ARBOR

Industrial Automation

Edge AI Platform

Automation Controllers

Transportation Computers

Digital Signage Players

Industrial HMI

Edge AI Computing

Edge AI League in ARBOR

Digital Transformation and smart cities have created a demand for advanced edge AI computing solutions. ARBOR Technology recognized this need and developed the innovative series of edge AI computers with powerful, efficient features to support edge computing applications. We also offer a range of solutions that combine MXM and Jetson platforms. These solutions enable real-time analysis, deep learning models, machine vision, autonomous vehicles, and VR equipment to become an exceptional AI partner on your digital transformation journey.

Reduced Latency

Edge AI eliminates the requirement to send huge amounts of data across networks or devices to reduce the network bandwidth usage and latency, and shorten response times. In the end, the main goal of edge computing is to provide as close to real-time business insights as possible.

Control and monitoring

Edge computing requires huge amounts of sensor data to be collected and analyzed need to be made in real-time. In a high-speed production line, latency must be kept to a minimum, and therefore doing the data processing closer to the manufacturing plant is highly valuable.

Minimal Bandwidth

Thousands of IoT devices have to transmit massive amounts of data to the cloud. Local devices can perform results in real-time before sending them back to the central data center, reducing network bandwidth usage and shortening response times.

FPC-521X Series

ARBOR's FPC-521X Series Edge AI that support the Intel® 14th / 13th Gen. Core™ i processors and supports the NVIDIA® RTX™ A4500/A2000 GPU. FPC-5211's unique fanless design, along with embedded heat pipes, ensures efficient cooling and reliable performance even in harsh environments that involve dust and debris. Furthermore, the NVIDIA MXM 3.1 platform can accurately and efficiently perform critical tasks with up to 120W/60W GPU MXM power-efficient module.

FPC-9108-P6-G3

FPC-9108-P6-G3 is a robust Edge AI Computing Platform designed for various applications. It is designed to support advanced AI applications with NVIDIA® GeForce RTX™ 3090 GPU and Intel's 10th Gen. Xeon® Core™ Processor. It comes with a wide-range DC power input, dual-display support, and a PCI-E expansion slot that is compatible with a 350W GPU graphic card. This feature is especially useful for enhancing edge computing and AI inferencing applications.
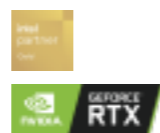
Automatic Number-Plate Recognition

An electronic tolling company chose ARBOR's ARES-5310 as the engine for their ANPR cameras in every toll station of a national highway. The computer performs the video analytic algorithms for video streaming from a camera. With millions of transactions a day, the edge computer reduces the computing load at the central server, as well as the network latency of streaming HD video.

AI-Enabled Wafer Inspection

In Japan, a wafer manufacturer chose ARBOR to develop a highly customized machine vision computer with AI capabilities for their automated inspections in wafer manufacturing. With an Intel CPU, dual NVIDIA Tesla T4 GPU graphic cards and 2.5G PoE connectors, the system fulfills the needs of training on thousands of images to detect deviations from the standard appearance to optimize the inspection process.

Autonomous Vehicles

A LiDAR expert startup company in the USA collaborated with ARBOR to develop their highly automated driving and autonomous driving system. To process the numerous sensor-collected data and thus to deliver high-resolution, three-dimensional information about the surrounding environment, they needed a robust system that was well-integrated with the optical sensors. What ARBOR offers is a highly customized vehicle computer to fulfill customers' needs. The edge system offers stringent performance to process an enormous amount of data and exchange the information with the central server.

Featured Products

FPC-5210	FPC-5211	FPC-9108-P6-G3	AEC-6100 / 6200

Automation Controllers
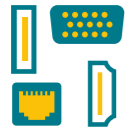
Bringing Industrial Strength to IIoT Applications

ARBOR's automation controllers consolidate high performance CPUs, wide operating temperature ranges, wide voltage ranges, rich I/O options, and highly expandable capabilities for use in industrial automation applications. With the advent of smart factories, PC-based IoT controllers play a critical role in enabling IIoT applications. Our offerings targeting areas like machine vision and predictive maintenance can help customers accelerate IIoT deployment for intelligent manufacturing.
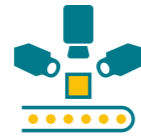
Rich I/O Interfaces

Multiple I/O interfaces and connectivity can simultaneously provide DI/O for real-time inspection, monitoring, and surveillance. Power ignition function can secure important data in case of power outages.

Addressing AOI Demands

Featuring USB 3.0 and GbE PoE interfaces and robust expandable design, ARBOR's automation controllers meet the ever increasing demands of Automated Optical Inspection (AOI) applications.
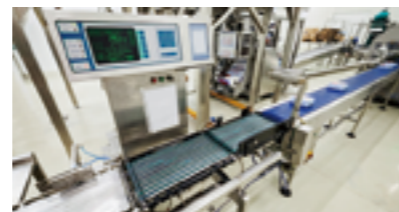
Real-time Communication

From the computing platform itself to the GPU and network interfaces, ARBOR's automation computers use selected components to ensure real-time communication between control systems and the factory floor.

Transportation controller

- Location: Europe
- Service & Product: ARES-5310

Mobile Phone Inspection

- Location: China
- Service & Product: FPC-9002-P6

X-Ray Inspection for Food Safety Process

- Location: UK
- Service & Product: FPC-7900

Featured Products

FPC-821X Series	ARES-1983H	ARES-1983H-MV

Automation Controllers

Smart IoT Solutions

Smart factory is the future. To realize its potential in driving productivity, efficiency, cost savings, and competitive advantage, we need smart factories, smart machines, and smart products to communicate with each other.

Fanless Design and Wide Temperature Support

The fanless design of our box PC makes dust accumulation avoidable. Also, it comes with a wide operating temperature range from -20ºC to 70ºC and storage temperature range from -40ºC to 85ºC, it suitable for operations in harsh environments.

Designed for Connectivity

ARES-5311 has two Mini-PCIe slots to support additional SIM card modules. The new embedded controller's two SIM card slots allow all vehicles or machines to stay networked when they travel across different countries over two types of communication bands.

Extensive I/O Interfaces

With 8 COM ports (RS-232/422/485), one GbE LAN, two PoE ports, four USB 3.0, and 32 DI/O for real-time inspection, monitoring and surveillance at the same time. ARES-5311 also comes with both HDMI and VGA outputs to connect multiple monitors.

Featured Products

ARES-5320	ARES-5311	ARES-5310

Machine Vision Controllers

Kick-start Zero Defects on the Production Line

Machine Vision technology can avoid mistakes occurring on production lines when the human brain gets distracted and tired. ARBOR has developed a highly reliable and low-power consumption machine vision controller that enables swift, precise identification and reduction of faulty goods on production lines. Moreover, it can operate 24/7 to ensure top-quality assurance at the highest level and remain focused on the job, regardless of external factors.

High Performance

ARBOR relies on rich experience and R&D design capabilities to optimize hardware design and heat dissipation management to effectively maintain efficient system operation.

Reliability and Validity

Tailoring designs for specific projects enables the system to operate smoothly, minimizing production disruptions and delivering the reliability crucial for automated manufacturing processes.

Scalability and Flexibility

ARBOR offers highly customized services that are scalable and flexible while maintaining optimum economic efficiency.

Visualize Precision: ARES-1983H Series

ARBOR's robust industrial computers - ARES-1983H series designed for machine vision applications, equipped with the latest Intel 14th generation processors. By leveraging the latest CPU technology, these computers are capable of faster data processing, improved image recognition, and more efficient algorithm execution. The stackable design enables it to meet the stringent requirements of a variety of compact environments within industrial settings.

Featured Products

FPC-9108 Series	FPC-821X Series	ARES-1980	ARES-1983H-MV

Mobile Phone Inspection (AOI)

In China, a smartphone manufacturer replaced manual inspection with ARBOR's Machine Vision Controllers. The automated identification and removal of defective products helped to prevent bottlenecks. It also contributed to significant increases in speed, accuracy which resulted in notable cost savings.

Bottling Line Automation/ Food and Beverage Processing

A can manufacturing factory selected ARBOR's Embedded Controller with four Power-over-Ethernet 802.3af compatible LAN ports, ARES-1970-E, to connect smart cameras for scanning production lines and detect potential problems on glass bottles, caps, tags and packaging. Also, the ARES-1970 was also chosen for drug, food and beverage processing, tracing, and testing equipment in China.

The Efficient Check of Vehicles

Outside of the factory, ARBOR's Machine Vision Solutions are used by Eurotunnel for the efficient check of vehicles wishing to cross the channel. Incorporating number plate recognition, the machines are able to automatically display on-screen information that is directly relevant to individual passengers. This helps to keep waiting times down, as well as preventing those without a booking from entering.

Featured Products

SB-244-11135G7	SB-244-1J64	SB-142-1J64	SB-226-1J64

Transportation Controllers

Internet of Vehicles on the Move

Currently, the Internet of Vehicles (IoV) trend emphasizes seamless integration to enable features such as autonomous driving, in-car entertainment, and vehicle health monitoring. ARBOR Technology provides hardware technology to further innovate the IoV in areas such as predictive maintenance, personalized services and enhanced safety functions.

Box PC Solutions for Railway Applications

Rugged Design for High Reliability

The railway transportation industry has been developed for ages. However, it never stopped, thanks to the advanced modern technology and rolling stock embedded controllers. As a leading embedded computing solutions provider, ARBOR Technology Corp. launches the latest robust box PC for vehicle. Its fanless and wide-temperature designs fulfill the needs of railway solutions.

Reliable Connections

- Shock & vibration resistance
- M8/M12 connections
- Isolated RS-232/422/485 & DIO
- CAN BUS support
- Isolated NMEA 0183
- Fanless and wide temperature design

Uninterrupted Communication

- Wi-Fi & Bluetooth support
- WWAN SIM card socket (3G, HSUPA and LTE/4G)
- GPS support (Glonass, Galileo, BeiDou and QZSS)
- External SIM card socket

Reliable Power Safety

- Power ignition ON/OFF delay.
- Wide DC power input range
- Low voltage protection switch
- Reverse power input protection
- Overvoltage protection
- Supercapacitor power backup

Certification

ARBOR vehicle robust box PC is compliant with EN50155 regulations. Connectors are designed to provide excellent vibration and shock resistance per IEC61373 Category 1 Class B.

Fanless & Wide Temp.

Fanless design prevents dust accumulation. It also operates at a wide temp. range from -20 to 70℃ and storage temp. range from -40 to 85 ℃, it suitable for operations in harsh environments.
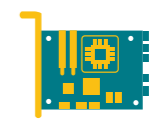
Expansion Slots

ARES-1970E series is supporting two mPCI-E slots for optional Wi-Fi / BT / 3G / 4G / GPS modules, one SIM card slot, one M.2 M-Key (2242) socket for storage module suitable for in-train surveillance.

Passenger Service System

- Location: Europe
- Service & Product: ARES-5310

Passenger Infotainment Service

- Location: USA
- Service & Product: ARTS-1540

Road Safety with LiDAR Sensor

- Location: USA
- Service & Product: ODM Vehicle PC

In-Train Surveillance

- Location: Asia
- Service & Product: ARES-1970E-M12-NVR

In-train Passenger Information System

- Location: Asia
- Service & Product: ARES-1970E-M12-PISC

Featured Products

ARES-5320	ARES-5310	ARTS-1450

Featured Products

FPC-5211	ARES-1970E-M12-PISC	ARES-1970E-M12-NVR	FPC-9000-V1

Ultra Slim HMI

Limitless Versatility via ARM-Based Architecture

IOT-800N-G350 is an 10" HMI based on the powerful MediaTek Genio 350 Quad-Core SoC processor. The system runs on Android 13 and is designed to meet demanding applications where performance matters.

