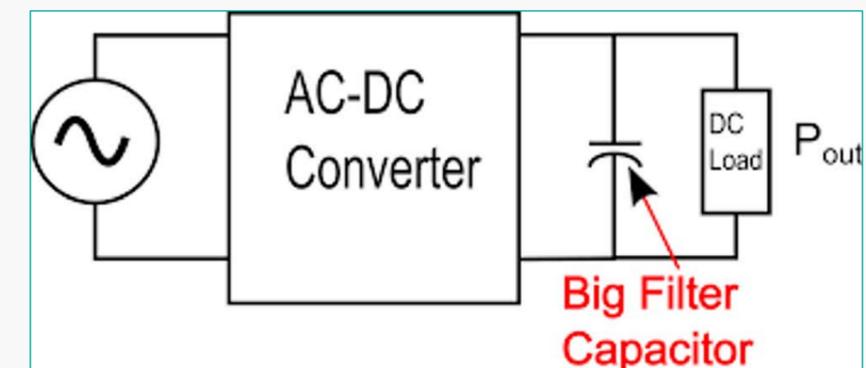
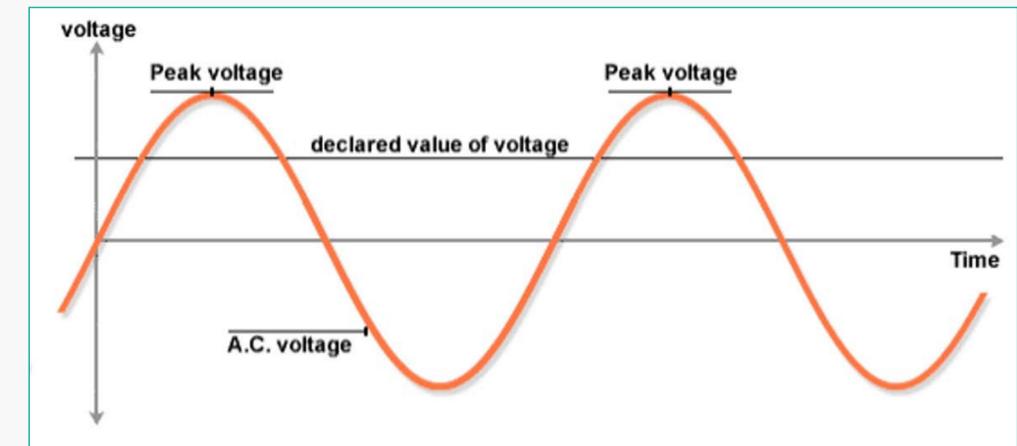


WHAT IS INDUSTRIAL COMPUTER

DIFFERENCES BETWEEN INDUSTRIAL PC AND STANDART PC

24VDC SUPPLY CURRENT REQUIREMENT

- Sudden and short-term "peak" currents may occur on the alternating current supplied from the network. For this reason, the power units of the devices are in danger.
- If DC supply current is applied, the effect of fluctuations on the network will be much less.





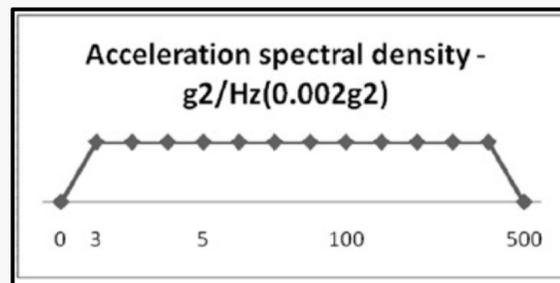
Tests Applied on IPCs

WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

RANDOM VIBRATION TEST

- In this test, **products are vibrated with 1G intensity for 1 hour each from the X, Y and Z axes.**
- **The ability of the product to operate in vibrating environments** is tested by simulating vibration in factories.



	Operating
Accelerate	1 G rms
Frequency	3 ~ 500 Hz
Test Axis	Z axis
Test Time	60 mins

Operating

Burning Test 7.1 Results

Test Name	Cycle	Operations	Errors	Last Error Description
2D Graphics	1039	62332	0	No errors
3D Graphics	0	19507	0	No errors
CPU	176	725 Billion	0	No errors
Disk (C:)	30	57.671 Billion	0	No errors
Disk (D:)	22	39.779 Billion	0	No errors
Disk (E:)	132	11.499 Billion	0	No errors
Memory (RAM)	35	72.737 Billion	0	No errors
Network 1	59	2.374 Million	0	No errors
Sound	17	57.749 Million	0	No errors
Video Playback	12	385	0	No errors

WHAT IS INDUSTRIAL COMPUTER



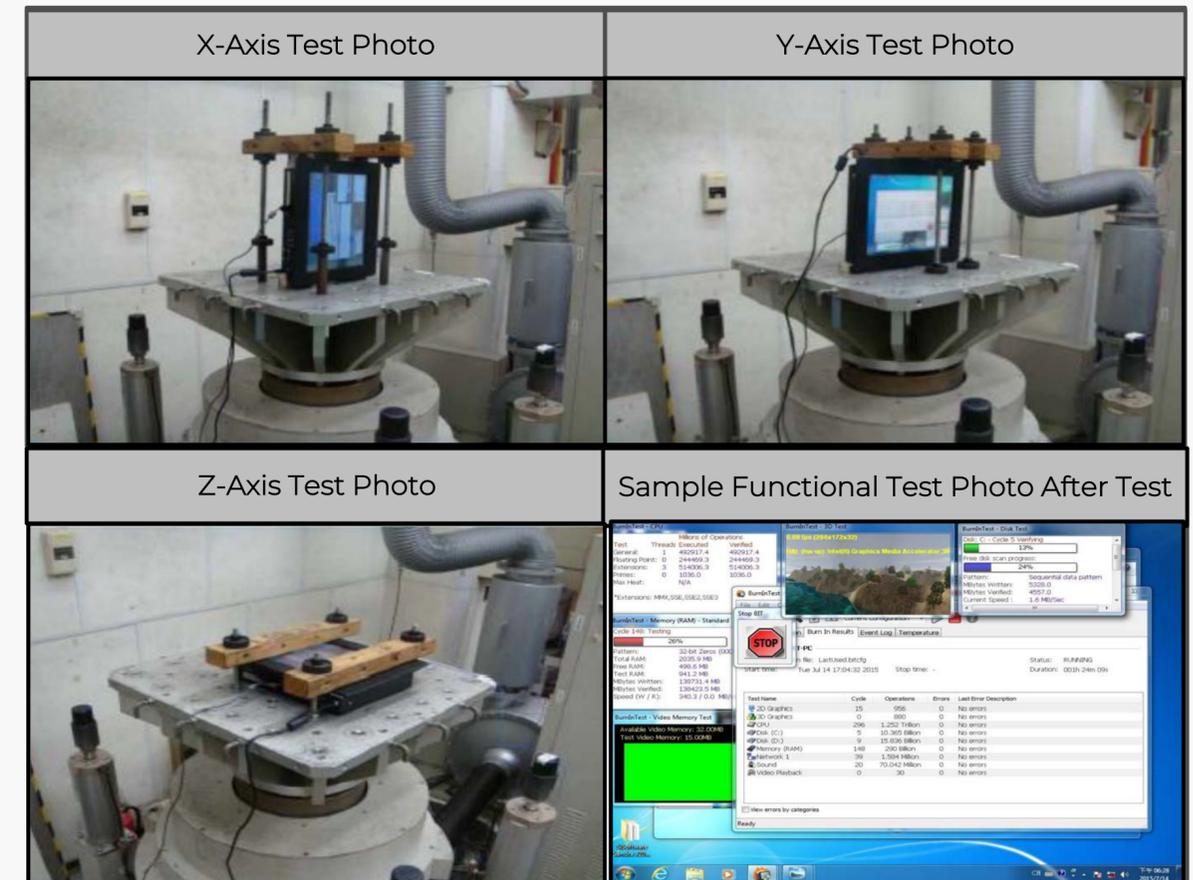
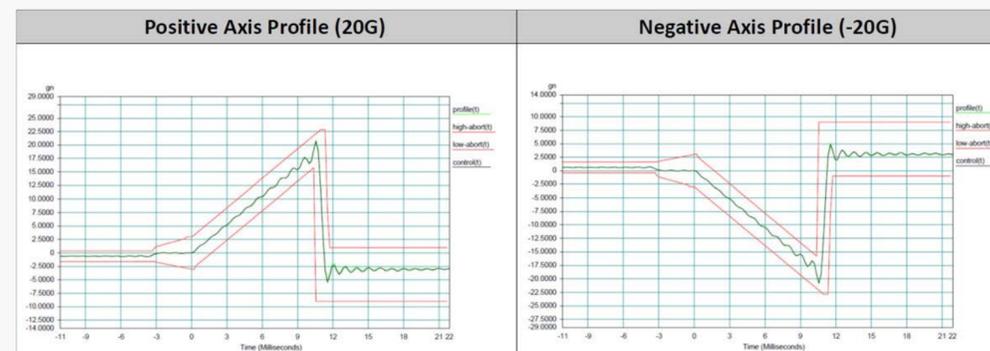
TESTS APPLIED ON IPCs

