

Product Specification

Model	AiTRON-910EP(H)	AiTRON-912EP(H)	AiTRON-915EP(H)	AiTRON-916EP(H)	AiTRON-921EP(H)					
System										
CPU	Intel Core Ultra 5 125U Intel Core Ultra 7 155U									
Memory	1 x DDR5-5600MHz SO-DIMM, up to 48GB									
External I/O										
USB	4 x USB 3.2 Gen1 Type-A									
Serial/Parallel	1 x DB9, supports RS-232/422/485 (COM1, BIOS selection, RS-232 is default) 1 x DB9, supports RS-232/422/485 (COM2, BIOS selection, RS-232 is default) 1 x DB9, supports RS-232 (COM3) as standard, optional 2 x USB 2.0 Type-A									
Display Output	1 x HDMI 2.1, resolution up to 7680 x 4320 @60Hz 1 x DP 1.4, resolution up to 7680 x 4320 @60Hz									
LAN	2 x RJ-45, support Intel I226V/IT 2.5GbE LAN									
Expansion										
Expansion slot	1 x M.2 2230 E-Key (USB2.0, PCIe x1) for optional Wi-Fi/BT module 1 x M.2 3402/3052 B-key (PCIe x1, USB3.2 Gen1, USB2.0) for optional LTE/5G module, w/1 x Nano-SIM slot									
Storage Space										
HDD/SSD	1 x M.2 2280 M-Key socket (PCIe 3.0 x4)									
Display										
Display Type	10.1" TFT-LCD		12.1" TFT-LCD		15" TFT-LCD	15.6" TFT-LCD		21.5" TFT-LCD		
Max. Resolution	1024 x 800		1280 x 800		1024 x 768		1920 x 1080		1920 x 1080	
Max. Color	16.2M	16.7M	16.2M	16.7M	16.7M	16.2M	16.7M	16.7M	16.7M	16.7M
Luminance (cd/m2)	350	1000	350	1000	350	1000	500	1000	250	1000
View Angle (H/V)	170/170	178/178	170/170	178/178	178/178	176/176	178/178	170/170	178/178	170/170
Contrast	800 : 1	800 : 1	800 : 1	800 : 1	1,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1
Backlight Lifetime (hrs)	30,000	50,000	30,000	70,000	50,000	50,000	50,000	50,000	50,000	50,000
Touch Screen										
Type	Projected Capacitive									
Interface	USB									
Light transmission	>88±2%									
Power										
Power Input	DC 9~36V									
Power Consumption	TBD									
Mechanical										
Construction	Aluminum die-casting chassis									
Mounting	Panel mount, VESA 100x100									
IP Rating	IP66 compliant front bezel									
Dimensions (mm)	270 x 184 x 66	291 x 230 x 64	396 x 245 x 64	396 x 245 x 64	592 x 321 x 65					
Net Weight (kg)	TBD									
Environmental										
Operating Temperature	-20~60°C	-20~60°C	-20~60°C	-20~60°C	0~50°C					
Storage Temperature	-30~70°C	-30~70°C	-30~70°C	-30~70°C	-10~60°C					
Humidity	10 to 95% @ 40°C, non- condensing									
Other										
Certificate	CE/FCC Class A									
Operating System	Windows 10 IoT Enterprise 2021 LTSC or later, Windows 11 (21H2) or later, Linux 18.04 or later									

APLEX AT A GLANCE

Founded in 2004

APLEX has committed to providing and developing innovative technologies that enable to benefit our partners. By offering a full spectrum of quality products ranging from industrial panel PCs, HMI, industrial displays, embedded box PC.

APLEX is proud that we fulfill the requirements of our customers in a wide range of industrial applications fields, including factory automation, surveillance, control and communication,medical, healthcare, logistic.

Application



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Empowering the Future of Smart Industry
AI-enabled HMI with robust design and limitless expandability



AI Enabler HMI Solutions

The AITRON Series HMI represents a new generation of innovative design—combining robust construction with flexible expandability. With I/O scalability and a modular architecture, maintenance becomes effortless. Its IP66-certified front panel ensures water and dust resistance, while the ultra-slim edge to edge bezel saves space and enhances aesthetics. Whether in smart factory automation or outdoor applications such as EV chargers and payment kiosks, AITRON HMI delivers a reliable and future-ready solution.

