

Arestech

Modular Embedded Computing



PRODUCT CATALOGUE

V3.0



Flexible & diversified
manufacturing



Technical
Support



Full Service



Product
Management





Modular Embedded Computing

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About Arestech

Established in 2011, Arestech is swiftly evolved into a key player in the Industrial Computer field. As a system designer, manufacturer, and ODM specializing in Embedded Box PC, Industrial Panel PC, and Touch Monitor, we have successfully served various application-specific markets. We dedicate to delivering innovative, high-quality and high-performance embedded computing solutions to meet our customers' needs and expectations.

Certified by ISO 9001:2015 standard, Arestech proudly upholds the highest standards of quality management, ensuring that our processes and products consistently meet or exceed customer requirements.

At Arestech, we embrace "innovation", "diversity" and "flexibility" as our guiding principles. These values enable us to think outside the box and approach challenges with fresh ideas across diverse applications, markets, and industries. We recognize that different industries are constantly evolving, and we are confident that our products and services at Arestech will surpass all others.



Applications

- Industrial Automation
- Food & Beverage Processing
- Pharmaceutical & Medical Industry
- Warehouse Management
- Self-Service Kiosk
- Edge AI
- Machine Vision
- Human Machine Interface (HMI)

| Core Competence

Agility

We pride ourselves on our resilience while encountering market changes. We remain agile and responsive to the shifts in industry trends, enabling us to adapt quickly and provide corresponding solutions.

Innovation

Arestech excels in ODM/JDM capabilities, tailoring solutions to meet customers' specific requirements and product specifications. We consistently expand and invest in research & development, perpetually enhancing our product innovation to sustain our leading edge in the market.

Teamwork

We cultivate an inclusive environment that encourages our colleagues to express their ideas through effective communication. We contribute to develop new products and solutions by embracing suggestions from all team members, offering mutual support, and working together cohesively.

Full service

Our comprehensive range of services covers everything from pre-sales to after-sales support, ensuring that customers receive prompt assistance while maintaining the highest standards of product quality and service experience.

Commitment

Our primary focus is delivering cutting-edge solutions that empower our customers to achieve their business goals. At Arestech, we attentively address customer's requirements and promptly, effectively, and responsibly cater to those needs.

| Our Vision

At Arestech, our vision is to pioneer the best solutions in Industrial Computer field, serving as the driving force behind innovative technology that can elevate and enrich people's lives. Our commitment goes beyond delivering cutting-edge products; we aim to be the front-runner in innovating industry-leading solutions that directly address the unique challenges faced by our customers. Rooted in industry knowledge, we empower our customers to leverage high-quality products and application-ready hardware, enabling faster time to market and fostering a seamless integration of technology into their evolving needs.

02.

EMBEDDED COMPUTING

The Embedded Computing lines up are designed in both Compact and Expandable Box PC versions which focus on power efficiency or high computing performance.