SHOCK PULSE TEST

- The instantaneous **impact from the X, Y and Z axes for 11 msec** is applied with an intensity of 20G (1G=9kg) when the product is working and 40G when the product is not working.

	Operating
Wave Form	Sawtooth Wave
Acceleration	20G
Duration Time	11 ms
Shock Direction	$\pm X, \pm Y, \pm Z$ axis, each axis 3 times.

	Non-Operating
Wave Form	Sawtooth Wave
Acceleration	40G
Duration Time	11 ms
Shock Direction	$\pm X, \pm Y, \pm Z$ axis, each axis 3 times.

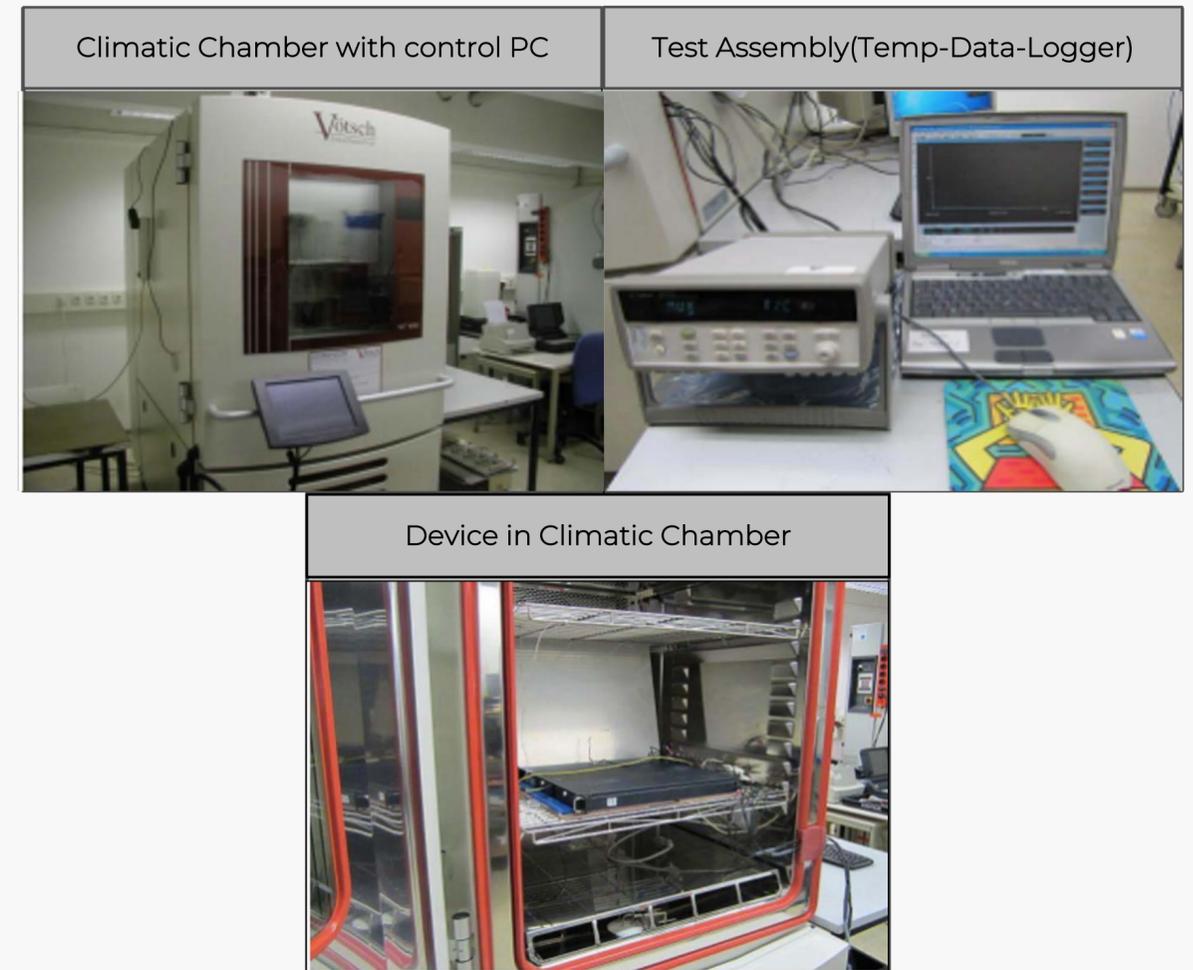


WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

ENVIRONMENTAL STRENGTH TEST

- In this test, the devices are subjected to **temperatures between -5°C and +55°C** and **humidity of 0-100%** for 81 hours in a box-like structure called the Climatic Chamber.
- In the event of a malfunction or a blister on the device's screen, the product has failed.
- The operating temperature range of our products is **-10 °C - +60 °C**