Rugged & Reliable

IOT-800N-G350 features a high resolution display, capacitive touchscreen and computer into one easily deployable package. The panel maintains an IP-54 rating and is engineered to operate in high shock, vibration and temperature ranges (up to 0°C ~ 50°C / 32°F ~ 100°F).

Connectivity for Every Application

IOT-800N-G350 is a true Internet of Things device, with standard wireless features such as 802.11 ac/a/b/g/n, Bluetooth 5, RFID and NFC to keep your systems and processes connected.

Rich I/O

The panel is equipped with 1 x RS-232 port, 1 x RS-232/422/485 port, 2 x High Speed USB ports, 13MP camera, integrated speakers and a built in microphone. IOT-800N-G350 is unique in that it comes equipped with CAN BUS and ignition detection capability, making it ideal for specific applications like fleet management.

Slim Panel PC Solutions

IOT-800N-G350	IOT-800N	M1016
8"	8"	10.1"

Industrial-Grade Panel PCs

Next-Generation HMI for Industry 4.0

ARBOR's Industial panels PCs combine multi-touch interface and flexible add-on capability to simplify dynamic control and display operations for efficient system productivity. Our panel PCs deliver various sizes, durable, multi-tasking and scalable usability to fit perfect for industry 4.0 applications. We have built computers and industrial-grade PC for some of the companies in oil platforms, agriculture, and food factories worldwide.

Smarty Factory / Machine Automation

Fanless Touch Panel

Featuring industrial components and fanless design for non-stop operation

Intelligent Building / Transportation

Industrial-grade Ruggedness

IP65-rated and 7H anti-scratch panels for waterproof protection and dust resistance

Kiosk POS / Rugged Infotainment
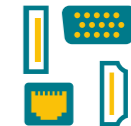
IIoT-ready Connections

Equipped with rich I/O, PCIe front camera and barcode reader connectivity

Solution for Harsh Environment

ARBOR offers customized touch/kiosk panel PCs with rich I/O options, machine automation and OEM manufacturing for companies with unique requirements. For harsh environments as the oil platform, we can offer panel PCs with extensive I/O, compact size, wide temperature, high pressure, resistive touch screen, and ability to communicate with external peripherals.

Industrial HMI Solutions

ASLAN-W922C-IP	SP-181C-1J64	iTC-1150R	iTC-1101C
21.5" 16:9	18" 16:9	15" 4:3	10.1" 16:10

Smart Industrial Power Backup Solution

Protect Your Factory Assets with Super-Capacitor Power Backup Solution

Safe, secure, uninterrupted power is crucial to today's factory productivity, sudden power failure can damage equipment, corrupt data, disrupt production, an UPS usually have batteries inside, ARBOR's power backup solution doesn't, we use supercapacitors instead, guard against power glitches and short-term power loss or to allow for a graceful shutdown.

Smart Power Management Software

Smart Industrial Power Backup Solutions ships with backup power monitoring and management Software, providing user the ability to monitor SuperCapacitor Power Status, power output voltage status, as well as timer to shutdown and more.

Application Scenario: Flexible Implementations

With mounting bracket, Smart Power Backup System can be attached to panel systems to protect HMIs from power interruptions.

Smart Power BackupBoards can be integrated into computing systems or other devices to protect the system from power interruptions.

Featured Products

SCP CUBE MK2	SiP-41B	SiP-42B	SiPB-1690

Multi-Display Controller

Stunning 4K / UHD Video Wall Solution

Powered by Intel® Core-i series processors / AMD Ryzen SoC to ensure high performance for multitasking applications. The control room systems aim at providing communication, security, surveillance, and technology that allow safe, convenient, and comfortable, efficient and environmentally friendly travel for all commuters.

Independent Multi-displays from One Small Controller

ARBOR's multimedia controllers are designed with multiple built-in signal outputs that provide a vibrant visual experience with 4K graphics and complex multimedia features within a slim form factor.

Easy To Deploy and Maintain

With compact design and standard DIN Rail/Wall/VESA Mount on our multi-display controller, clients can easily deploy and maintain display controllers suitable for control room and showroom applications.

Featured Products

ELIT-1270	ELIT-1930	ELIT-1060	IEC-3390
AMD Ryzen	Intel® Coffee Lake	Intel® Celeron® N6210	ARMv8 64-bit Processor
4 Display out	3 Display out	3 Display out	2 Display out

Selection Guide

Edge AI Platform

Model	FPC-5211-P6	FPC-5211-M4	FPC-5211-2M4	FPC-5211-2P4
Dimensions (W x H x D)	285 x 90 x 230mm	285 x 90 x 230mm	285 x 90 x 230mm	285 x 90 x 230mm
CPU	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 35W CPU)	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 35W CPU)	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 35W CPU)	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 35W CPU)
GPU	Intel® HD Graphics 770 or GPU Graphics (support MXM A2000)	Intel® HD Graphics 770 or GPU Graphics (support MXM A2000)	Intel® HD Graphics 770 or GPU Graphics (support MXM A2000)	Intel® HD Graphics 770 or GPU Graphics (support MXM A2000)
Chipset	Intel® R680E	Intel® R680E	Intel® R680E	Intel® R680E
Memory	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)
Video	2 x DP 1.4a, 1 x HDMI 2.0b, 1 x DVI-I	2 x DP 1.4a, 1 x HDMI 2.0b, 1 x DVI-I	2 x DP 1.4a, 1 x HDMI 2.0b, 1 x DVI-I	2 x DP 1.4a 1 x HDMI 2.0b, 1 x DVI-I
Audio	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out
Ethernet	4 x GbE 6 x PoE 802.3af POE	4 x GbE 4 x 802.3af M12 POE	2 x 2.5GbE, 2 x 10GbE 4 x 802.3af/at M12 POE	2 x 2.5GbE, 2 x 10GbE 4 x 802.3af/at M12 POE
Mass Storage	2 x 2.5" drive bays 1 x M.2 B key(2242/2280) 1 x M.2 M key(2242/2280)	2 x 2.5" drive bays 1 x M.2 B key (2242/2280) 1 x M.2 M key(2242/2280)	2 x 2.5" drive bays 1 x M.2 B key (2242/2280) 1 x M.2 M key(2242/2280)	2 x 2.5" drive bays 1 x M.2 B key (2242/2280) 1 x M.2 M key(2242/2280)
USB 3.0/2.0	8 x USB 3.2 Gen 2(10G)	8 x USB 3.2 Gen 2(10G)	8	8
RS-232	-	2	2	2
RS-232/422/485	2	2	2	2
CAN BUS	-	-	2 x CAN Bus 2.0B	2 x CAN Bus 2.0B
Digital I/O	8-in/8-out (Isolation)	8-in/8-out (Isolation)	8-in/8-out (Isolation)	8-in/8-out (Isolation)
Expansion Bus	1 x MXM3.1 TYPE A/B GPU Slot 2 x mPCIe Slots 1 x M.2 B key (2242/3052/2280) 1 x M.2 E key (2230)	1 x MXM3.1 TYPE A/B GPU Slot 2 x mPCIe Slots 1 x M.2 B key (2242/3052/2280) 1 x M.2 E key (2230)	1 x MXM3.1 TYPE A/B GPU Slot 2 x mPCIe Slots 1 x M.2 B key (2242/3052/2280) 1 x M.2 E key (2230)	1 x MXM3.1 TYPE A/B GPU Slot 2 x mPCIe Slots 1 x M.2 B key (2242/3052/2280) 1 x M.2 E key (2230)
Power Input	9~36V / Ignition	9~36V / Ignition	9~36V / Ignition	9~36V / Ignition
Operating Temperature	-20 ~ 50° C, (ambient w/ air flow) -20 ~ 65° C, (w /External SMART FAN kit)	-20 ~ 50° C, (ambient w/ air flow) -20 ~ 65° C, (w /External SMART FAN kit)	-20 ~ 50° C, (ambient w/ air flow) -20 ~ 60° C, (w /External SMART FAN kit)	-20 ~ 50° C, (ambient w/ air flow) -20 ~ 60° C, (w /External SMART FAN kit)

Model	FPC-5210-P6	FPC-5210-M4	FPC-5210-2M4	FPC-5210-2P4
Dimensions (W x H x D)	285 x 110 x 230 mm	285 x 110 x 230 mm	285 x 110 x 230 mm	285 x 110 x 230 mm
CPU	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 65W CPU)	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 65W CPU)	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 65W CPU)	Intel® 14th/13th Gen. Core™ i9/i7/i5/i3 processor in LGA1700 socket (Max 65W CPU)
GPU	Intel® HD Graphics 770 or GPU Graphics (support MXM A4500)	Intel® HD Graphics 770 or GPU Graphics (support MXM A4500)	Intel® HD Graphics 770 or GPU Graphics (support MXM A4500)	Intel® HD Graphics 770 or GPU Graphics (support MXM A4500)
Chipset	Intel® R680E	Intel® R680E	Intel® R680E	Intel® R680E
Memory	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)	2 x 262-pin DDR5 SO-DIMM up to 64GB (ECC/ non ECC)
Video	2 x DP 1.4a, 1 x HDMI 2.0b, 1 x DVI-I	2 x DP 1.4a, 1 x HDMI 2.0b, 1 x DVI-I	2 x DP 1.4a, 1 x HDMI 2.0b, 1 x DVI-I	2 x DP 1.4a, 1 x HDMI 2.0b, 1 x DVI-I
Audio	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out
Ethernet	4 x GbE 6 x 802.3af PoE	4 x GbE 4 x 802.3af M12 PoE	2 x 2.5GbE, 2 x 10GbE 4 x 802.3af/at M12 PoE	2 x 2.5GbE, 2 x 10GbE 4 x 802.3af/at PoE
Mass Storage	2 x 2.5" drive bays 1 x M.2 B key(2242/2280) 1 x M.2 M key(2242/2280)	2 x 2.5" drive bays 1 x M.2 B key(2242/2280) 1 x M.2 M key(2242/2280)	2 x 2.5" drive bays 1 x M.2 B key(2242/2280) 1 x M.2 M key(2242/2280)	2 x 2.5" drive bays 1 x M.2 B key(2242/2280) 1 x M.2 M key(2242/2280)
USB 3.0/2.0	8 x USB 3.2 Gen 2(10G)	8 x USB 3.2 Gen 2(10G)	8 x USB 3.2 Gen 2(10G)	8 x USB 3.2 Gen 2(10G)
RS-232	-	2	2	2
RS-232/422/485	2	2	2	2
CAN Bus	-	-	2 x CAN bus 2.0B	2 x CAN bus 2.0B
Digital I/O	8-in/ 8-out (isolation)	8-in/ 8-out (isolation)	8-in/ 8-out (isolation)	8-in/ 8-out (isolation)
Expansion Bus	1x MXM3.1 TYPE A/B GPU Slot, 2 x mini-PCI Express Slots, 3 x SIM sockets, 1 x M.2 B key (2242/3052/2280), 1 x M.2 E key (2230)	1x MXM3.1 TYPE A/B GPU Slot, 2 x mini-PCI Express Slots, 3 x SIM sockets, 1 x M.2 B key (2242/3052/2280), 1 x M.2 E key (2230)	1x MXM3.1 TYPE A/B GPU Slot, 2 x mini-PCI Express Slots, 3 x SIM sockets, 1 x M.2 B key (2242/3052/2280), 1 x M.2 E key (2230)	1x MXM3.1 TYPE A/B GPU Slot, 2 x mini-PCI Express Slots, 3 x SIM sockets, 1 x M.2 B key (2242/3052/2280), 1 x M.2 E key (2230)
Power Input	9~36V / Ignition	9~36V / Ignition	9~36V / Ignition	9~36V / Ignition
Operating Temperature	-20 ~ 55° C ambient w/ air flow (w/65W TDP CPU,115W GPU)	-20 ~ 55° C ambient w/ air flow (w/65W TDP CPU,115W GPU)	-20 ~ 55° C ambient w/ air flow (w/65W TDP CPU,115W GPU)	-20 ~ 55° C ambient w/ air flow (w/65W TDP CPU,115W GPU)