Model	SB-5512	SB-5612
Processor System		
CPU	Intel® Core™ Series 2 (Bartlett Lake) & 14th/13th/12th LGA 1700 Processors (35/45W)	Intel® Core™ i5-1235U /i5-1245UE CPU Intel® Core™ i5-1335U / i5-1335UE CPU
System Chipset	Intel® Q670	SoC
BIOS	AMI 256 Mbit	UEFI
TPM	Onboard TPM 2.0	
Memory		
Technology	Dual Channel DDR5 4800/5600MHz	Dual Channel DDR4 3200MHz
Type	2 x 262-pin SO-DIMM	2 x 260-pin SO-DIMM
Max. Capacity	96GB	64GB
Display		
Graphic Engine	Intel® UHD Graphics	Intel® Iris® Xe Graphics
Multiple Display	3	2
HDMI	2 x HDMI 2.0b, Max resolution up to 4096 x 2160	2 x HDMI, Max Resolution 4096 x 2160
Display Port	1 x DP, Max solution 4096 x 2160	N/A
Storage		
2.5" SSD/HDD	2 x Removable 2.5" SATA HDD/SSD	N/A
M.2	1 x M.2 M-Key 2242/2280 (PCIe Gen4 x4) 1 x M.2 M-Key 2242 (PCIe Gen4 x4 and SATA III)	1 x M.2 M-Key2 2280 (PCIe x4 and SATA III)
RAID	Intel® VMD RAID 0/1(supported by identical interface (PCIe or SATA))	N/A
I/O Interface		
LAN	1 x 2.5GbE (Intel® I226V) ,1 x GbE (Intel® I219LM)	2 x 2.5GbE (Intel® I226V)
Serial	2 x RS-232/422/485 (Optional for 2 x RS-232)	4 x RS-232/422/485
USB	4 x USB3.2 Gen2	4 x USB3.2 Gen2 , 2 x USB2.0
DIO	N/A	16 x Isolated DI & 16 x Isolated DO (Optional)
GPIO	4 x Input, 4 x Output	
Expansion		
Mini-PCIe	N/A	1 x Full-Size Mini-PCIe (PCIe, USB2.0, and SIM)
M.2	1 x M.2 E-Key 2230 (PCIe x1, USB 2.0 and CNVi for Wireless) 1 x M.2 B-Key 3042/3052 (PCIe x1, USB 3.2 Gen1, and USB 2.0)	1 x M.2 E-Key 2230 (PCIe, CNVi)
SIM Holder	N/A	1 x Nano-SIM Holder
Antenna Hole	7	
Power		
Power Mode	AT/ATX	
Voltage	12~28V DC	9-36V DC
Connector Type	1 x 2-pin Terminal Block Connector	
Mechanical		
Material	Aluminum & SECC	
Mounting	Wall Mount	
Thermal Dissipation	Fanless System	
Dimension WxDxH (mm)	231.5x228x89.5 mm	
Weight (kg)	5.0kg	
Environment		
Operating Temperature (°C)	-20°C~+60°C	
Storage Temperature (°C)	-30°C~+70°C	
Operating Humidity	10~95%@40°C, Non-Condensing	
Storage Humidity	10~95%@60°C, Non-Condensing	
Others		
Vibration	1Grms, 5-500 Hz, 1hr/Axis	
Shock	20Grms, Half-sine 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux	



Model	SB-5000	MERA-3100
Processor System		
CPU	Intel® 14th/13th/12th Gen Core™ (35W)	Intel® 9th/8th Gen Core™ (35W)
Chipset	Intel® R680E	Intel® Q370
BIOS	AMI 256 Mbit SPI Flash	
TPM	TPM 2.0	
Memory		
Technology	Dual Channel DDR5 5600MHz	Dual Channel DDR4 2666MHz
Type	2 x 262-Pin SO-DIMM	2 x 260-Pin SO-DIMM
Max. Capacity	64GB	64GB
Display		
Graphic Engine	Intel® UHD Graphics	
Multiple Display	4	3
Display Port	3 x DP, Max Resolution 4096x2160	1 x DP, Max solution 4096x2160
VGA	1 x VGA, Max Resolution 1920x1200	1 x VGA, Max Resolution 1920x1200
DVI-D	N/A	1 x DVI-D, Max Resolution 1920x1200
Storage		
2.5" SSD/HDD	2 x Internal 2.5" SATA HDD	1 x Removable and 1 x Internal 2.5" SATA HDD
M.2	1 x M.2 2280 M-Key (SATA) 1 x M.2 2280 M-Key (PCIe x4 and SATA)	N/A
mSATA	N/A	2 x mSATA (Shared by 2 x CFAST)
CFAST	N/A	2 x CFAST (Shared by 2 x mSATA)
RAID	RAID 0/1/5/10	
I/O Interface		
LAN	2 x 2.5GbE (Intel® I226-IT)	1 x 1.0GbE (Intel® i219-LM) 2 x 1.0GbE (Intel® i210-AT)
Serial	6 x RS232/422/485	6 x RS232/422/485
USB	9 x USB3.2 Gen2	6 x USB3.2 Gen1 and 2 x USB2.0
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	8 x DI and 8 x DO	
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)	1 x Full-size Mini-PCIe (PCIe, USB2.0 and SIM), 1 x Full-size Mini-PCIe (PCIe, SATA III and SIM) (mux with mSATA)
M.2	1 x M.2 2242/3042/3052 B-Key (PCIe, USB 3.0 and SIM), 1 x M.2 2230 E-Key (PCIe, CNVi)	N/A
SIM Holder	2 x Mini-SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x 3-Pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 35W	
Dimension WxDxH (mm)	240.5 x 200 x 88mm	241.5 x 230 x 73mm
Weight (kg)	3.8kg	3.3kg
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux	