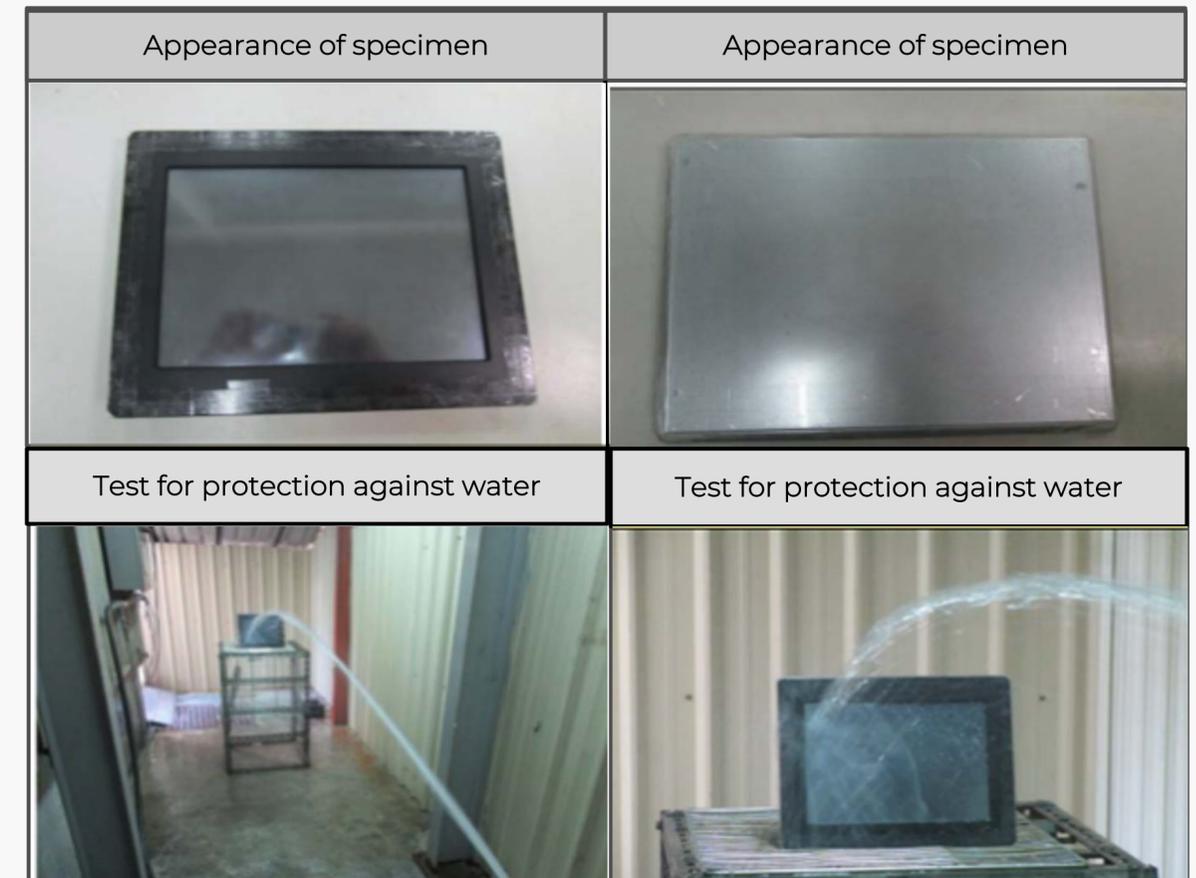


WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

IP65 DUST AND LIQUID STRENGTH TEST

- At these levels of security, called IP (International Protection)degrees, different tests are applied for each IP rating.
- **In the IP65 protection test;**
- 100 kPA pressure water is squeezed from a distance of 3 meters for 3 minutes to check whether water enters the product.



WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

IP65 DUST AND LIQUID STRENGTH TEST

- In the second phase of the test;
- Items to be tested for IP 6X enclosures are exposed to **fine-grained powder** in the dust chamber for **2-8 hours**,



WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

FALL - DAMAGE TEST

- Products that have passed all of these tests and have proven their industrial suitability travel many kilometers before reaching the user.
- Therefore, **an impact test is performed on our products;**
- The packaged **products are dropped from 92 cm** and the authorities inspect them for damage.
- Our products are ready to go after this **impact simulation was applied separately from the corners and edges in the form of 45G.**

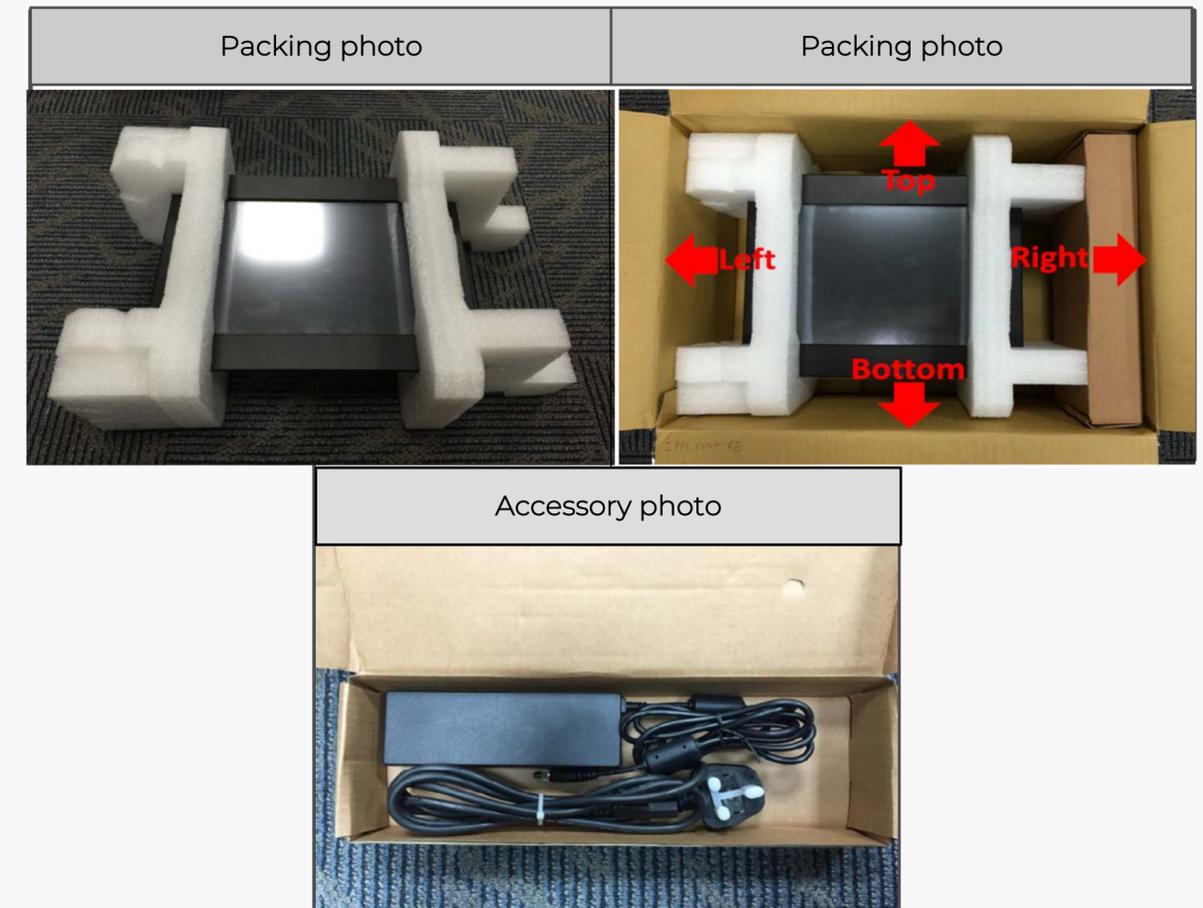


WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

FALL - DAMAGE TEST

- Products that have passed all of these tests and have proven their industrial suitability travel many kilometers before reaching the user.
- **Our products are packed with particular methods to withstand accidents that may occur during shipping.**



WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

TOUCH SCREEN DURABILITY TEST

- The screens of industrial computers become resistant to accidents by increasing the density of the glass used.
- In the first test, **30 kgf force is applied to certain points of the screen with a press with a diameter of 25mm.** There should be no crack in the screen as a result of this force.