Features

- Narrow Bezel and Slim Chassis Design
- 7"~21.5" TFT-LCD
- IP66 Compliant Aluminum Front Bezel
- Fanless Design
- Wide Range DC 9~36V Power Input
- Multi-touch with Projected Capacitive Touch



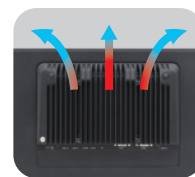
IP66 Front Bezel



Modular Design & Easy Maintenance



7H Hardness PCT Multi-touch



Great Thermal Dissipation



Narrow Bezel and Slim Chassis



Wide Range Operating



intel
CORE
ULTRA

Intel Core
Ultra
Processors

AI is Everywhere

Intel 4
Compute Tile
P-Cores+E-Cores

Intel Arc GPU
Xe-cores

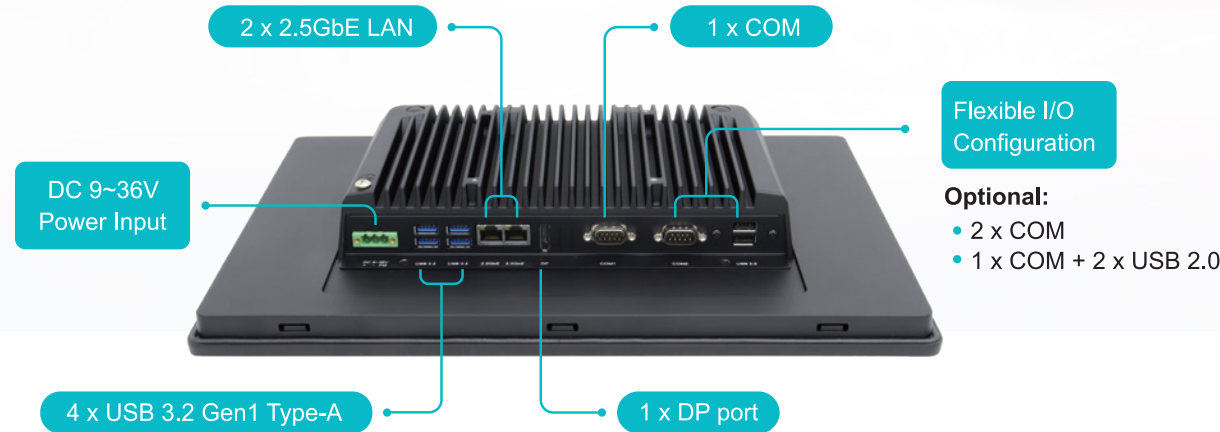
AI Dedicated
NPU

DDR5-5600MHz

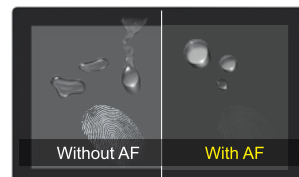
Reimagined
Efficiency

Lead AI at Scale

I/O Interfaces



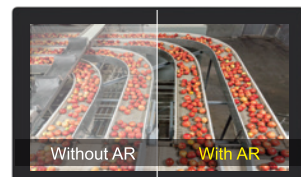
Sunlight Readable Solutions for Optional