Selection Guide

Edge AI Platform

Model	FPC-9108-P6-G3	FPC-9108-L2U4-G3	FPC-9107-P6-G2	FPC-9107-L2U4-G2
Dimensions (W x H x D)	181 x 250 x 380 mm	181 x 250 x 380 mm	181 x 250 x 320 mm	181 x 250 x 320 mm
CPU	10th Gen. Intel Xeon®Core™ i9/i7/i5/i3 processor in LGA1200	10th Gen. Intel Xeon®Core™ i9/i7/i5/i3 processor in LGA1200 socket	10th Gen. Intel Xeon®Core™ i9/i7/i5/i3 processor in LGA1200 socket	10th Gen. Intel Xeon®Core™ i9/i7/i5/i3 processor in LGA1200 socket
Chipset	W480E	W480E	W480E	W480E
Memory	2 x 260-pin DDR4 SO-DIMM sockets, supporting 2933 (i9/ i7) / 2666(i5/ i3) / 2400 MHz (Pentium/ Celeron CPU) SDRAM up to 64GB (ECC / Non-ECC)	2 x 260-pin DDR4 SO-DIMM sockets, supporting 2933 (i9/ i7) / 2666(i5/ i3) / 2400 MHz (Pentium/ Celeron CPU) SDRAM up to 64GB (ECC / Non-ECC)	2 x 260-pin DDR4 SO-DIMM sockets, supporting 2933 (i9/ i7) / 2666(i5/ i3) / 2400 MHz (Pentium/ Celeron CPU) SDRAM up to 64GB (ECC / Non-ECC)	2 x 260-pin DDR4 SO-DIMM sockets, supporting 2933 (i9/ i7) / 2666(i5/ i3) / 2400 MHz (Pentium/ Celeron CPU) SDRAM up to 64GB (ECC / Non-ECC)
Video	1 x HDMI, 1 x VGA	1 x HDMI, 1 x VGA	1 x HDMI, 1 x VGA	1 x HDMI, 1 x VGA
Audio	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out
Ethernet	2 x RJ-45 ports for GbE 6 x RJ-45 Ports for PoE (support 60W)	4 x RJ-45 ports for GbE/2.5GbE	2 x RJ-45 Ports for GbE 6 x RJ-45 Ports for PoE (support 60W)	4 x RJ-45 ports for GbE/2.5GbE
Mass Storage	2 x 2.5" drive bays 1 x M.2 B key (2242/3052/2280)	2 x 2.5" drive bays 1 x M.2 B key (2242/3052/2280)	2 x 2.5" drive bays 1 x M.2 B key (2242/3052/2280)	2 x 2.5" drive bays 1 x M.2 B key (2242/3052/2280)
USB 2.0	2	2	1 (Internal)	1 (Internal)
USB 3.0/2.0	2	6	2	6
RS-232	-	2	-	2
RS-232/422/485	2	2	2	2
LPT**	Yes	Yes	-	-
Digital I/O**	8-in/8-out	8-in/8-out	1.5KV isolation 16-in/16-out	1.5KV isolation 16-in/16-out
Expansion Bus	1 x PCIe x16 slot for 350W GPU card 3 x PCI slots 1 x mini-PCI Express 1 x M.2 E key (2230) 1 x M.2 B key (2242 / 3052 / 2280)	1 x PCIe x16 slot for 350W GPU card 3 x PCI slots 1 x mini-PCI Express 1 x M.2 E key (2230) 1 x M.2 B key (2242 / 3052 / 2280)	1 x PCIe x 4, 2 x PCIe x16 1 x mPCIe (full) 1 x SIM 1 x M.2 B key (2242/3052/2280) 1 x M.2-E key 2230	1 x PCIe x 4, 2 x PCIe x16 1 x mPCIe (full) 1 x SIM 1 x M.2 B key (2242/3052/2280) 1 x M.2-E key 2230
Power Input	DC 12 ~ 36V (input for system) DC 12 ~ 36V (input for graphic cards)	DC 12 ~ 36V (input for system) DC 12 ~ 36V (input for graphic cards)	DC 12~36V for system DC 12-36V for GPU card	DC 12~36V for system DC 12-36V for GPU card
Operating Temperature	80W TDP CPU : -20 ~ 50° C (-4 ~ 122° F) 65W TDP CPU : -20 ~ 55° C (-4 ~ 131° F) 35W TDP CPU : -20 ~ 70° C (-4 ~ 158° F) w/ NVIDIA® RTX-3090 : -20 ~ 45° C (-4 ~112° F)	80W TDP CPU : -20 ~ 50° C (-4 ~ 122° F) 65W TDP CPU : -20 ~ 55° C (-4 ~ 131° F) 35W TDP CPU : -20 ~ 70° C (-4 ~ 158° F) w/ NVIDIA® RTX-3090 : -20 ~ 45° C (-4 ~112° F)	80W TDP CPU : -20 ~ 50° C (-4 ~ 122° F) 35W TDP CPU : -20 ~ 70° C (-4 ~ 158° F) w/ NVIDIA® Tesla T4 : -20 ~ 50° C (-4 ~ 122° F) w/ NVIDIA® RTX-3070 : -20 ~ 45° C (-4 ~112° F)	80W TDP CPU : -20 ~ 50° C (-4 ~ 122° F) 35W TDP CPU : -20 ~ 70° C (-4 ~ 158° F) w/ NVIDIA® Tesla T4 : -20 ~ 50° C (-4 ~ 122° F) w/ NVIDIA® RTX-3070 : -20 ~ 45° C (-4 ~112° F)

* Including one outside accessible drive bay
** For LPT and digital I/O, only either one of them is available
🌡 Wide Temperature Range

Model	FPC-8108W-G1	FPC-8109-G1	ARES-1980	ELIT-1060
Dimensions (W x H x D)	225 x 190 x 292 mm	225 x 190 x 292 mm	210 x 70 x 180 mm	118 x 49.5 X 108 mm
CPU	10th Gen Intel® Xeon® Core™ i9/i7/i5/i3 processor in LGA1200 socket	10th Gen Intel® Xeon® Core™ i9/i7/i5/i3 processor in LGA1200 socket	Soldered 11th Intel® Core™ i7/ i5/ i3 Processor	Intel® Celeron® N6210, 1.20GHz
Chipset	W480E	H420E (W480E Optional)	SoC	SoC
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	4GB DDR4 pre-installed
GPU	Supports NVIDIA® GTX-16 series up to 150W GPU	Supports NVIDIA® GTX-16 series up to 150W GPU		
Video	1 x HDMI 1 x VGA 1 x DVI-D	1 x HDMI 1 x VGA 1 x DVI-D	1 x HDMI, 1 x DisplayPort, 1 x DVI-D	2 x HDMI 1 x DisplayPort
Audio	Mic-in/Line-out	Mic-in/Line-out		Mic-in / Line-out (Combo)
Ethernet	2 x RJ-45 ports for GbE 1 x RJ-45 ports for 2.5GbE	2 x RJ-45 ports for GbE 1 x RJ-45 ports for 2.5GbE	2 x PoE(af) 1 x 2.5GbE	2 x 2.5 GbE
Mass Storage	1 x CFast socket 2 x 2.5" drive bays	1 x CFast socket 2 x 2.5" drive bays	1 x 2.5" drive bay, 1 x M.2 M-Key 2242/2280 (Compatible w/ Hailo-8 module)	32GB eMMC 1 x M.2 M-Key 2260/2280 (Compatible w/ Hailo-8 module)
USB 2.0	2	2	1 (internal)	1
USB 3.0/2.0	6	6	4	4 (2 x Type-A, 2 x Type-C)
RS-232	4	4	2	-
RS-232/422/485	2	2	2	1
LPT**	Yes	Yes		-
Digital I/O**	8-in/8-out	8-in/8-out	1.5kV Isolated 8-in/8-out	-
Expansion Bus	3 x PCIe x4, 1 x PCIe x16 1 x mPCIe (full), 1 x SIM, 1 x M.2-E key (2230) 1 x M.2 B key (2242/3052/2280) 1 x full-size Mini-card	4 x PCI, 1 x PCIe x16 1 x SIM, 1 x M.2-E key 2230 1 x full-size Mini-card	1 x mPCIe (full), 1 x M.2 B-Key 2242/3042/3052 w/ 2 x nano SIM (competible w/ Hailo-8 module) 1 x M.2 E-Key 2230	1 x M.2 E-key 2230,
Power Input	DC 9~36V/Ignition	DC 9~36V/Ignition	DC 9 ~ 36V / Power Ignition	DC 12V
Operating Temperature	-20 ~ 70° C (-4 ~ 158° F) 🌡 (w/35W TDP CPU, fanless) -20 ~ 55° C (-4 ~ 131° F) (w/65W TDP CPU, fanless) -20~45° C (-4 ~ 112° F), (w/ GTX-1660 GPU)	-20 ~ 70° C (-4 ~ 158° F) 🌡 (w/35W TDP CPU, fanless) -20 ~ 55° C (-4 ~ 131° F) (w/65W TDP CPU, fanless) -20~45° C (-4 ~ 112° F), (w/ GTX-1660 GPU)	-20 ~ 60° C ambient w/ air flow	-20 ~ 60° C

* Including one outside accessible drive bay
** For LPT and digital I/O, only either one of them is available
🌡 Wide Temperature Range

Selection Guide

Edge AI Platform

Model	AEC-6100	AEC-6200
Dimensions (W x H x D)	260 x 182 x 69 mm	260 x 182 x 69 mm
CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU
Memory	32GB LPDDR5 DRAM	32GB LPDDR5 DRAM
GPU	1792-core NVIDIA Ampere™ architecture GPU with 56 Tensor Cores	1792-core NVIDIA Ampere™ architecture GPU with 56 Tensor Cores
Video	1 x HDMI	1 x HDMI
Ethernet	2 x 10/100/1000 Base-T Ethernet GigE LAN	2 x 10/100/1000 Base-T Ethernet GigE LAN
Storage	2 x M.2 Key M Socket (2280, PCIe x4) 1 x eMMC 5.1, 64GB 1 x Micro SD (External)	2 x M.2 Key M Socket (2280, PCIe x4) 1 x eMMC 5.1, 64GB 1 x Micro SD (External)
USB 3.0/2.0	1 x USB 3.2, 4 x USB 3.1	1 x USB 3.2, 4 x USB 3.1
RS-232/422/485	2	2
Digital I/O**	16 Isolated DIO (8-in/8-out)	16 Isolated DIO (8-in/8-out)
Expansion Bus	1 x PCIe Gen4 x8 Slot, 1 x M.2 Key B Socket, M.2 Key E Socket	1 x PCIe Gen4 x8 Slot, 1 x M.2 Key B Socket, M.2 Key E Socket
Power Input	DC 9V ~ 48V/Ignition	DC 9V ~ 48V/Ignition
Operating Temperature	-25 ~ 70° C (-13 ~ 158° F) (TDP: 30W), -25 ~ 55° C (-13 ~ 131° F) (TDP: 40/50W) 🔆	-25 ~ 70° C (-13 ~ 158° F) (TDP: 30W), -25 ~ 55° C (-13 ~ 131° F) (TDP: 40/50W) 🔆