3.2 Impact Test [衝擊測試]

Item [項目]	Condition[測試條件]	Judge[判定標準]
Impact Test [衝擊測試]	Aluminium alloy Head R25mm ,9 Point , Speed 10 mm/min , Load 30 Kgf [鋁合金測試頭 R25mm, 9點, 速度 10 mm/min, 重力 30 Kgf]	NO any crack on TP after test [TP 於測試後不得破裂]

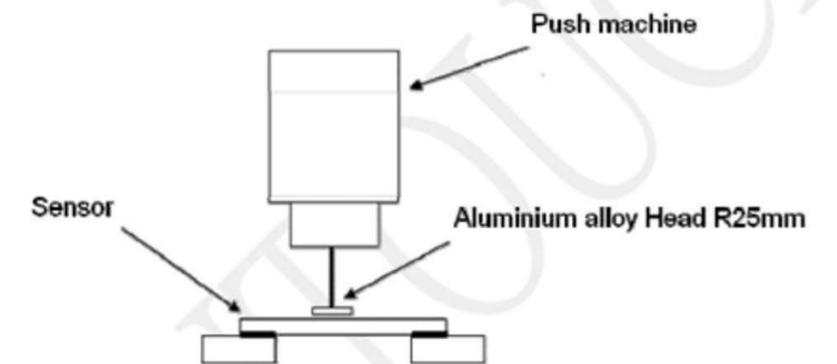


Figure 3.2-1 Impact test method

WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

TOUCH SCREEN DURABILITY TEST

In the second level of the test, a **metal ball weighing 130 g with a diameter of 32 mm is dropped from a distance of 40 cm to certain points on the screen** and the screen is examined for cracking.

3.3 Ball Drop Test [落球測試]

Item [項目]	Specification [測試規格]	Judge [判定標準]
Ball Drop Test [落球測試]	Steel ball $\Phi 32$ mm, 130 g , 1 Drop Points , Height 40cm [鋼球 $\Phi 32$ mm, 130 g, 一個落下點, 高度 40cm]	NO any crack on TP after test [TP 於測試後不得破裂]

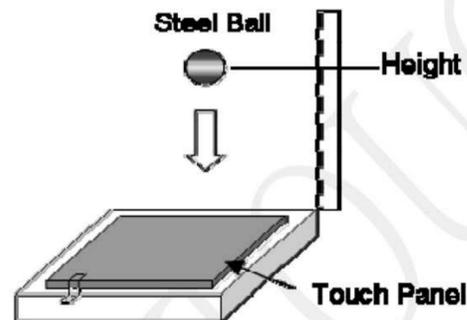


Figure 3.3-1 Ball Drop Test Method

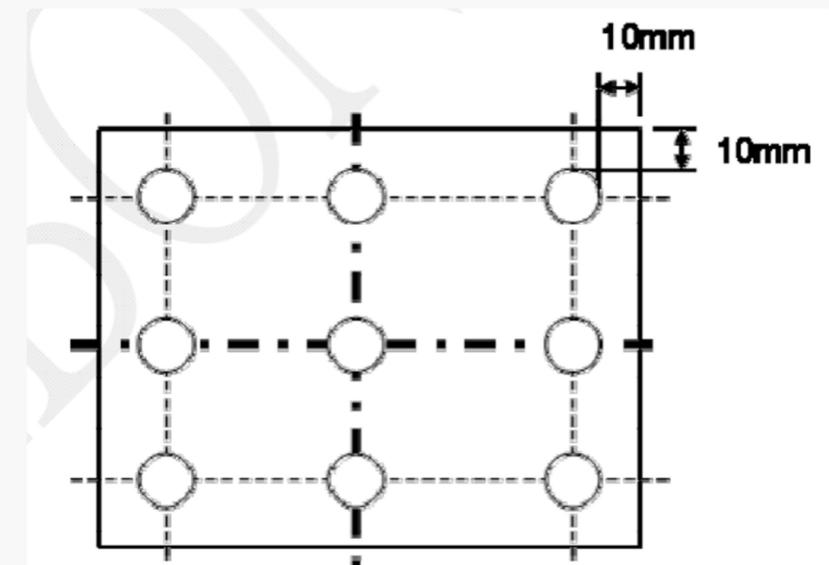


Figure 3.2-2 Impact Point definition

WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

EMC (Electromagnetic Compability) TEST

- High-power electrical devices used in factories create a strong magnetic field around them when they start working.
- This situation may negatively affect other devices around and cause irreversible damage.
- The purpose of electromagnetic compatibility (EMC) is to keep all these potential effects under control.



WHAT IS INDUSTRIAL COMPUTER

TESTS APPLIED ON IPCs

EMC (Electromagnetic Compability) TEST

- To prevent such situations, 'Faraday Cage' is used in Industrial PCs.
- The Faraday cage is an enclosure that protects the internal volume, covered with electrically conductive metal or networked with conductors, from the electric fields outside
- In this way, the device is protected from all magnetic effects outside the cage.
- This system gets used in shielded cables and electronic devices used in industrial environments.





IPC Selection

IPC SELECTION

INDUSTRIAL PANEL PC



- Industrial Panel PCs are intended for use in a variety of work environments.
- Support for operation in a wide temperature range, IP65 protection class, multi-touch feature, sunlight readability options, and scratch-proof screens.
- They efficiently optimize different applications such as factory automation, IoT and smart city applications.

IPC SELECTION

INDUSTRIAL MONITOR



- The ICC Industrial Monitor series provides the opportunity to choose between P-CAP capacitive 10-finger touch and resistive touch screen models with a size between 7" and 23.8".
- 12VDC ~30VDC power supply offers input range, reverse voltage, and short circuit protection
- Durable panels and an IP65 aluminum front frame complement each other.
- Monitors can be used in temperatures ranging from -10 to 55 degrees Celsius.