Compact Box PC Series



Model	CB-2210	CB-2260
Processor System		
CPU	Intel® Processor N150	Intel® Core™ i3-N355
BIOS	AMI 256Mbit	
TPM	TPM 2.0	
Memory		
Technology	Single Channel DDR5 4800MHz	
Type	1 x 262-Pin SO-DIMM	
Max. Capacity	16GB	
Display		
Graphic Engine	Intel® UHD Graphics	
Multiple Display	2	
Display Port	2 x DisplayPort 1.4a, Max Resolution 4096 x 2160 (Included 1 output from Type-C)	
Storage		
2.5" SSD/HDD	1 x Removable 2.5" SATA HDD Bay	
I/O Interface		
LAN	2 x 2.5GbE (Intel® I226-IT)	
Serial	2 x RS232/422/485	
USB	3 x USB3.2 Gen2 Type-A 1 x USB3.2 Gen2 Type-C (Supports DP 1.4a display output) 1 x USB2.0 Type-A	
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	4 x DI and 4 x DO, 2 x 5-pin Terminal Block	
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)	
M.2	1 x M.2 2230/2242/2280 B-key (PCIe SATA, USB3.0 and SIM)	
SIM Holder	2 x SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x DC Power Connector, 1 x 3-pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 15W	
Dimension WxDxH (mm)	168 x 135 x 47mm	
Weight (kg)	1.23kg	
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux	

Compact Box PC Series



Model	CB-2200	CB-2250
Processor System		
CPU	Intel® Alder Lake-N Processor N97	Intel® Alder Lake Core™ i3-N305
BIOS	AMI UEFI	
TPM	TPM 2.0	
Memory		
Technology	Single Channel DDR5 5600MHz	
Type	1 x 262-Pin SO-DIMM	
Max. Capacity	16GB	
Display		
Graphic Engine	Intel® UHD Graphics	
Multiple Display	2	
Display Port	2 x DisplayPort 1.4a, Max Resolution 4096 x 2160 (Included 1 output from Type-C)	
Storage		
2.5" SSD/HDD	1 x Removable 2.5" SATA HDD Bay	
I/O Interface		
LAN	2 x 2.5GbE (Intel® I226-IT)	
Serial	2 x RS232/422/485	
USB	3 x USB3.2 Gen2 Type-A 1 x USB3.2 Gen2 Type-C (Supports DP 1.4a display output) 1 x USB2.0 Type-A	
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	4 x DI and 4 x DO	
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)	
M.2	1 x M.2 2230/2242/2280 B-key (PCIe SATA, USB3.0 and SIM)	
SIM Holder	2 x SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x 3-Pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 15W	
Dimension WxDxH (mm)	168 x 135 x 47mm	
Weight (kg)	1.23kg	
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux	