Automation Computers

Model	FPC-7901/02/03	FPC-9002-P6/ P6-G1	FPC-9002-L2U4
Dimensions (W x H x D)	225 x 120 x 292 mm	225 x 120 x 292 mm	225 x 120 x 292 mm
CPU	6th/7th Gen. Intel® Xeon® E3 / Core™ i7/i5/i3 (LGA1151 socket)	6th/7th Gen. Intel® Xeon® E3 / Core™ i7/i5/i3 (LGA1151 socket)	Intel® Xeon® E3/ 6th & 7th generation Core™ i7/i5/i3 (LGA1151 socket)
Chipset	C236	C236	C236
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM
Video	1 x DisplayPort 1 x VGA, 1 x DVI-D, 1 x HDMI	1 x DisplayPort 1 x VGA, 1 x DVI-D, 1 x HDMI	1 x DisplayPort 1 x VGA, 1 x DVI-D, 1 x HDMI
Audio	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out
Ethernet	3 x GbE	3 x GbE 6 x PoE(af)	1 x CFast, 2 x 2.5" Drive bays (Max.)*
Mass Storage	1 x CFast, 2 x 2.5" Drive bays (Max.)*	1 x CFast, 2 x 2.5" Drive bays (Max.)*	1 x CFast, 2 x 2.5" Drive bays (Max.)*
USB 2.0	-	-	-
USB 3.0/2.0	6	6	10
RS-232	4	4	2
RS-232/422/485	2	2	2
LPT*	Yes	Yes	Yes
Digital I/O**	8-in/8-out	8-in/8-out	8-in/8-out
Expansion Bus	1 x PCIe x16 + 1 x PCI (FPC-7901) 1 x PCIe x16 +1 x PCIe x8 (FPC-7902) 2 x PCI (FPC-7903)	1 x PCIe x8, 1 x PCIe x16, 2 x Mini-card (1 half & 1 full), 1 x SIM	1 x PCIe x8, 1 x PCIe x16, 2 x Mini-card (1 half & 1 full), 1 x SIM
Power Input	DC 9~36V/Ignition	DC 9~36V/Ignition	DC 9~36V/Ignition
Operating Temperature	-20 ~ 55° C	FPC-9002-P6: -20 ~ 50° C FPC-9002-P6-G1: -20 ~ 45° C	-20 ~ 55° C

* Including one outside accessible drive bay
** For LPT and digital I/O, only either one of them is available.
🔆 Wide Temperature Range

Selection Guide

Automation Computers

Model	FPC-8107	FPC-8103	FPC-8102	FPC-8101	FPC-8100
Dimensions (W x H x D)	225 x 140 x 292 mm	225 x 120 x 292 mm	225 x 120 x 292 mm	225 x 120 x 292 mm	225 x 90 x 292 mm
CPU	10th Gen Intel® Xeon® Core™ i9/i7/i5/i3 processor in LGA1200 socket	10th Gen. Intel Core™ i9/i7/i5/i3 processor in LGA1200 socket	10th Gen. Intel Core™ i9/i7/i5/i3 processor in LGA1200 socket	10th Gen. Intel Core™ i9/i7/i5/i3 processor in LGA1200 socket	10th Gen. Intel Core™ i9/i7/i5/i3 processor in LGA1200 socket
Chipset	H420E (W480E Optional)	H420E (W480E Optional)	H420E (W480E Optional)	H420E (W480E Optional)	H420E (W480E Optional)
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM
Video	1 x HDMI 1 x VGA,1 x DVI-D	1 x HDMI 1 x VGA 1 x DVI-D	1 x HDMI 1 x VGA 1 x DVI-D	1 x HDMI 1 x VGA 1 x DVI-D	1 x HDMI 1 x VGA 1 x DVI-D
Audio	1 x Mic-in/ 1 x Line-out	1 x Mic-in/ 1 x Line-out	1 x Mic-in/ 1 x Line-out	1 x Mic-in/ 1 x Line-out	1 x Mic-in/ 1 x Line-out
Ethernet	2 x RJ-45 ports for GbE 1 x RJ-45 ports for 2.5GbE	2 x RJ-45 ports for GbE 1 x RJ-45 ports for 2.5GbE	3xGbE	3xGbE	3xGbE
Mass Storage	1 x CFast socket 2 x 2.5" drive bays	1 x CFast socket 2 x 2.5" drive bays	1 x CFast socket 2 x 2.5" drive bays	1 x CFast socket 2 x 2.5" drive bays	1 x CFast socket 2 x 2.5" drive bays
USB 2.0	2	2	2	2	2
USB 3.0/2.0	6	6	6	6	6
RS-232	4	4	4	4	4
RS-232/422/485	2	2	2	2	2
LPT*	Yes	Yes	Yes	Yes	Yes
Digital I/O*	8-in/8-out	8-in/8-out	8-in/8-out	8-in/8-out	8-in/8-out
Expansion Bus	1 x PCIe x16 2 x PCI slot (FPC-8107-1E2P) 3 x PCI slot (FPC-8107-3P) 1 x M.2 E key (2230) 1 x full-size Mini-card	2 x PCI, 1 x full-size Mini-card, 1 x SIM, 1 x M.2-E key 2230 1 x M.2 B key (2242/3052/2280)	1 x full-size Mini-card, 1 x SIM, 1 x M.2-E key 2230 1 x M.2 B key (2242/3052/2280) 1 x PCIe x16 slot + 1 x PCIe x8 slot	1 x full-size Mini-card, 1 x SIM, 1 x M.2-E key 2230 (2242/3052/2280) 1 x PCIe x16 slot +1 x PCI slot	1 x full-size Mini-card, 1 x SIM, 1 x M.2-E key 2230 1 x M.2 B key (2242/3052/2280)
Power Input	DC 9~36V/Ignition	DC 9~36V/Ignition	DC 9~36V/Ignition	DC 9~36V/Ignition	DC 9~36V/Ignition
Operating Temperature	-20 ~ 70° C (-4 ~ 158° F) (w/ 35W TDP CPU, fanless) -20 ~ 55° C (-4 ~ 131° F) (w/ 65W TDP CPU, fanless) 🔆	-20 ~ 70° C (-4 ~ 158° F) (w/ 35W TDP CPU, fanless) -20 ~ 55° C (-4 ~ 131° F) (w/ 65W TDP CPU, fanless) 🔆	-20 ~ 70° C (-4 ~ 158° F) (w/ 35W TDP CPU, fanless) -20 ~ 55° C (-4 ~ 131° F) (w/ 65W TDP CPU, fanless) 🔆	-20 ~ 70° C (-4 ~ 158° F) (w/ 35W TDP CPU, fanless) -20 ~ 55° C (-4 ~ 131° F) (w/ 65W TDP CPU, fanless) 🔆	-20 ~ 70° C (-4 ~ 158° F) (w/ 35W TDP CPU, fanless) -20 ~ 55° C (-4 ~ 131° F) (w/ 65W TDP CPU, fanless) 🔆

* Including one outside accessible drive bay
** For LPT and digital I/O, only either one of them is available.
🔆 Wide Temperature Range

Selection Guide
Automation Computers

Model	ARES-1983H	ARES-1983H-MV	ARES-5320	ARES-5311
Dimensions (W x H x D)	55 x 210 x 164 mm	90 x 210 x 164 mm	70 x 190 x 125 mm	70 x 180 x 125 mm
CPU	14th/13th Core™ i7 / i5 / i3 processor (LGA1700)	14th/13th Core™ i7 / i5 / i3 processor (LGA1700)	Intel® Atom™ x6425RE	Intel® Atom™ x7 E3950 / Celeron® N3350
Chipset	Intel® H610E	Intel® H610E	SoC	SoC
Memory	1 x DDR5 SO-DIMM	1 x DDR5 SO-DIMM	1 x DDR4 SO-DIMM	1 x DDR3L SO-DIMM
Video	1 x VGA 1 x DisplayPort	1 x VGA 1 x DisplayPort	1 x VGA 1 x DisplayPort	1 x VGA 1 x HDMI
Audio	-	-	1 x Mic-in/1 x Line-out	1 x Mic-in/1 x Line-out
Ethernet	1 x 2.5GbE 2 x GbE	1 x 2.5GbE 2 x GbE 4 x GbE PoE ports	3 x 2.5GbE (-x6425A & -ISO) 1 x 2.5GbE PoE, 2 x 2.5G PoE (-x6425P & -ISO)	1 x GbE 2 x PoE
Mass Storage	1 x M.2 M-Key 2242/2280	1 x 2.5" drive bay, 1 x M.2 M-Key 2242/2280	64GB eMMC, 1 x mSATA 1 x 2.5" drive bay(A & P ver.)	64GB eMMC, 1 x M.2 M-Key 2242
USB 2.0	4(incl. 2 x internal)	4(incl. 2 x internal)	1	-
USB 3.0/2.0	4	4	3	4
RS-232	1	1	2	-
RS-232/422/485	1	1	2 x RS232/422/485 4 x 2kV Isolated RS232/422/485 (-ISO ver.)	6 x RS-232/422/485 3 x RS-232/485
Digital I/O	-	1.5kV Isolated 16-in/16-out	8 x DI/O (A & P ver.) 2kV Isolated 8-in/8-out (-ISO ver.)	2kV Isolated 16-in/16-out
Expansion Bus	1 x M.2 E-key 2230 1 x mPCIe (full) w/ 1 x nano SIM	1 x M.2 E-key 2230 1 x mPCIe (full) w/ 1 x nano SIM	2 x mPCIe (full) w/ 1 x nano SIM 1 x mPCIe(half)	2 x mPCIe (full) w/ 2 x nano SIM
Power Input	DC 12~24V	DC 12~24V	DC 9 ~ 36V/Ignition	DC 9 ~ 36V/Ignition
Operating Temperature	-20 ~ 50° C (w/65W TDP CPU) -20 ~ 60° C (w/35W TDP CPU)	-20 ~ 50° C (w/65W TDP CPU) -20 ~ 60° C (w/35W TDP CPU)	-20 ~ 70° C 🌡	-20 ~ 70° C 🌡

🌡 Wide Temperature Range

Model	ARES-5310	ARES-530WT	ARES-1970	ARES-1970-E
Dimensions (W x H x D)	70 x 180 x 125 mm	70 x 160 x 125 mm	265 x 62 x 141 mm	141 x 272 x 112 mm
CPU	Intel® Atom™ x7 E3950 / Celeron® N3350	Intel® Celeron® J1900/ Atom® E3845	6th Gen. Intel® Core™ i7-6600U/ i5-6300U/ i3-6100U/ i3-7100U	6th Gen. Intel® Core™ i7-6600U/ i5-6300U/ i3-6100U
Chipset	SoC	SoC	SoC	SoC
Memory	1 x DDR3L SO-DIMM	4GB DDR3L installed for J1900 4GB WT DDR3L installed for E3845	4GB DDR4 Installed	4GB DDR4 Installed
Video	1 x VGA, 1 x HDMI	1 x VGA, 1 x DVI-D	1 x VGA 1 x HDMI	1 x VGA 1 x HDMI
Audio	1 x Mic-in/1 x Line-out	1 x Line-out	1 x Mic-in/1 x Line-out	1 x Mic-in/1 x Line-out
Ethernet	3 x GbE (-E3950A, -N3350A) 1 x GbE, 2 x PoE (-E3950P, -N3350P)	2 x GbE	2 x GbE	2 x GbE 4 x PoE (af)
Mass Storage	64GB eMMC, 1 x 2.5" drive bay (-A ver.) 1 x M.2 M-Key 2242 (-P ver.)	2 x mSATA	1 x mSATA	1 x mSATA, 2 x front accessible 2.5" drive bay
USB 2.0	-	5	2	2
USB 3.0/2.0	4	1 (USB 3.0 only)	4	4
RS-232	-	-	-	-
RS-232/422/485	4	1 x 3kV Isolated RS-232/422 1 x 3kV Isolated RS-422/485	4 x RS-232/422/485 4 x RS-232/485	4
Digital I/O	8 x DI/O (-E3950A, -N3350A) 2kV Isolated 16-in/16-out (-E3950P, -N3350P)	3.75kV isolated 4-in/4-out	-	16-in/16-out
Expansion Bus	2 x mPCIe (full) w/ 1 x nano SIM	1 x mPCIe (half)	2 x mPCIe (1 half & 1 full) 1 x SIM, 1 x mSATA	2 x mPCIe (1 half & 1 full) 1 x mSATA
Power Input	DC 9 ~ 36V/Ignition	DC 9 ~ 36V	DC 12~28V	DC 19~36V
Operating Temperature	-40 ~ 70° C 🌡	-20 ~ 70° C (J1900) 🌡 -40 ~ 85° C (E3845)	-20 ~ 70° C 🌡	-20 ~ 55° C