IPC SELECTION

INDUSTRIAL BOX PC



- Embedded Box PC products are designed for use in transportation, entertainment, environmental and industrial plant monitoring, biometrics, industrial production, food production automation control, inspection management and building applications.
- It can be produced specifically for the configuration customers demand.
- All Embedded Box PCs are reliable, flexible and require little maintenance



IPC SELECTION

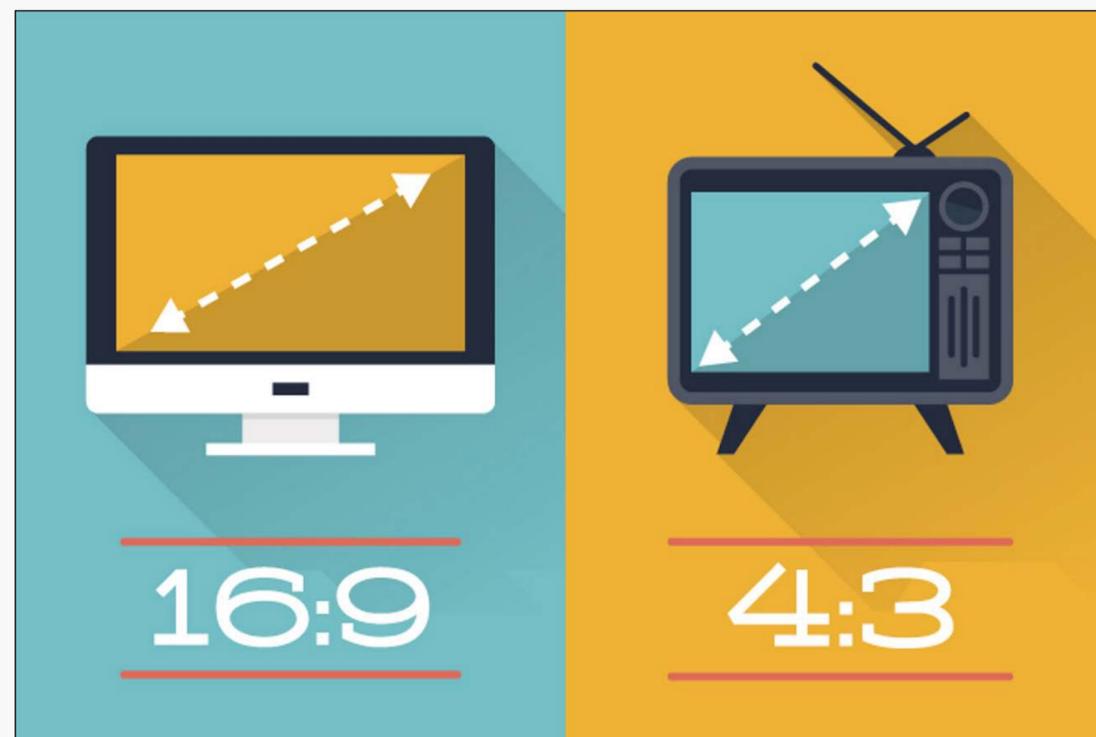
INDUSTRIAL TABLET



- Industrial tablets offer multifunctional, military-grade designs designed to withstand the industry's harsh working environments, whether inside or outside.
- It can be produced specifically for the configuration customers demand.

IPC SELECTION

ASPECT RATIO



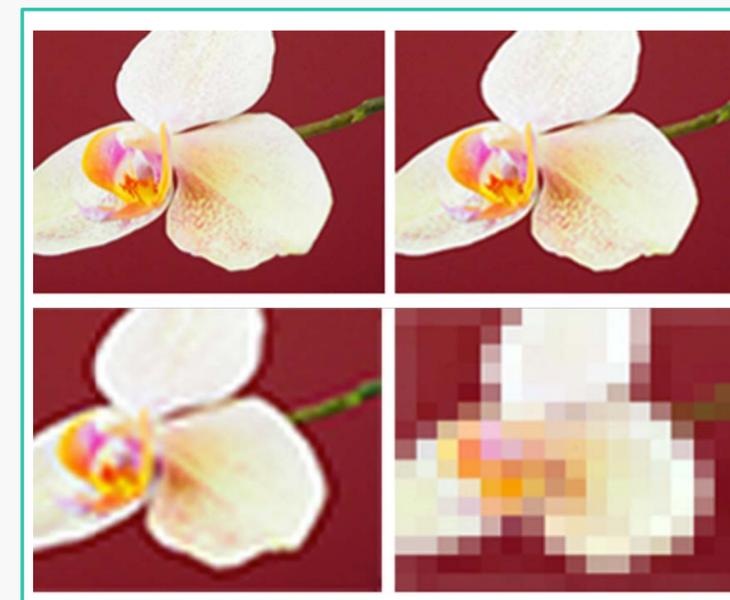
The product families of industrial monitors offer a wide range of screen sizes. 16:9 widescreens and 4:3 normal formats provide more detailed and different look .

- 100% industrial-grade monitors adapt to harsh industrial conditions such as shock, vibration and temperature.
- ICC offers you fully customized Industrial Monitors with IPC4 and AAEON quality