Compact Box PC Series



Model	CB-2297	CB-2274
Processor System		
CPU	Intel® Alder Lake-N N97 Processor	Intel® Atom® x7433RE Processor
BIOS	AMI SPI 256 Mbit	UEFI
Memory		
Technology	Single Channel DDR5 4800MHz	
Type	1 x 262-pin SO-DIMM	
Max. Capacity	32GB	16GB
Display		
Graphic Engine	Intel® UHD Graphics	
Multiple Display	2	
HDMI	1 x HDMI 2.0b, Max resolution up to 4096 x 2160@60Hz	2 x HDMI 2.0, Max resolution up to 4096 x 2160@60Hz
Storage		
2.5" SSD/HDD	1 x 2.5" SATA SSD	
M.2	1 x M.2 (Key M, 2242/2280) with PCIe Gen3 x1 and SATA3 for SSD	1 x M.2 M-Key 2280 (PCIe Gen3 x2)
I/O Interface		
Ethernet	2 x GbE LAN (Intel® I210-AT)	2 x 2.5GbE LAN (Intel® I225-V)
Serial Port	1 x RS-232/422/485 (supports 5V/12V/RI) 3 x RS-232 (supports 5V/12V/RI) (Optional for 2 extra RS-232)	1 x RS-232/422/485 (supports 5V/12V/RI) 1 x RS-232/422/485 , 2 x RS-232
USB	3 x USB3.2 (Gen2), 3 x USB2.0	2 x USB3.2 (Gen2), 2 x USB2.0 (Optional for 2 x USB2.0)
GPIO	Optional for 4 x Input, 4 x Output (D-SUB 9-pin)	
Expansion		
M.2	1 x M.2 E-Key 2230 with PCIe Gen3 x1, USB 2.0 and CNVi for Wireless 1 x M.2 B-Key 3042/3052 with PCIe Gen3 x1, USB 2.0 and SIM for 4G/5G	1 x M.2 E-Key 2230 with PCIe Gen3 x1, USB 2.0 and CNVi for Wireless
SIM Socket	1 x SIM socket connected to M.2 key B	1 x SIM socket connected to Mini PCIe
Power		
Power Mode	AT/ATX	
Voltage	9-36V DC Input	12-36V DC Input
Connector Type	1 x DC Power Connector, 1 x 2-pin Terminal Block	
Mechanical		
Material	Aluminum & SECC	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 15W CPU	
Dimension WxDxH (mm)	168x215x45.9 mm	
Weight (kg)	3.5kg	
Environment		
Operating Temperature (°C)	-20°C~+60°C	
Storage Temperature (°C)	-40°C~+85°C	
Operating Humidity	10~95%@40°C, Non-Condensing	
Storage Humidity	10~95%@40°C, Non-Condensing	
Others		
Vibration	1.5Grms, 5 - 500 Hz, 0.5 hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux	



Model	MERA-2000	MERA-2100
Processor System		
CPU	Intel® Celeron® J1900	Intel® Pentium® N4200
BIOS	AMI UEFI	
Memory		
Technology	Single Channel DDR3L-1333MHz	Single Channel DDR3L-1866MHz
Type	2 x 204-Pin SO-DIMM	
Max. Capacity	8GB	
Display		
Graphic Engine	Intel® UHD Graphics	Intel® HD Graphics 505
Multiple Display	2	
HDMI	N/A	1 x HDMI 1.4b, Max Resolution 4096x2160 (Optional)
Display Port	1 x DP, Max Resolution 2560x1600	1 x DP1.4a, Max Resolution 4096x2160
VGA	1 x DVI-I (DVI-D+VGA), Max Resolution 1920x1200	1 x VGA, Max Resolution 1920x1200
Storage		
2.5" SSD/HDD	1 x Removable 2.5" SATA HDD Bay	
mSATA	1 x mSATA (Shared by 1 x Mini-PCIe and CFast)	1 x mSATA (Shared by 1 x Mini-PCIe)
CFast	1 x CFast (Shared by mSATA)	N/A
I/O Interface		
LAN	2 x 1.0GbE (Intel® I210-AT)	
Serial	2 x RS232/422/485	
USB	1 x USB3.0, 4 x USB2.0	2 x USB3.2 Gen1, 2 x USB2.0
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	4 x DI and 4 x DO	
Expansion		
Mini-PCIe	1 x Full-size Mini-PCIe (SATA, USB2.0 and SIM) (shared by mSATA) 1 x Full-size Mini-PCIe (PCIe, USB2.0 and SIM)	
SIM Holder	2 x SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x 3-Pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 15W	
Dimension WxDxH (mm)	168 x 135 x 47mm	
Weight (kg)	1.1kg	
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Linux	Windows 10 IoT, Windows 11 IoT/Professional, Linux