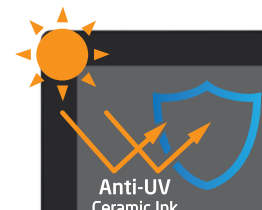
Anti-Fingerprint



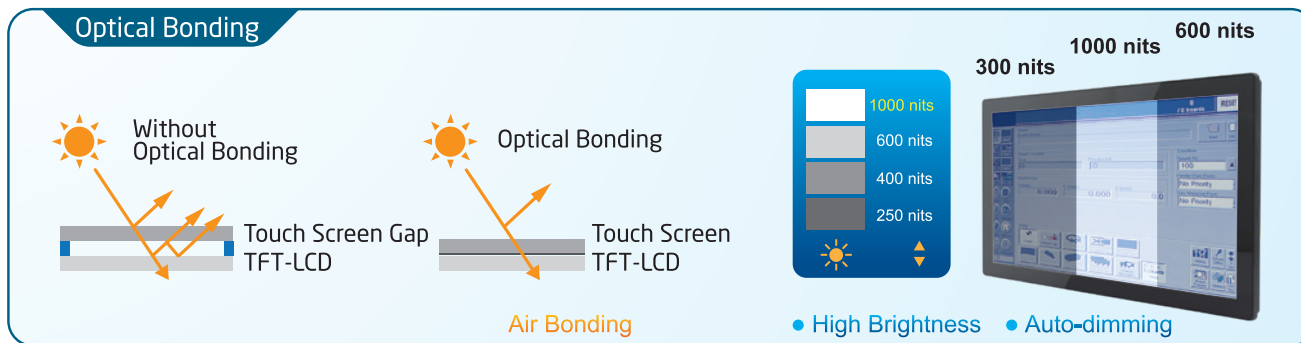
Anti-Glare



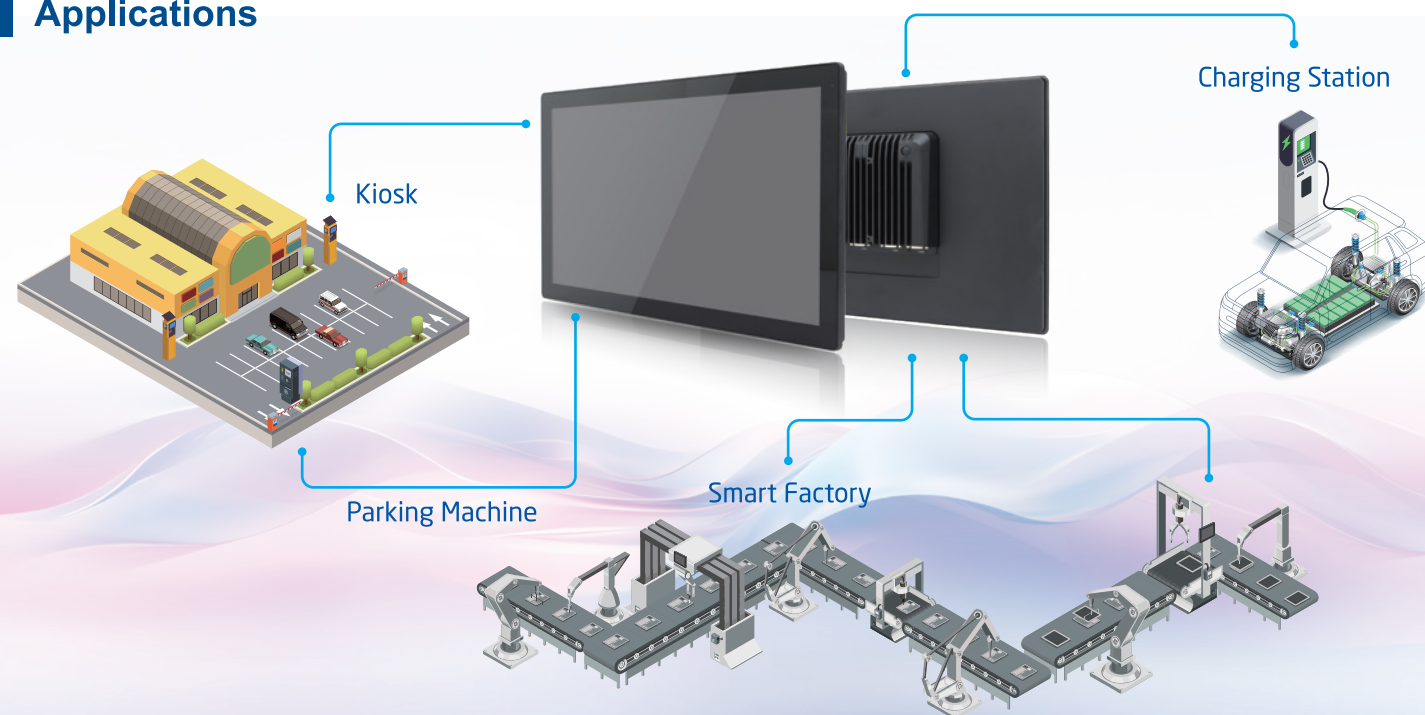
Anti-Reflection



UV Protection



Applications



Product Specification

Model	AiTRON-807CP(H)	AiTRON-810CP(H)	AiTRON-812CP(H)	AiTRON-815CP(H)	AiTRON-816CP(H)	AiTRON-821CP(H)						
System												
CPU	Intel N97 Processor, Quad Core 2.0GHz, TDP is 12W Intel Atom x7425E, Quad Core 1.5GHz, TDP is 12W											
Memory	1 x DDR5 4800MHz SO-DIMM, up to 32GB											
External I/O												
USB	2 x USB 3.2 Gen1 Type-A , 2 x USB 2.0 Type-A											
Serial/Parallel	1 x DB9, supports RS-232/422/485 (COM1, BIOS selection, RS-232 is default) 1 x DB9, supports RS-232/422/485 (COM2, BIOS selection, RS-232 is default) 1 x DB9, supports RS-232 (COM3) as standard, optional 2 x USB 2.0 Type-A											
LAN	2 x RJ-45, support Intel I226V/IT 2.5GbE LAN											
Display Output	1 x HDMI 1.4: Up to 4096 x 2160@30Hz											
Expansion												
Expansion slot	1 x M.2 2230 E-Key (USB2.0, PCIe x1) for optional Wi-Fi/BT module 1 x M.2 3402/3052 B-key (PCIe x1, USB3.2 Gen1, USB2.0) for optional LTE/5G module, w/1 x Nano-SIM slot											
Storage Space												
HDD/SSD	1 x M.2 2280 M-Key socket (SATA 3.0 and PCIe 3.0 x1), Default is SATA Type											
Display												
Display Type	7" TFT-LCD		10.1" TFT-LCD		12.1" TFT-LCD		15" TFT-LCD		15.6" TFT-LCD		21.5" TFT-LCD	
Max. Resolution	1024 x 600		1280 x 800		1024 x 768		1024 x 768		1920 x 1080		1920 x 1080	