IPC SELECTION

SCREEN RESOLUTION

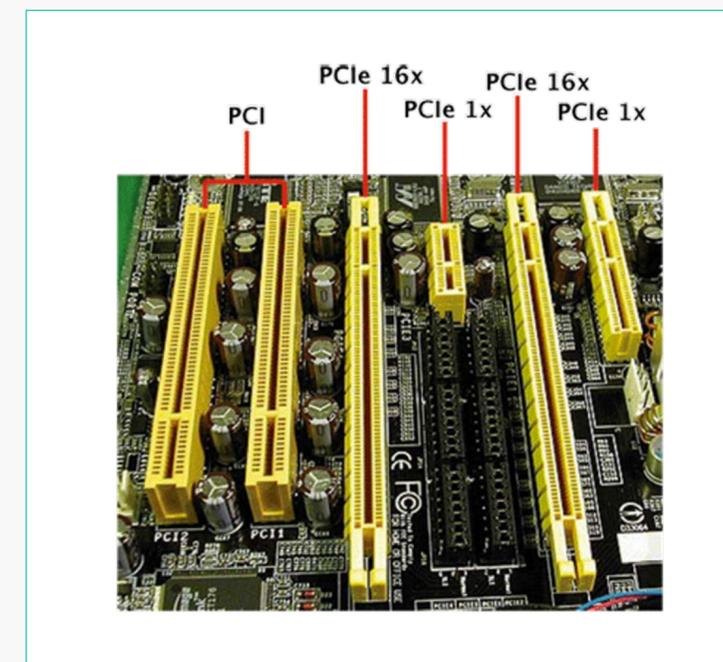
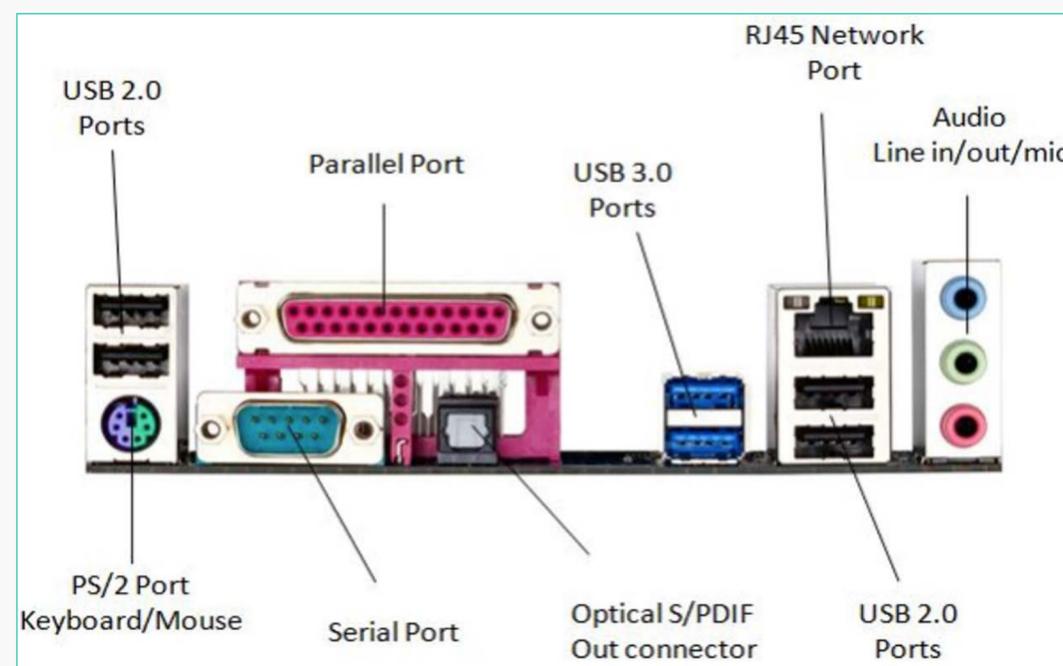
Screen Size	Video Standard	Screen Resolution	Aspect Ratio
7"	XGA	800x480	16:09
7"	WXGA	1024x600	16:09
8"	XGA	1024x768	04:03
8,4"	SVGA	800x600	04:03
10,1"	WXGA	1024x600	16:09
10,1"	HD	1280x800	16:09
10,4"	XGA	640x480	04:03
10,4"	XGA	1024x768	04:03
12,1"	SVGA	800x600	04:03
11,6"	Full HD	1920x1080	16:09
12,1"	XGA	1024x768	04:03
12,1"	WXGA	1280x800	16:10
15"	XGA	1024x768	04:03
15,6"	HD	1366x768	16:09
15,6"	Full HD	1920x1080	16:09
17"	SXGA	1280x1024	04:03
17,3"	Full HD	1920x1080	16:09
18,5"	HD	1360x768	16:09
19"	SXGA	1280x1024	04:03
19,1"	HD	1440x900	04:03
21,5"	Full HD	1920x1080	16:09



ICC products offer you the opportunity to choose the one that suits you from different screen resolution options.

IPC SELECTION

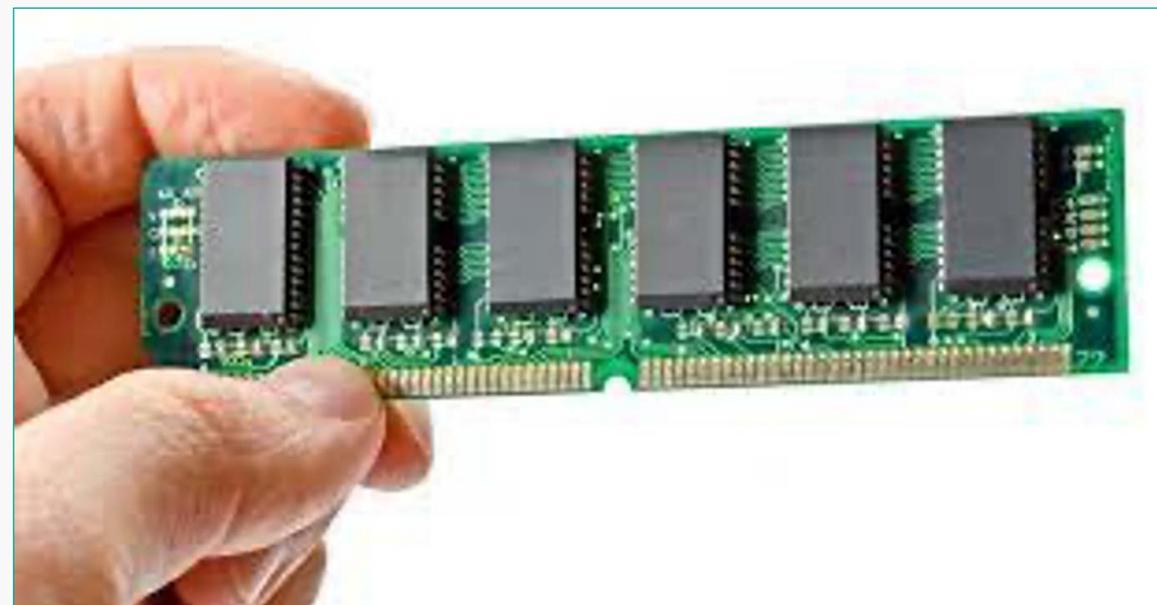
ADDITIONAL REQUIREMENTS



- ICC offers you products suitable for the ports you will use in your project.
- Thanks to the expansion slots, we can choose the appropriate PCIe slot for the display card you will use.

IPC SELECTION

RAM(MEMORY)



ICC offers you the opportunity to customize your device with one of the up to 64GB RAM options according to your needs.

IPC SELECTION

STORAGE SSD, HDD, mSATA



SSD vs HDD

Usually 10 000 or 15 000 rpm SAS drives

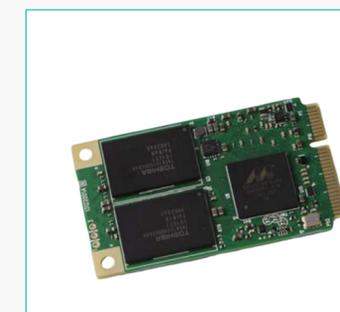
0.1 ms	Access times SSDs exhibit virtually no access time	5.5 ~ 8.0 ms
SSDs deliver at least 6000 io/s	Random I/O Performance SSDs are at least 15 times faster than HDDs	HDDs reach up to 400 io/s
SSDs have a failure rate of less than 0.5 %	Reliability This makes SSDs 4 - 10 times more reliable	HDD's failure rate fluctuates between 2 ~ 5 %
SSDs consume between 2 & 5 watts	Energy savings This means that on a large server like ours, approximately 100 watts are saved	HDDs consume between 6 & 15 watts
SSDs have an average I/O wait of 1 %	CPU Power You will have an extra 6% of CPU power for other operations	HDDs' average I/O wait is about 7 %
the average service time for an I/O request while running a backup remains below 20 ms	Input/Output request times SSDs allow for much faster data access	the I/O request time with HDDs during backup rises up to 400 ~ 500 ms
SSD backups take about 6 hours	Backup Rates SSDs allows for 3 - 5 times faster backups for your data	HDD backups take up to 20 ~ 24 hours



SSD



HDD



mSATA

ICC also offers you the opportunity to customize memory selection. The priority of ICC is always mSATA SSD.