Model	BPC-5112	BPC-5080
Processor System		
CPU	Intel® 14th/13th/12th Gen Core™ (35W)	Intel® 9th/8th Gen Core™ (35W)
Chipset	Intel® Q670	Intel® Q370
Socket	LGA1700	LGA1151
BIOS	AMI UEFI	
Memory		
Technology	Dual Channel DDR5-4800/5600MHz	Dual Channel DDR4-2666MHz
Type	2 x 262-Pin SO-DIMM	2 x 260-Pin SO-DIMM
Max. Capacity	96GB	64GB(i9/i7/i5)/32GB(i3/Pentium®/Celeron®)
Display		
Graphic Engine	Intel® UHD Graphics	Intel® UHD Graphics
Multiple Display	3	3
HDMI	2 x HDMI2.0b, Max Resolution 4096x2160	N/A
Display Port	1 x DP1.4a, Max Resolution 4096x2160	3 x DP1.2, Max Resolution 4096x2160
VGA	N/A	N/A
Storage		
2.5" SSD/HDD	2 x SATA III (6Gb/s)	
M.2	1 x M.2 M-Key 2242/2280 (PCIe Gen4 x4) 1 x M.2 M-Key 2242 (PCIe Gen4 x4 and SATA III)	1 x 2242/2260/2280 M-Key (PCIe x4, SATA)
I/O Interface		
LAN	1 x 2.5GbE (Intel® I226-V) 1 x 1.0GbE (Intel® I219-LM)	1 x 1.0GbE (Intel® I210) 1 x 1.0GbE (Intel® I219-LM)
Serial	2 x RS232/422/485	1 x RS232/422/485, 2 x RS232
USB	4 x USB3.2 Gen2, 4 x USB2.0	4 x USB3.1, 4 x USB2.0
Audio	1 x Mic-In, 1 x Line-Out	1 x Mic-In, 1 x Line-Out
GPIO	4 x DI and 4 x DO	N/A
Expansion		
Mini-PCIe	N/A	1 x Full-Size Mini-PCIe (PCIe x1, USB2.0)
M.2	1 x M.2 E-Key 2230 (PCIe x1, USB 2.0 and CNVi for Wireless) 1 x M.2 B-Key 3042/3052 (PCIe x1, USB 3.2 Gen1, and USB 2.0)	1 x M.2 2230 E-Key (PCIe x1, USB2.0, CNVi)
Power		
Power Mode	AT/ATX	
Voltage	12~28VDC	12~28VDC
Connector Type	1 x 2-Pin Terminal Block	
Mechanical		
Material	Aluminum & SECC	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 35W	
Dimension WxDxH (mm)	238 x 245 x 67mm	
Weight (kg)	3.22kg	3.22kg
Environment		
Operating Temperature (°C)	-20°C~+60°C	
Storage Temperature (°C)	-30°C~+70°C	
Operating Humidity	10~95%@40°C, Non-Condensing	
Storage Humidity	10~95%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux	