Selection Guide
Automation Computers

NEW   NEW   NEW   Coming Soon

Model	FPC-8213	FPC-8212	FPC-8211	FPC-8210
Dimensions (W x H x D)	195 x 125 x 268 mm	195 x 125 x 268 mm	195 x 125 x 268 mm	195 x 90 x 268 mm
CPU	Intel® 14th/13th/12th Gen Core™ i9/i7/i5/i3 (LGA1700 socket)	Intel® 14th/13th/12th Gen Core™ i9/i7/i5/i3 (LGA1700 socket)	Intel® 14th/13th/12th Gen Core™ i9/i7/i5/i3 (LGA1700 socket)	Intel® 14th/13th/12th Gen Core™ i9/i7/i5/i3 (LGA1700 socket)
Chipset	H610E	H610E	H610E	H610E
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM
Video	1 x VGA, 1 x DVI-D, 1 x DisplayPort	1 x VGA, 1 x DVI-D, 1 x DisplayPort	1 x VGA, 1 x DVI-D, 1 x DisplayPort	1 x VGA, 1 x DVI-D, 1 x DisplayPort
Audio	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out
Ethernet	3 x 2.5GbE	3 x 2.5GbE	3 x 2.5GbE	3 x 2.5GbE
Mass Storage	1 x CFast, 2 x 2.5" Drive bays	1 x CFast, 2 x 2.5" Drive bays	1 x CFast, 2 x 2.5" Drive bays	1 x CFast, 2 x 2.5" Drive bays
USB 2.0	-	-	-	-
USB 3.0/2.0	2 x USB 3.2 Gen2 (10Gbps) 4 x USB 3.2 Gen1 (5Gbps)	2 x USB 3.2 Gen2 (10Gbps) 4 x USB 3.2 Gen1 (5Gbps)	2 x USB 3.2 Gen2 (10Gbps) 4 x USB 3.2 Gen1 (5Gbps)	2 x USB 3.2 Gen2 (10Gbps) 4 x USB 3.2 Gen1 (5Gbps)
RS-232	2	2	2	2
RS-232/422/485	2	2	2	2
LPT*	Yes	Yes	Yes	Yes
Digital I/O*	8-in/8-out	8-in/8-out	8-in/8-out	8-in/8-out
Expansion Bus	1 x Mini-card, 1 x M.2 E Key (2230), 1 x M.2 B key(2242/3052/2280) 2 x PCI	1 x Mini-card, 1 x M.2 E Key (2230), 1 x M.2 B key(2242/3052/2280) 1 x PCIe x16 slot +1 x PCIe x8 slot	1 x Mini-card, 1 x M.2 E Key (2230), 1 x M.2 B key(2242/3052/2280) 1 x PCIe x16 slot +1 x PCI slot	1 x Mini-card, 1 x M.2 E Key (2230), 1 x M.2 B key(2242/3052/2280)
Power Input	DC 9~36V	DC 9~36V	DC 9~36V	9~36V
Operating Temperature	❄ -20 ~ 70° C ambient w/ air flow (35W TDP CPU, Fanless) -20 ~ 55° C ambient w/ air flow (65W TDP CPU, fanless)	❄ -20 ~ 70° C ambient w/ air flow (35W TDP CPU, Fanless) -20 ~ 55° C ambient w/ air flow (65W TDP CPU, fanless)	❄ -20 ~ 70° C ambient w/ air flow (35W TDP CPU, Fanless) -20 ~ 55° C ambient w/ air flow (65W TDP CPU, fanless)	-20 ~ 55° C ambient w/ air flow (35W TDP CPU, Fanless)

* For LPT and digital I/O, only either one of them is available.
❄ Wide Temperature Range

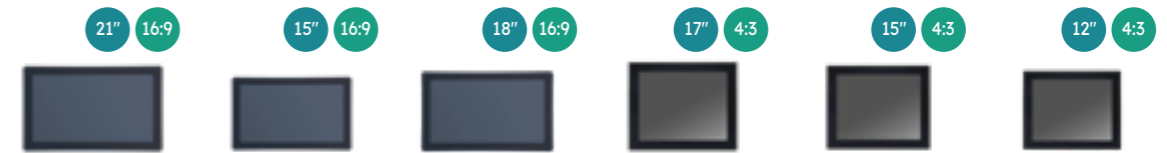| Model	FPC-7913	FPC-7912	FPC-7911	FPC-7910
Dimensions (W x H x D)	195 x 110 x 268 mm	195 x 110 x 268 mm	195 x 110 x 268 mm	195 x 75 x 268 mm
CPU	6th/7th Gen. Intel® Core™ i7/i5/i3 (LGA1151 socket)	6th/7th Gen. Intel® Core™ i7/i5/i3 (LGA1151 socket)	6th/7th Gen. Intel® Core™ i7/i5/i3 (LGA1151 socket)	6th/7th Gen. Intel® Core™ i7/i5/i3 (LGA1151 socket)
Chipset	H110	H110	H110	H110
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM
Video	1 x VGA, 1 x DVI-D, 1 x HDMI	1 x VGA, 1 x DVI-D, 1 x HDMI	1 x VGA, 1 x DVI-D, 1 x HDMI	1 x VGA, 1 x DVI-D, 1 x HDMI
Audio	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out	Mic-in/Line-out
Ethernet	3 x GbE	3 x GbE	3 x GbE	3 x GbE
Mass Storage	2 x 2.5" drive bay 1 x CFast	2 x 2.5" drive bay 1 x CFast	2 x 2.5" drive bay 1 x CFast	2 x 2.5" drive bay 1 x CFast
USB 2.0	6	6	6	6
USB 3.0/2.0	4	4	4	4
RS-232	2	2	2	2
RS-232/422/485	2	2	2	2
LPT*	Yes	Yes	Yes	Yes
Digital I/O*	8-in/8-out	8-in/8-out	8-in/8-out	8-in/8-out
Expansion Bus	2 x PCI, 1 x Mini-card (full), 1 x SIM	1 x PCIe x8, 1 x PCIe x16, 1 x Mini-card (full), 1 x SIM	1 x PCI, 1 x PCIe x16, 1 x Mini-card (full), 1 x SIM	1 x Mini-card (full), 1 x SIM
Power Input	DC 9 ~ 36V	DC 9 ~ 36V	DC 9 ~ 36V	DC 9 ~ 36V
Operating Temperature	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C

Selection Guide
Automation Computers

Model	SB-122-1J64	SB-142-1J64	SB-142-2J64	SB-244-11135G7	SB-244-1J64	SB-226-1J64
Dimensions (W x H x D)	165 x 120 x 50 mm	165 x 120 x 50 mm	165 x 125 x 45 mm	224 x 140 x 49.2 mm	200 x 153 x 52.8 mm	200 x 130 x 44 mm
CPU	Intel® Celeron® J6412 CPU Elkhart Lake	Intel® Celeron® J6412 CPU Elkhart Lake	Intel® Celeron® J6412 CPU Elkhart Lake	Intel® Tiger Lake i5-1135G7 2.4G	Intel® Celeron® J6412 CPU Elkhart Lake	Intel® Celeron® J6412 CPU Elkhart Lake
Graphics	Intel® UHD Graphics for 10th Gen. Intel® Processors	Intel® UHD Graphics for 10th Gen. Intel® Processors	Intel® UHD Graphics for 10th Gen. Intel® Processors	Intel® Iris® Xe graphics	Intel® UHD Graphics for 10th Gen. Intel® Processors	Intel® UHD Graphics for 10th Gen. Intel® Processors
Memory	1 x DDR4 SO-DIMM slot	1 x DDR4 SO-DIMM slot	1 x DDR4 SO-DIMM slot	1 x DDR4 SO-DIMM slot	1 x DDR4 SO-DIMM slot	1 x DDR4 SO-DIMM slot
Video	1 x HDMI, 1 x DP	1 x HDMI, 1 x DP	1 x HDMI, 1 x DP	2 x HDMI, 1 x DP	1 x HDMI, 1 x DP	1 x HDMI
Audio	-	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out
LAN Chipset	1 x Intel I210AT, 1 x Intel I226-V	1 x Intel I210AT, 3 x Intel I226-V	1 x Intel I210AT, 3 x Intel I226-V	1 x Intel i219LM, 3 x Intel i210	1 x Intel I210AT, 3 x Intel I226-V	2 x Intel I211
Ethernet	2 x RJ45	4 x RJ45	4 x RJ45	4 x RJ45	4 x RJ45	2 x RJ45
Mass Storage	1 x M.2 M Key(2242)	1 x M.2 2242	1 x M.2 2242	1 x M.2 2242, 1 x SATA	1 x M.2 2242, 1 x SATA	1 x M.2 2242, 1 x mSATA
USB 2.0	2 x Internal 2 x External	2 x Internal 2 x External	2	2 x Internal 3 x External	1 x Internal 4 x External	2 x Internal
USB 3.1/3.2	2 x USB 3.1	2 x USB 3.1	2 x USB 3.1	3 x USB3.2	2 x USB 3.1	4 x USB 3.1
RS-232/422/485	2	2	2	4	2 x RS232/RS422/RS485, 2 x RS485, 2 x RS232	1 x RS232/RS422/RS485, 4 x RS485, 1 x RS232
GPIO	-	1 x 8bit programmable GPIO	1 x 8bit programmable GPIO	1 x 8bit programmable GPIO	1 x 8bit programmable GPIO	1 x 4bit programmable GPIO
OS Support	Windows 10, Ubuntu 20.04	Windows 10, Ubuntu 20.04	Windows 10, Ubuntu 20.04	Windows 10, Ubuntu 20.04	Windows 10, Ubuntu 20.04	Windows 10, Ubuntu 20.04
Expansion Bus	1 x Mini-PCIe, 1 x E-Key M.2 2230	-	1 x Mini-PCIe, 1 x E-Key M.2 2230	1 x Mini-PCIe, 1 x E-Key M.2 2230	1 x Mini-PCIe, 1 x E-Key M.2 2230	1 x Mini-PCIe slot
Power Input	DC 12-24V	DC 12-24V	DC 12-24V	DC 10-36V	DC 12-24V	DC 12-36V
Certification	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Operating Temperature	-20 ~ 60° C	-20 ~ 60° C	-20 ~ 60° C	-20 ~ 60° C	-10 ~ 60° C	-20 ~ 60° C