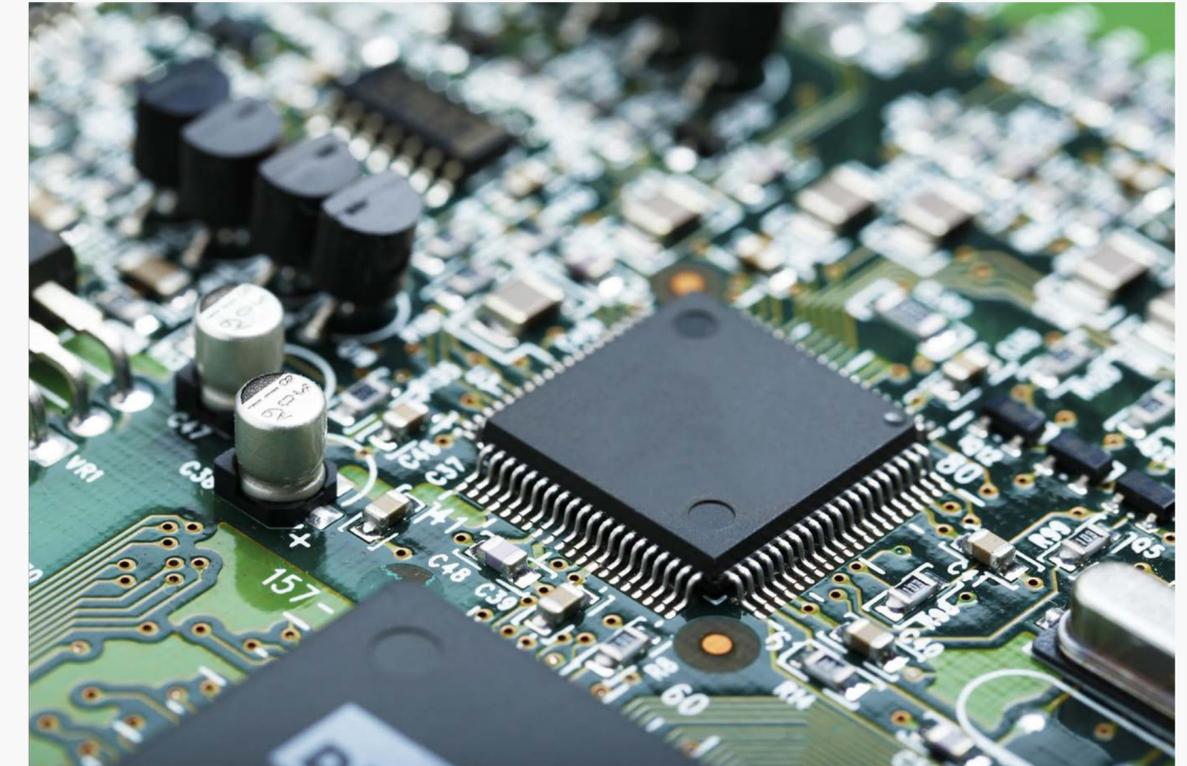
IPC SELECTION

CPU

İşlemciler Hakkında



İşlemci	Intel® Celeron® J1900	Intel® Celeron® J4125	Intel® Core® i5-7. Nesil	Intel® Core® i5-8. Nesil	Intel® Core® i5-10. Nesil	Intel® Core® i7-7. Nesil	Intel® Core® i7-8. Nesil	Intel® Core® i7-10. Nesil
Çalışma Frekansı	2.0 GHz	2.0 GHz	2.5 GHz	1.6 GHz	1.7 GHz	2.7 GHz	1.8 GHz	1.8 GHz
Turbo Frekansı	2.7 GHz'e kadar	2.7 GHz'e kadar	3.1 GHz'e kadar	3.4 GHz'e kadar	4.4 GHz'e kadar	3.5 GHz'e kadar	4.0 GHz'e kadar	4.9 GHz'e kadar
Çekirdek Sayısı *	4 Threads:4	4 Threads:4	2 Threads: 4	4 Threads: 8	4 Threads: 8	2 Threads: 4	4 Threads: 8	4 Threads: 8
Güç Tüketimi	10W	10W	15W	15W	15W	15W	15W	15W
Piyasaya Sürüm Zamanı	Q1 2020	Q1 2020	Q4 2016	Q3 2017	Q2 2020	Q4 2016	Q3 2017	Q3 2019
CPU Benchmark Puanı	~1100	~3000	~3400	~5950	~6550	~3700	~6000	~6800



IPC SELECTION

RECOMMENDED PRODUCT

	Product code	IPC4-156W
	Screen size	15.6" TFT LCD
	Resolution	1920x1080
	Brightness	350 cd/m2
	Viewing Angle	178°(H), 178°(V)
	Touch Type	10 Finger Touch Projected Capacitive (PCAP) ◆: 1 Resistive ◆: 2
	Backlight Life	50,000 Hours (Minimum)
	Cooling	Fanless Passive Fanless + Combined
	Processor [CPU]	Intel® Celeron® J4125 4 Cores 2.00 GHz BM: 2980 IPC4-156W ◆-C ◆◆-4125 Intel® Core™ i3-6100U 2 Cores 2.30 GHz BM: 2630 IPC4-156W ◆-i3 ◆◆-6100 Intel® Core™ i3-8130U 2 Cores 2.20 GHz BM: 3680 IPC4-156W ◆-i3 ◆◆-8130 Intel® Core™ i5-7200U 2 Core 2.50GHz BM: 3340 IPC4-156W ◆-i5 ◆◆-7200 Intel® Core™ i5-8250U Quad Core 1.60 GHz BM: 5950 IPC4-156W ◆-i5 ◆◆-8250 Intel® Core™ i5-10310U Quad Core 1.70 GHz BM: 6700 IPC4-156W ◆-i5 ◆◆-10310 Intel® Core™ i7-7500U 2 Cores 2.7 GHz BM: 3600 IPC4-156W ◆-i7 ◆◆-7500 Intel® Core™ i7-10510U Quad Core 1.78 GHz BM: 6870 IPC4-156W ◆-i7 ◆◆-10510
	RAM [System Memory]	Intel® Celeron® : 4GB Intel® Core™ 8GB <small>(Celeron® and Core™ 6th generation models can be upgraded to 8GB, Core™ 7th, 8th and 10th generation Models up to 16GB.)</small>
	SSD/mSATA/M.2 Storage	64GB mSATA/M.2 SSD (Upgradeable to 512GB)
	LAN / Ethernet	GbE x 2
	USB 3.0	x 2
	USB 2.0	x 2
	RS-232 Serial Port	x 2
	RS-485 Serial Port	Optional
	Video Output	HDMI x 1 VGA x 1
	Audio Output	Line-Out x 1
	Built-in Speaker	x 1
	Expansion Slot	Mini-PCIe x 2 [for mSATA and WiFi-BT module]
	Wireless Bluetooth	802.11b/g/n BT4.1
	Mounting Type	Panel Mount VESA 75 VESA100 Stand Fully Closed VESA 75 only VESA100 ◆: FC
	Supply Voltage	Dual Supply – Adapter + DC 12~36V (Adapter is included in the package.)
	Operating temperature	-10°C~60°C
	External Dimensions (mm)	420 x 269 x 70 ◆: FC : 389.6 x 264
	Cut Dimensions (mm)	402 x 251
	Weight (kg)	3
	Body Material	Aluminum Body Color : Black : ◆: 0 Metallic Gray : ◆: 1
	IP Protection Class	Front IP65
	Certificates	CE/FCC/ROHS
	Supported Operating Systems	Pre-Installation: Windows 10 Pro Supported : Windows 7* Windows 10 Windows 11 Linux <small>(* Only Core™ 6th and 7th generation models support Windows 7.)</small>