Model	BPC-3112	BPC-3064
Processor System		
CPU	Intel® Core™ i5-1235U	Intel® Celeron® J6412
BIOS	AMI UEFI	
Memory		
Technology	Dual Channel DDR4-3200MHz (Un-Buffered, Non-ECC)	
Type	2 x 260-Pin SO-DIMM	
Max. Capacity	64GB	32GB
Display		
Graphic Engine	Intel® Iris® Xe Graphics	Intel® UHD Graphics
Multiple Display	2	2
HDMI	2 x HDMI, Max Resolution 4096x2160	
Display Port	N/A	N/A
VGA	N/A	N/A
Storage		
2.5" SSD/HDD	N/A	1 x 2.5" SSD/HDD
M.2	1 x M.2 2280 M-Key (PCIe x4, SATA)	1 x M.2 2280 M-Key (PCIe x2, SATA)
I/O Interface		
LAN	2 x 2.5GbE (Intel® I226-V)	2 x 1.0GbE (Intel® I211-AT)
Serial	4 x RS232/422/485	2 x RS232/422/485, 2 x RS232
USB	4 x USB3.2 Gen2, 2 x USB2.0	4 x USB3.2 Gen1, 2 x USB2.0
Audio	1 x Mic-In, 1 x Line-Out	1 x Line-Out
GPIO	4 x DI and 4 x DO	N/A
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0, and SIM)	
M.2	1 x M.2 2230 E-Key (PCIe, USB)	N/A
SIM Holder	1 x Nano-SIM Holder	
Antenna Hole	2	
Power		
Power Mode	AT/ATX	
Voltage	9~36VDC	12~36VDC
Connector Type	1 x DC Power Connector, 1 x 2-Pin Terminal Block	
Mechanical		
Material	Aluminum & SECC	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 15W CPU	Fanless 10W CPU
Dimension WxDxH (mm)	238 x 155 x 55mm	
Weight (kg)	1.93kg	1.85kg
Environment		
Operating Temperature (°C)	-20°C~+60°C	
Storage Temperature (°C)	-30°C~+70°C	
Operating Humidity	10~95%@40°C, Non-Condensing	
Storage Humidity	10~95%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux	



Model	BPC-3080	BPC-3040	BPC-3030
Processor System			
CPU	Intel® Core™ i5-8265U	Intel® Pentium® N4200	Intel® Celeron® J1900
BIOS	AMI UEFI		
Memory			
Technology	Dual Channel DDR4-2400MHz	Dual Channel DDR3L-1866MHz	Dual Channel DDR3L-1333MHz
Type	2 x 260-Pin SO-DIMM		2 x 204-Pin SO-DIMM
Max. Capacity	64GB	8GB	
Display			
Graphic Engine	Intel® UHD Graphics	Intel® HD Graphics	Intel® Gen7 Graphics
Multiple Display	2	2	2
HDMI	2 x HDMI, Max Resolution 4096x2304	1 x HDMI, Max Resolution 3840x2160	1 x HDMI, Max Resolution 1920x1200
Display Port	N/A	N/A	N/A
VGA	N/A	1 x VGA, Max Resolution 1920x1200	1 x VGA, Max Resolution 1920x1200
Storage			
2.5" SSD/HDD	1 x SATA III 6.0Gbs (SATA RAID 0/1)	1 x SATA III (6.0Gbs)	1 x SATA II (3.0Gbs)
M.2	1 x M.2 2280 M-Key (PCI x4, SATA)	1x M.2 2242 M-Key (SATA)	N/A
I/O Interface			
LAN	2 x 1.0GbE (Intel® I219-V / Intel® I211-AT)	2 x 1.0GbE (Intel® I211-AT)	2 x 1.0GbE (Realtek RTL8111G-CG)
Serial	1 x RS232/422/485, 3 x RS232	1 x RS232/422/485, 3 x RS232	1 x RS232/422/485, 3 x RS232
USB	4 x USB3.2 Gen1, 2 x USB2.0	4 x USB3.2 Gen1, 2 x USB2.0	2 x USB3.0, 2 x USB2.0
Audio	1 x Mic-In, 1 x Line-Out	1 x Line-Out	1 x Line-Out
Expansion			
Mini-PCle	1 x Full-Size mPCle (PCIe, USB2.0, and SIM)		1 x Half-Size mPCle (PCIe, USB2.0) 1 x Full-Size mPCle (PCIe, SATA, and USB2.0)
M.2	1 x M.2 2230 E-Key (PCIe, CNVi)	N/A	N/A
SIM Holder	1 x Micro-SIM Holder	1 x Micro-SIM Holder	N/A
Antenna Hole	2	2	0
Power			
Power Mode	AT/ATX		
Voltage	9~36VDC		
Connector Type	1 x DC Power Connector, 1 x 2-Pin Terminal Block		
Mechanical			
Material	Aluminum & SECC		
Mounting	Wall Mount		
Thermal Dissipation	Fanless 15W CPU	Fanless 10W CPU	
Dimension WxDxH (mm)	238 x 155 x 55mm		
Weight (kg)	1.97kg	1.97kg	1.78kg
Environment			
Operating Temperature (°C)	-20°C~+60°C		
Storage Temperature (°C)	-30°C~+70°C		
Operating Humidity	10~95%@40°C, Non-Condensing		
Storage Humidity	10~95%@60°C, Non-Condensing		
Others			
Vibration	5Grms, 5-500Hz, 0.5hr/axis		
Shock	50G, Half Sine, 11ms		
Certification	CE/FCC Class A		
O/S Support	Windows 10 IoT, Linux		Windows 7/8/10, Linux