🌡 Wide Temperature Range

Selection Guide
Industrial HMI

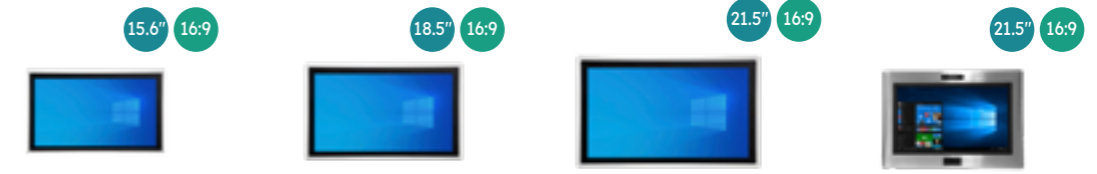| Model	SP-211C-11115G4	SP-151C-11115G4	SP-181C-1J64	SP-170R-1J64	SP-150R-1J64	SP-120R-1J64
Dimensions (W x H x D)	528.2 X 321.9 X 59 mm	395 x 245.5 x 59 mm	395 x 245.5 x 66mm	392.4 x 327.7 x 66 mm	351.6 x 275.6 x 68.4 mm	307 x 241.6 x 60 mm
CPU	Intel® 11th i3-1115G4 3.0G	Intel® 11th i3-1115G4 3.0G	Intel® Celeron® J6412 CPU Elkhart Lake	Intel® Celeron® J6412 CPU Elkhart Lake	Intel® Celeron® J6412 CPU Elkhart Lake	Intel® Celeron® J6412 CPU Elkhart Lake
Graphics	Intel® UHD Graphics for 11th Gen. Intel® Processors	Intel® UHD Graphics for 11th Gen. Intel® Processors	Intel® UHD Graphics for 10th Gen. Intel® Processors	Intel® UHD Graphics for 10th Gen. Intel® Processors	Intel® UHD Graphics for 10th Gen. Intel® Processors	Intel® UHD Graphics for 10th Gen. Intel® Processors
Memory	1 x DDR4 SO-DIMM slot	1 x DDR4 SO-DIMM slot	1 x DDR4 SO-DIMM	1 x DDR4 SO-DIMM	1 x DDR4 SO-DIMM	1 x DDR4 SO-DIMM
LCD Display	21.5", 1920 x 1080	15.6", 1920 x 1080	18.5" 1366 x 768	17", 1280 x 1024	15", 1024 x 768	12.1", 1024 x 768
Touch Screen	P-CAP	P-CAP	P-CAP	Resistive	Resistive	Resistive
Luminance	250 cd/m²	450 cd/m²	500 cd/m²	250 cd/m²	300 cd/m²	450 cd/m²
Video	1 x HDMI (up to 4096x2304@60hz)	1 x HDMI (up to 4096x2304@60hz)	1 x HDMI (up to 4096x2304@60hz)	1 x HDMI (up to 4096x2304@60hz)	1 x HDMI (up to 4096x2304@60hz)	1 x HDMI (up to 4096x2304@60hz)
Audio	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out
Speakers	2 x 4Ω3W speaker	2 x 4Ω3W speaker	2 x 4Ω3W speaker	2 x 4Ω3W speaker	2 x 4Ω3W speaker	2 x 4Ω3W speaker
LAN Chipset	1 x Intel I226-V 2.5GbE 2 x Intel I210-AT GbE	1 x Intel I226-V 2.5GbE 2 x Intel I210-AT GbE	2 x Intel I226-V	2 x Intel I226-V	2 x Intel I226-V	2 x Intel I226-V
Ethernet	3 x RJ45	3 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45
Mass Storage	1 x 2.5" SATA Drive bay 1 x M.2 2242	1 x 2.5" SATA Drive bay 1 x M.2 2242	1 x 2.5" SATA Drive bay 1 x M.2 2242	1 x 2.5" SATA Drive bay 1 x M.2 2242	1 x 2.5" SATA Drive bay 1 x M.2 2242	1 x 2.5" SATA Drive bay 1 x M.2 2242
RS-232/422/485	2 x RS232/RS422/RS485, 2 x RS232/RS485, 2 x RS232	2 x RS232/RS422/RS485, 2 x RS232/RS485, 2 x RS232	1 x RS232/RS422/RS485, 1 x RS232/RS485, 1 x RS232	1 x RS232/RS422/RS485, 1 x RS232/RS485, 1 x RS232	1 x RS232/RS422/RS485, 1 x RS232/RS485, 1 x RS232	1 x RS232/RS422/RS485, 1 x RS232/RS485,
USB 3.1/2.0	4 x USB3.1	4 x USB3.1	2 / 2	2 / 2	2 / 2	2 / 2
Expansion Bus	1 x mPCIe, 1 x M.2 2230, 1 x SIM	1 x mPCIe, 1 x M.2 2230, 1 x SIM	1 x mPCIe, 1 x M.2 2230, 1 x SIM	1 x mPCIe, 1 x M.2 2230, 1 x SIM	1 x mPCIe, 1 x M.2 2230, 1 x SIM	1 x mPCIe, 1 x M.2 2230, 1 x SIM
Power Input	DC 12~36V	DC 12~36V	DC 12~36V	DC 12~36V	DC 12~36V	DC 12~36V
Operating Temperature	-10 ~ 50° C	-10 ~ 60° C	-10 ~ 60° C	-10 ~ 50° C	-10 ~ 60° C	-10 ~ 60° C

Selection Guide
Industrial HMI

| Model	iTC-1101C	iTC-1121R	iTC-1150R	iTC-1170R	iTC-1150R-EXP	iTC-1170R-EXP
Dimensions (W x H x D)	255 x 175 x 62.8 mm	315 x 260 x 68.8 mm	367 x 299 x 68.8 mm	415 x 347 x 70 mm	367 x 299 x 99 mm	415 x 347 x 100 mm
CPU	Intel® Celeron® J6413 Quad-Core™ 1.80GHz	Intel® Celeron® J6413 Quad-Core™ 1.80GHz	Intel® Celeron® J6413 Quad-Core™ 1.80GHz	Intel® Celeron® J6413 Quad-Core™ 1.80GHz	Intel® Celeron® J6413 Quad-Core™ 1.80GHz	Intel® Celeron® J6413 Quad-Core™ 1.80GHz
Memory	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed
LCD Display	10.1", 1280 x 800	12.1", 1024 x 768	15", 1024 x 768	17", 1280 x 1024	15", 1024 x 768	17", 1280 x 1024
Touch Screen	P-CAP	Resistive	Resistive	Resistive	Resistive	Resistive
Video Output	1 x DVI-D 1 x DisplayPort	1 x DVI-D 1 x DisplayPort	1 x DVI-D 1 x DisplayPort	1 x DVI-D 1 x DisplayPort	1 x DVI-D 1 x DisplayPort	1 x DVI-D 1 x DisplayPort
Audio	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out	1x Mic-in / 1x Line out
Ethernet	1 x GbE 1 x 2.5GbE	1 x GbE 1 x 2.5GbE	1 x GbE 1 x 2.5GbE	1 x GbE 1 x 2.5GbE	1 x GbE 1 x 2.5GbE	1 x GbE 1 x 2.5GbE
Mass Storage	1 x M.2 M-key 2242/2280	1 x M.2 M-key 2242/2280 1 x 2.5" drive bay	1 x M.2 M-key 2242/2280 1 x 2.5" drive bay	1 x M.2 M-key 2242/2280 1 x 2.5" drive bay	1 x M.2 M-key 2242/2280 1 x 2.5" drive bay	1 x M.2 M-key 2242/2280 1 x 2.5" drive bay
RS-232	2(Optional)	2	2	2	4	4
RS-232/ 422/485	2	2	2	2	2	2
Digital I/O	8 bit Digital I/O	8 bit Digital I/O	8 bit Digital I/O	8 bit Digital I/O	8 bit Digital I/O	8 bit Digital I/O
USB 3.0/2.0	4	4	4	4	4	4
Wi-Fi	mPCIe (optional)	mPCIe (optional)	mPCIe (optional)	mPCIe (optional)	mPCIe (optional)	mPCIe (optional)
Speakers	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)
Expansion Bus	1 x mPCIe (full)	1 x mPCIe (full)	1 x mPCIe (full)	1 x mPCIe (full)	1 x mPCIe (full) 1 x PCI 32 bit or 1 x PCIex1 slot	1 x mPCIe (full) 1 x PCI 32 bit or 1 x PCIex1 slot
Power Input	DC 9~36V	DC 9~36V	DC 9~36V	DC 9~36V	DC 9~36V	DC 9~36V
Operating Temperature	-10 ~ 55° C	-10 ~ 55° C	-10 ~ 55° C	-10 ~ 55° C	-10 ~ 55° C	-10 ~ 55° C

Selection Guide
Wide-Screen HMI

Model	ASLAN-W1015C	ASLAN-W1019C	ASLAN-W1022C	ASLAN-W922C-IP
Dimensions (W x H x D)	404 x 255 x 65.8 mm	470 x 295 x 65.7 mm	536 x 332 x 65 mm	620 x 423 x 62 mm
CPU	11ᵗʰ Gen. Intel® Core™ i5-1145G7E 1.50 GHz	11ᵗʰ Gen. Intel® Core™ i5-1145G7E 1.50 GHz	11ᵗʰ Gen. Intel® Core™ i5-1145G7E 1.50 GHz	6ᵗʰ Gen. Intel® Core™ i5-6300U 2.4GHz
Memory	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed
LCD Display	15.6", 1366 x 768, WXGA	18.5", 1366 x 768, WXGA	21.5, 1920 x 1080, FHD	21.5, 1920 x 1080, FHD
Touch Screen	P-CAP	P-CAP	P-CAP	P-CAP
Video Output	1 x HDMI 1 x DisplayPort	1 x HDMI 1 x DisplayPort	1 x HDMI 1 x DisplayPort	-
Audio	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line-out	-
Ethernet	1 x 2.5 GbE 2 x GbE	1 x 2.5 GbE 2 x GbE	1 x 2.5 GbE 2 x GbE	2 x GbE
Mass Storage	1 x 2.5" drive bay 1 x M.2 M-Key 2242/2280 slot	1 x 2.5" drive bay 1 x M.2 M-Key 2242/2280 slot	1 x 2.5" drive bay 1 x M.2 M-Key 2242/2280 slot	1 x mSATA, 2 x 2.5" drive bays
RS-232	2	2	2	-
RS-232/422/485	1	1	1	2
Digital I/O	8in/8out w/ 1.5KV isolation	8in/8out w/ 1.5KV isolation	8in/8out w/ 1.5KV isolation	-
USB 2.0	-	-	-	2
USB 3.0/2.0	4	4	4	-
WiFi	mPCIe(Optional)	mPCIe(Optional)	mPCIe(Optional)	mPCIe(optional)
Speaker	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	-
Expansion Bus	1 x mPCIE (full) 1 x M.2 B-Key 2242/3042/3052 1 x M.2 E-Key 2230 (CNVi + USB 2.0)	1 x mPCIE (full) 1 x M.2 B-Key 2242/3042/3052 1 x M.2 E-Key 2230 (CNVi + USB 2.0)	1 x mPCIE (full) 1 x M.2 B-Key 2242/3042/3052 1 x M.2 E-Key 2230 (CNVi + USB 2.0)	2 x mPCIe (1 half & 1 full)
Power Input	DC 9~36 V	DC 9~36 V	DC 9~36 V	DC 10 ~ 36V
Operating Temperature	-20°C ~ 55°C	-20°C ~ 55°C	0°C ~ 55°C	-10 ~ 50° C