IPC4-156W 15,6 | Intel Celeron ~ Core i7 CPU | Wi-Fi

IPC SELECTION

RECOMMENDED PRODUCT



Product Code	IPC4-BXPCW																
Cooling	Fanless Passive Fanless + Combined																
Processor [CPU]	<table border="1"> <tr><td>Intel® Celeron® J4125 4 Core 2.00 GHz BM: 3030</td><td>IPC4-BXPCW-C10-4125</td></tr> <tr><td>Intel® Core™ i3-6100U 2 Core 2.30 GHz BM: 2630</td><td>IPC4-BXPCW-i310-6100</td></tr> <tr><td>Intel® Core™ i3-8130U 2 Core 2.20 GHz BM: 3680</td><td>IPC4-BXPCW-i310-8130</td></tr> <tr><td>Intel® Core™ i5-7200U 2 Core 2.50GHz BM: 3340</td><td>IPC4-BXPCW-i510-7200</td></tr> <tr><td>Intel® Core™ i5-8250 U 4 Core 1.60 GHz BM: 5950</td><td>IPC4-BXPCW-i510-8250</td></tr> <tr><td>Intel® Core™ i5-10310U 4 Core 1.70 GHz BM: 6700</td><td>IPC4-BXPCW-i510-10310</td></tr> <tr><td>Intel® Core™ i7-7500U 2 Core 2.7 GHz BM: 3600</td><td>IPC4-BXPCW-i710-7500</td></tr> <tr><td>Intel® Core™ i7-10510U 4 Core 1.78 GHz BM: 6870</td><td>IPC4-BXPCW-i710-10510</td></tr> </table>	Intel® Celeron® J4125 4 Core 2.00 GHz BM: 3030	IPC4-BXPCW-C10-4125	Intel® Core™ i3-6100U 2 Core 2.30 GHz BM: 2630	IPC4-BXPCW-i310-6100	Intel® Core™ i3-8130U 2 Core 2.20 GHz BM: 3680	IPC4-BXPCW-i310-8130	Intel® Core™ i5-7200U 2 Core 2.50GHz BM: 3340	IPC4-BXPCW-i510-7200	Intel® Core™ i5-8250 U 4 Core 1.60 GHz BM: 5950	IPC4-BXPCW-i510-8250	Intel® Core™ i5-10310U 4 Core 1.70 GHz BM: 6700	IPC4-BXPCW-i510-10310	Intel® Core™ i7-7500U 2 Core 2.7 GHz BM: 3600	IPC4-BXPCW-i710-7500	Intel® Core™ i7-10510U 4 Core 1.78 GHz BM: 6870	IPC4-BXPCW-i710-10510
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Intel® Core™ i5-10310U 4 Core 1.70 GHz BM: 6700	IPC4-BXPCW-i510-10310																
Intel® Core™ i7-7500U 2 Core 2.7 GHz BM: 3600	IPC4-BXPCW-i710-7500																
Intel® Core™ i7-10510U 4 Core 1.78 GHz BM: 6870	IPC4-BXPCW-i710-10510																
RAM [System Memory]	Intel® Celeron®: 4GB Intel® Core™ 8GB <small>(Celeron® and Core 6th generation models can be upgraded up to 8GB, while Core™ 7th, 8th and 10th generation Models can be upgraded up to 16GB.)</small>																
SSD/mSATA/M.2 Storage	64GB mSATA/M.2 SSD (Upgradable to 512GB)																
LAN / Ethernet	GbE x 2																
USB 3.0	x 2																
USB 2.0	x4																
RS-232 Serial Port	x6																
RS-485 Serial Port	Optional																
Video Output	HDMI x 1 VGA x 1																
Audio Output	Line-Out x 1																
Built-in Speaker	x 1																
Expansion Slot	Mini-PCIe x 2 [For mSATA and WiFi-BT module]																
Wireless	802.11 b/g/n																
Bluetooth	BT4.1																
Supply Voltage	DC 12~24V (Adapter is included in the package.)																
Mounting Type	Desktop VESA75 VESA100																
Operating Temperature	-10°C~60°C																
External Dimensions (mm)	188.6 x 200 x 58.3																
Weight (kg)	2																
Body Material	Aluminium																
Certificates	CE/FCC/ROHS/ISO																
Supported Operating Systems	Pre-installation : Windows 10 Pro Supported : Windows 7* Windows 10 Windows 11 Linux (pd) <small>(* Only Core™ 6th and 7th generation models support Windows 7.)</small>																

IPC SELECTION

Marka					
Model	IPC4-101W-C10	IPC4-121W-C10	IPC4-156W-C10	IPC4-173W-C10	IPC4-215W-C10
Ekran Boyutu	10,1"	12,1"	15"	17,3"	21,5"
Çözünürlük	1280 x 800	1280 x 800	1920 x 1080	1920 x 1080	1920 x 1080
Dokunmatik	P-CAP Kapasitif				
İşlemci	Intel® Celeron® J4125				
CPU Hızı	2,0	2,0	2,0	2,0	2,0
Çekirdek Sayısı	4	4	4	4	4
Benchmark Puanı	2986	2986	2986	2986	2986
HDD / SSD	64GB SSD	64GB SSD	64GB SSD	64GB SSD	64GB SSD
RAM	4GB	4GB	4GB	4GB	4GB
LAN	2 x GbE LAN RJ-45				
Seri Port 1	RS232 x 1	RS232 x 1	RS232 x 1	RS232 x 1	RS232 x 1
Seri Port 2	RS232 x 1				
USB Portları	USB 2.0 x 1 + USB 3.0 x 1	USB 2.0 x 2 + USB 3.0 x 1	USB 2.0 x 2 + USB 3.0 x 1	USB 2.0 x 2 + USB 3.0 x 1	USB 2.0 x 2 + USB 3.0 x 1
Wifi	Dahili	Dahili	Dahili	Dahili	Dahili
Harici Video	1x VGA; 1x HDMI				
Çalışma Sıcaklığı	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C
Besleme Voltajı	12 ~ 36 VDC				





Advantages of ICC

ADVANTAGES OF ICC

- ❑ Metal Computer Box
- ❑ IP65
- ❑ Intel® Celeron® J4125 CPU
- ❑ Standart 4GB RAM
- ❑ Standart 64GB SSD