Max. Color	16.2M	16.2M	16.7M	16.7M	16.2M	16.7M	16.7M	16.2M	16.7M	16.7M	16.7M	16.7M
Luminance (cd/m2)	350	1000	350	1000	350	1000	350	1000	500	1000	250	1000
View Angle (H/V)	170/170	170/170	170/170	178/178	170/170	178/178	178/168	17/170	176/176	17/170	178/178	178/178
Contrast	800 : 1	800 : 1	800 : 1	800 : 1	800 : 1	800 : 1	1,000 : 1	1000 : 1	1,000 : 1	1000 : 1	1,000 : 1	1,000 : 1
Backlight Lifetime (hrs)	30,000	30,000	30,000	50,000	30,000	70,000	50,000	50,000	50,000	50,000	50,000	50,000
Touch Screen												
Type	Projected Capacitive											
Interface	USB											
Light transmission	>88±2%											
Power												
Power Input	DC 9~36V											
Power Consumption	TBD											
Mechanical												
Construction	Aluminum die-casting chassis											
Mounting	Panel mount, VESA 75x75	Panel mount, VESA 100x100										
IP Rating	IP66 compliant front bezel											
Dimensions (mm)	197 x 135 x 48	270 x 184 x 57	291 x 230 x 55	359 x 283x 56	395 x 245 x 54	592 x 321 x 56						
Net Weight (kg)	TBD											
Environmental												
Operating Temperature	-20~60°C	-20~60°C	-20~60°C	-20~60°C	-20~60°C	0~50°C						
Storage Temperature	-30~70°C	-30~70°C	-30~70°C	-30~70°C	-30~70°C	-10~60°C						
Humidity	10 to 95% @ 40°C, non- condensing											
Other												
Certificate	CE/FCC Class A											
Operating System	Windows 10 IoT Enterprise 2021 LTSC or later, Windows 11 (21H2) or later, Linux 22.04 or later											