Selection Guide

Wide-Screen HMI

	21.5" 16:9	18.5" 16:9	15.6" 16:9	11.6" 16:9	10.1" 16:10
Model	ASLAN-W922C-6300G4	ASLAN-W919C-6300G4	ASLAN-W915C-6300G4	ASLAN-W912C-6300G4	ASLAN-W910C-6300G4
Dimensions (W x H x D)	536 x 332 x 55.5 mm	470 x 295 x 56.2 mm	404 x 255 x 56.3 mm	306 x 206 x 76.5 mm	255 x 175 x 76.5 mm
CPU	6th Gen. Intel® Core™ i5-6300U 2.4GHz	6th Gen. Intel® Core™ i5-6300U 2.4GHz	6th Gen. Intel® Core™ i5-6300U 2.4GHz	6th Gen. Intel® Core™ i5-6300U 2.4GHz	6th Gen. Intel® Core™ i5-6300U 2.4GHz
Memory	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed	4GB DDR4 pre-installed
LCD Display	21.5", 1920 x 1080	18.5", 1366 x 768	15.6", 1366 x 768	11.6", 1920 x 1080	10.1", 1280 x 800
Touch Screen	P-CAP	P-CAP	P-CAP	P-CAP	P-CAP
Video Output	HDMI / VGA	HDMI / VGA	HDMI / VGA	HDMI / VGA	HDMI / VGA
Audio	1 x Mic-in / 1 x Line out (Optional)	1 x Mic-in / 1 x Line out (Optional)	1 x Mic-in / 1 x Line out (Optional)	1 x Mic-in / 1 x Line out (Optional)	1 x Mic-in / 1 x Line out (Optional)
Ethernet	2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Mass Storage	1 x mSATA, 2 x 2.5" drive bays	1 x mSATA, 2 x 2.5" drive bays	1 x mSATA, 2 x 2.5" drive bays	1 x mSATA	1 x mSATA
RS-232	-	-	-	-	-
RS-232/422/485	4	4	4	2	2
Digital I/O	4-in/4-out(optional)	4-in/4-out(optional)	4-in/4-out(optional)	-	-
USB 2.0	-	-	-	-	-
USB 3.0/2.0	4	4	4	4	4
Wi-Fi	mPCIe(optional)	mPCIe(optional)	mPCIe(optional)	mPCIe(optional)	mPCIe(optional)
Speaker	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	-	-
Expansion Bus	2 x mPCIe (1 half & 1 full)	2 x mPCIe (1 half & 1 full)	2 x mPCIe (1 half & 1 full)	2 x mPCIe (1 half & 1 full)	2 x mPCIe (1 half & 1 full)
Power Input	DC 9 ~ 36V	DC 9 ~ 36V	DC 9 ~ 36V	DC 12 ~ 28V	DC 12 ~ 28V
Operating Temperature	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C
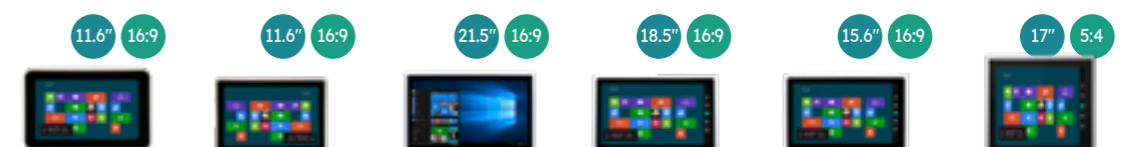
	11.6" 16:9	11.6" 16:9	21.5" 16:9	18.5" 16:9	15.6" 16:9	17" 5:4
Model	ASLAN-W812C-2930G2	ASLAN-W810C-2930G2	ASLAN-W722C-1900G4	ASLAN-W719C-1900G4	ASLAN-W715C-1900G4	ASLAN-917 Series R/C
Dimensions (W x H x D)	306 x 206 x 39.5 mm	255 x 175 x 39.5 mm	536 x 332 x 48.4 mm	470 x 295 x 49.2 mm	404 x 255 x 49.2 mm	420 x 358 x 62.2 mm
CPU	Intel® N2930 Quad-Core™ 1.83GHz	Intel® N2930 Quad-Core™ 1.83GHz	Intel® J1900 Quad-Core™ 2.0GHz	Intel® J1900 Quad-Core™ 2.0GHz	Intel® J1900 Quad-Core™ 2.0GHz	6th Gen. Intel® Core™ i5-6300U 2.4GHz
Memory	2GB DDR3L pre-installed	2GB DDR3L pre-installed	4GB DDR3L pre-installed	4GB DDR3L pre-installed	4GB DDR3L pre-installed	4GB DDR4 pre-installed
LCD Display	11.6", 1920 x 1080	10.1", 1280 x 800	21.5", 1920 x 1080	18.5", 1366 x 768	15.6", 1366 x 768	17", 1280 x 1024
Touch Screen	P-CAP	P-CAP	P-CAP	P-CAP	P-CAP	Resistive
Video Output	DVI-I	DVI-I	DVI-I	DVI-I	DVI-I	HDMI / VGA
Audio	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out	-	-	-	1 x Mic-in / 1 x Line out (Optional)
Ethernet	2 x GbE	2 x GbE	3 x GbE	3 x GbE	3 x GbE	2 x GbE
Mass Storage	1 x mSATA	1 x mSATA	2 x 2.5" drive bays	2 x 2.5" drive bays	2 x 2.5" drive bays	1 x mSATA, 2 x 2.5" drive bays
RS-232	-	-	2	2	2	-
RS-232/422/485	-	-	2	2	2	4
Digital I/O	-	-	-	-	-	-
USB 2.0	1	1	3	3	3	4
USB 3.0/2.0	1	1	1	1	1	4
Wi-Fi	mPCIe(optional)	mPCIe(optional)	mPCIe(optional)	mPCIe(optional)	mPCIe(optional)	mPCIe(optional)
Speaker	-	-	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	-
Expansion Bus	2 x mPCIe (1 half & 1 full)	2 x mPCIe (1 half & 1 full)	1 x mPCIe (full)	1 x mPCIe (full)	1 x mPCIe (full)	2 x mPCIe (1 half & 1 full)
Power Input	DC 12V	DC 12V	DC 9 ~ 36V	DC 9 ~ 36V	DC 9 ~ 36V	DC 9 ~ 36V
Operating Temperature	-10 ~ 55° C	-10 ~ 60° C	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C

Selection Guide
Ultra-Slim HMI

Model	LYNC-817	LYNC-715-4200G4	LYNC-715-1900G4	LYNC-712-4200G4	LYNC-712-1900G4
Dimensions (W x H x D)	428.0 x 380.0 x 77.0 mm	389.93 x 309.93 x 56.96 mm	389.93 x 309.93 x 46.80 mm	325.86 x 258.86 x 53.50 mm	325.86 x 258.86x 44.00 mm
CPU	Intel® J1900 Quad-Core™ 2.0GHz	Intel® N4200 Quad-Core™ 1.10GHz	Intel® J1900 Quad-Core™ 2.0GHz	Intel® N4200 Quad-Core™ 1.10GHz	Intel® J1900 Quad-Core™ 2.0GHz
Memory	4GB DDR3L pre-installed	Soldered 4GB DDR3L onboard	4GB DDR3 pre-installed	Soldered 4GB DDR3L onboard	4GB DDR3 installed
LCD Display	17", 1280 x 1024	15", 1024 x 768	15", 1024 x 768	12.1", 1024 x 768	12.1", 1024 x 768
Touch Screen	Resistive	Resistive	Resistive	Resistive	Resistive
Video Output	DVI-I	DVI	DVI-I	DVI	DVI-I
Audio	Line-out	-	-	-	-
Ethernet	2 x GbE	2 x GbE	2 x GbE	2 GbE	2 x GbE
Mass Storage	1 x CFast, 1 x 2.5" drive bay	1 x CFast, 1 x 2.5" drive bay	1 x CFast, 1 x 2.5" drive bay	1 x CFast, 1 x 2.5" drive bay	1 x CFast, 1 x 2.5" drive bay
RS-232	2	-	-	-	-
RS-232/485	2	4	4	4	4
USB 2.0	3	5	5	5	5
USB 3.0/2.0	1	-	-	-	-
Wi-Fi	mPCIe (optional)	mPCIe (optional)	mPCIe (optional)	mPCIe (optional)	mPCIe (optional)
Speaker	-	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)	2 x 1.5W speakers (optional)
Expansion Bus	1 x mPCIe (full) 1 x PCI 32-bit Slot (default) or 1 x PCIe x1 Slot (optional)	1 x mPCIe (full)	1 x mPCIe (full)	1 x mPCIe (full)	1 x mPCIe (full)
Power Input	DC 9~36V	DC 9~36V	DC 9~36V	DC 9~36V	DC 9~36V
Operating Temperature	0 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C	-20 ~ 55° C

Selection Guide
Multi-Display Terminals

Model	ELIT-1930	ELIT-1270-1807F	ELIT-1270-1605
Dimensions (W x H x D)	210 x 70 x 190 mm	240 x 41 x 204 mm	240 x 50 x 204 mm
CPU	8th/9th Gen. Intel® Core™ i7/i5/i3 (LGA1151)	AMD Ryzen™ Embedded V1807B	AMD Ryzen™ Embedded V1605B
Chipset	Intel Q370	AMD SoC	AMD SoC
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM
Video	1 x HDMI, 1 x DisplayPort, 1 x DVI-D	4 x DisplayPort	4 x DisplayPort
Resolution	3840 x 2160	3840 x 2160	3840 x 2160
Audio	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out
KB/MS	1	-	-
Ethernet	2 x GbE	2 x GbE	2 x GbE
Mass Storage	1 x M.2 M-Key 2280	1 x M.2 M-Key 2242/2280	1 x M.2 M-Key 2242/2280
USB 2.0	-	2	2
USB 3.0/2.0	4	2	2
RS-232/422/485	3 x RS-232/485	2	2
Expansion Bus	1 x M.2 E-Key 2230, 1 x M.2 M-Key 2280, 1 x M.2 B-Key 2242 w/ 1 x Nano SIM	1 x mPCIe (Full) w/ 1 x Nano SIM	1 x mPCIe (Full) w/ 1 x Nano SIM
Power Input	DC 12 ~ 24V	DC 9 ~ 36V	DC 9 ~ 36V
Operating Temperature	-15 ~ 60° C	- 10 ~ 50° C	- 10 ~ 50° C

Selection Guide
Multi-Display Terminals

Model	IEC-3900	IEC-3902	IEC-3904	IEC-3390
Dimensions (W x H x D)	130 x 35 x 124 mm	130 x 35 x 124 mm	130 x 35 x 124 mm	163 x 109 x 35 mm
CPU	7th Gen. Intel® Core™ i7/i5 processor	8th Gen. Intel® Core™ i5-8365UE 1.6GHz/ Celeron 4305UE 2.0GHz	11th Gen. Intel® Core™ i7/i5/i3 processor, Celeron 6305E 1.8GHz	ARMv8, Dual Cortex-A72 + Quad Cortex-A53, 64-bit
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	4GB LPDDR4
Video	2 x HDMI	2 x HDMI	2 x HDMI	2 x HDMI 2.0a output, max support 1 x 4K + 1 x FHD
Resolution	3840 x 2160	3840 x 2160	3840 x 2160	3840 x 2160 / 1920x1080
Audio	-	-	-	1 x 2V RMS Line out, 3.5mm phone Jack
Ethernet	1 x GbE	1 x GbE	1 x GbE	2 x GbE
Mass Storage	1 x M.2 M-Key 2280	1 x M.2 M-Key 2280	1 x M.2 M-Key 2280	64GB eMMC Flash
USB 2.0	-	-	-	4 x Type A, 1 x Type C
USB 3.0/2.0	4	4	4	-
RS-232	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)	2(DB-9)
Expansion Bus	1 x M.2 M-Key 2280	1 x M.2 M-Key 2280	1 x M.2 M-Key 2280	1 x micro SDHC/ micro SDXC/micro SD (Max. 256GB) card socket
Power Input	DC 24V	DC 24V	DC 24V	DC 12V/2A
Operating Temperature	-20 ~ 70° C	-20 ~ 70° C	-20 ~ 70° C	0° C ~ 50° C
Certification	CE, FCC	CE, FCC	CE, FCC, CB	CE, FCC
OS Support	Windows 10 IoT / Linux	Windows 10 IoT / Linux	Windows 10 IoT / Linux	Android 9.0

Selection Guide
Transportation Computers

Model	FPC-9100-V1	FPC-9000-V1	ARES-1970E-M12-NVR	ARES-1970E-M12-PISC	ARTS-1450
Dimensions (W x H x D)	225 x 90 x 292 mm	225 x 90 x 292 mm	225 x 90 x 292 mm	225 x 90 x 292 mm	200 x 54 x 180 mm
CPU	Intel® Xeon®/10th Gen Core™ Intel® i9/i7/i5/i3 in LGA1200 socket	Intel® Xeon® E3/ 6th & 7th Gen Intel® Core™i7/i5/i3 (LGA1151 socket)	Intel® Xeon® E3/ 6th & 7th Gen Intel® Core™i7/i5/i3 (LGA1151 socket)	Intel® Xeon® E3/ 6th & 7th Gen Intel® Core™i7/i5/i3 (LGA1151 socket)	Intel® Atom™ E3845 Quad-Core™ 1.91GHz
Chipset	W480E	C236	C236	C236	SoC
Memory	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM	1 x DDR3L SO-DIMM
Video	1 x VGA, 1 x DVI-D	1 x VGA, 1 x DVI-D	1 x VGA,1 x DVI-D	1 x VGA, 2 x DVI-D	1 x VGA, 1 x DVI-D
Audio	1 x M12-male 4P connector, D-code	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out
Ethernet	1 x RJ-45 ports for GbE, front side 4 x M12-male 8P connector	3 x GbE 4 x M12 PoE (af)	2 x RJ-45 ports for GbE, front side 4 x M12-male 8P connector, IP67 for PoE, A-coded, rear side	2 x RJ-45 ports for GbE, front side 1 x M12-male 8P connector, IP67 for PoE, A-coded, rear side	1 x GbE
Mass Storage	1 x CFast socket 2 x 2.5" Drive bays (Max.)* 1 x M.2 B-Key(2242/2280)	1 x CFast, 2 x 2.5" Drive bays (Max.)*	1 x M.2 M-Key socket for storage module (SATA signal only) 1 x external 2.5" SATA3 6Gb/s Drive Bay 1 x internal 2.5" SATA3 6Gb/s Drive Bay	1 x M.2 M-Key socket for storage module (SATA signal only) 1 x external 2.5" SATA3 6Gb/s Drive Bay 1 x internal 2.5" SATA3 6Gb/s Drive Bay	1 x 2.5" Drive bay, 1 x mSATA
USB 2.0	2	-	-	-	2
USB 3.0/2.0	4	6	4	4	1
RS-232/422/485	2	2	-	-	2
LPT	Yes	-	-	-	-
Digital I/O	8-in/8-out	Isolated 4-in/4-out	-	-	Isolated 4 in/4 out
Expansion Bus	2 x mini-PCI Express, 3 x SIM card sockets 1x M.2-B key 2242 1 x M.2 B key (2242/2252/2280)	3 x Mini-card (1 half & 2 full) 3 x SIM 1 x M.2 B-Key 3042	2 x mPCIe (1 half & 1 full) 1 x SIM	2 x mPCIe (1 half & 1 full) 1 x SIM	3 x mPCIe (1 half & 2 full) 2 x SIM
Power Input	DC 9~36V/Ignition	DC 9~36V/Ignition	DC 9~36V(M12 type)	DC 9~36V(M12 type)	DC 9 ~ 36V
Operating Temperature	-40 ~70° C (w/ 35W TDP CPU, fanless)	-40 ~ 70° C, ambient w/ air flow, w/ Xeon™ E3-1268L-V5t ⚠	-40 ~ 60° C, ambient w/ air flow, w/ 35W TDP Core™ i CPU -40 ~ 70° C, ambient w/ air flow, w/ Xeon™ E3-1268L-V5 ⚠	-40 ~ 60° C, ambient w/ air flow, w/ 35W TDP Core™ i CPU -40 ~ 70° C, ambient w/ air flow, w/ Xeon™ E3-1268L-V5 ⚠	-40 ~ 70° C ⚠

* Including one outside accessible drive bay
⚠ Wide Temperature Range

Selection Guide

Transportation Computers

Model	ARTS-3672W	ARTS-2870
Dimensions (W x H x D)	255 x 90 x 208 mm	270.4 x 110 x 240 mm
CPU	Soldered onboard 2nd Gen. Intel® Core™ i7-2610UE 1.5GHz	Soldered onboard 4th Gen. Intel® Core™ i5-4402E1.6GHz
Chipset	QM67	QM87
Memory	1 x DDR3 SO-DIMM	1 x DDR3L SO-DIMM
Video	1 x DVI-D	1 x VGA, 2 x DVI-D
Audio	1 x Mic-in / 1 x Line out	1 x Mic-in / 1 x Line out
Ethernet	1 x GbE 2 x M12 GbE	4 x GbE
Mass Storage	2 x 2.5" Drive bays, 1 x SATA DOM, 1 x CFast	2 x 2.5" Drive bays*, 1 x mSATA
USB 2.0	4	4
USB 3.0/2.0	-	2
RS-232	-	-
RS-232/422/485	1 x RS-232/485 3 x RS-485	8 x NMEA 0183 2 x RS-232/422/485
Digital I/O	2KV Isolation 6-in/4-out	2KV Isolation 4-in/4-out
Expansion Bus	2 x mPCIe (1 half & 1 full), 1 x SIM	1 x mPCIe (half), 1 x mSATA
Power Input	DC 9 ~ 36V	DC 24V
Operating Temperature	-40 ~ 70° C 🌡	-25 ~ 55° C

* Including one outside accessible drive bay
🌡 Wide Temperature Range

Ultra Slim HMI

Model	IOT-800N	IOT-800N-G350	M1016
Processor	RockChip PX30 Quad-Core ARM Cortex-A35, 1.5GHz	MediaTek Genio 350 Quad-Core SoC	ARM Quad-core Cortex-A35
Memory	2GB DDR4	4GB LPDDR4X SDRAM	2GB DDR4
Storage	16GB eMMC Flash	64GB EMMC5.1	16GB eMMC flash
Camera	1 x 8MP AF (MIPI CSI Type)	1x 13MP MIPI-CSI camera	1 x 8MP AF (MIPI CSI Type)
Audio	1 x 1W built-in mono speaker, 1 x MIC	1 x 8Ω/1W built-in speaker	1 x 1W built-in mono speaker, 1 x MIC
GPS	Yes	Optional	Yes
WWAN	WCDMA/LTE(optional)	LTE(optional)	WCDMA/LTE(optional)
SIM Card	Nano SIM card	Nano SIM card	Nano SIM card
Wi-Fi / BT	802.11 ac/a/b/g/n BT 4.2/BLE	802.11 ac/a/b/g/n BT 5.0	802.11 ac/a/b/g/n BT 4.2/BLE
NFC	Yes	Yes	Yes
SD Card	1 x micro SDHC/SDXC/ MicroSD (Max. 128GB)	1 x micro SDHC/SDXC/ MicroSD (Max. 256GB)	1 x micro SDHC/SDXC/SD (Max. 128GB)
USB Port	2 x USB 2.0 Type-A 1 x micro USB 2.0	2 x USB 2.0 Type-A 1 x micro USB 2.0	2 x USB 2.0 Type-A 1 x micro USB 2.0
Serial Port	1 x RS-232/422/485 1 x RS-232	1 x RS-232/422/485 1 x RS-232	1 x RS-232/422/485 1 x RS-232
LAN	1 x 10/100Mbps	1 x 10/100Mbps	1 x 10/100Mbps
CAN	OBD-II	OBD-II	OBD-II
DIO	3 x DI, 3 x DO (Dry contact)	3 x DI, 3 x DO (Dry contact)	3 x DI, 3 x DO (Dry contact)
Size/Type/ Resolution	8" TFT LCD, 1024 x 600	8" TFT LCD, 1024 x 600	10" TFT LCD, 1024 x 600
Brightness	500 cd/m²	450 cd/m²	500 cd/m²
Touchscreen	Projected Capacitive Multi-touch	Projected Capacitive Multi-touch	Projected Capacitive Multi-touch
Power Input	12V/1.5A, 9~36V Ignition detection	9~36V	12V/1.5A, 9~36V Ignition detection
Operating Temp.	-5° C ~ 60° C	0° C~50° C	-5° C ~ 60° C
Dimensions (W x H x D)	218.16 x 162.67 x 46.5 mm	218.16 x 162.67 x 46.5 mm	248.34 x 195.43 x 51.65mm
Regulatory	CE, FCC, E-Mark	CE, FCC, NCC	CE, FCC
OS Support	Android 8.1, Ubuntu 16.04	Android 13	Android 8.1

Intelligent Power Backup Solution

Model	SCP-41-MK2	SCP-43-MK2	SiP-41B	SiP-42B	SiPB-1690A	SiPB-1690B
Dimensions (W x H x D)	100 X 150 X 187.4 mm	100 X 150 X 187.4 mm	40 x 176 x 112 mm	59 x 176 x 112 mm	160 x 88 x 22.5 mm	160 x 88 x 44.7mm
Type	Supercapacitor 4S1P	Supercapacitor 4S3P	Supercapacitor 4S1P	Supercapacitor 4S2P	Supercapacitor 4S1P	Supercapacitor 4S2P
Capacity	400 Farads / Each	400 Farads / Each	100 Farads / Each	100 Farads / Each	100 Farads / Each	100 Farads / Each
Power Input	DC 12~35V	DC 12~35V	DC 12V / 24V	DC 12V / 24V	DC 12V / 24V	DC 12V / 24V
Power Output	DC 12V / 24V Max 120W	DC 12V / 24V Max 120W	DC 12V / 24V Max 60W	DC 12V / 24V Max 60W	DC 12V / 24V Max 60W	DC 12V / 24V Max 60W
Operating Temperature	-20 ~ 70° C 🌡	-20 ~ 70° C 🌡	-20 ~ 70° C 🌡	-20 ~ 70° C 🌡	-20 ~ 70° C 🌡	-20 ~ 70° C 🌡

🌡 Wide Temperature Range

Frame Grabber Commmunication Cards

Model	PoE-i314	POE-i354	SFP-7102
Dimensions (W x D)	147.8 x 124.3 mm	110.15 x 147.75mm	105.65 x 145.85 mm
LAN Chipset	4 x Intel i210AT	Intel® i350-AM4	1 x Intel X710-BM2
Interface	PCIe x4	PCIe x4	PCIe x4
Port	4 x RJ-45 GbE	4 x RJ-45 GbE	2 x 10G BASE SFP+ Fiber Connector
Power Input	12-24V, from 4-pin AT/ATX power connector	12VDC (Max. 5.6A @ 12VDC)	3A@3.3VDC/ 2.1A@12VDC from PCIe bus
Power Output	15.4W@48VDC power output(per port)	15.4W@48VDC power output(per port)	Max. 15W for 2 x copper Max. 1W for 2 x fiber
Operating Temperature	-20 ~ 70° C 🌡	-20 ~ 65° C 🌡	-25 ~ 55 ° C 🌡

🌡 Wide Temperature Range