Embedded Computing Expandable Box PCs



Model	SE-5010	SE-5012E	SE-5014E
Processor System			
CPU	Intel® 14th/13th/12th Gen Core™/Pentium®/Celeron® 35W LGA 1700 Processors		
Chipset	Intel® R680E		
BIOS	AMI 256 Mbit SPI Flash		
TPM	TPM 2.0		
Memory			
Technology	Dual Channel DDR5 5600MHz		
Type	2 x 262-Pin SO-DIMM		
Max. Capacity	64GB		
Display			
Graphic Engine	Intel® UHD Graphics		
Multiple Display	4		
Display Port	3 x DP, Max Resolution 4096x2160		
VGA	1 x VGA, Max Resolution 1920x1200		
Storage			
2.5" SSD/HDD	2 x 2.5" SATA III (6.0Gb/s)		
M.2	1 x M.2 2280 M-Key (SATA) 1 x M.2 2280 M-Key (PCIe x4 and SATA)		
RAID	RAID 0/1/5/10		
I/O Interface			
LAN	2 x 2.5GbE (Intel® I226-IT) 4 x GbE Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window)		
PoE+	4 x PoE+ Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window)		
Serial	6 x RS232/422/485		
USB	8 x USB3.2 Gen2		
Audio	1 x Mic-In, 1 x Line-Out		
GPIO	8 x DI and 8 x DO		
Flexible I/O Window	4		
Expansion			
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)		
M.2	1 x M.2 2242/3042/3052 B-key (PCIe, USB 3.0 and SIM) 1 x M.2 2230 E-Key (PCIe, CNVi)		
SIM Holder	2 x Mini-SIM Holders		
PCIe	N/A	1 x PCIe x16 Slot	1 x PCIe x16 Slot 2 x PCIe x8 Slot (4-lane)
Power			
Power Mode	AT/ATX		
Voltage	9~48VDC		
Connector Type	2 x 3-Pin Terminal Block		
Mechanical			
Material	Aluminum & SECC		
Mounting	Wall Mount		
Thermal Dissipation	Fanless 35W		
Dimension WxDxH (mm)	118 x 325 x 228mm	177 x 325 x 228mm	217 x 325 x 228mm
Weight (kg)	7.9kg	8.8kg	9.7kg
Environment			
Operating Temperature (°C)	-40°C~70°C		
Storage Temperature (°C)	-40°C~80°C		
Others			
Certification	CE/FCC Class A		
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux		



Model	MEVA-3110	MEVA-3111	MEVA-3112
Processor System			
CPU	Intel® 9th/8th Gen Core™/Pentium®/Celeron® 35W LGA 1151 Processors		
Chipset	Intel® Q370		
BIOS	AMI 256 Mbit SPI Flash		
TPM	FTPM		
Memory			
Technology	Dual Channel DDR4 2666MHz		
Type	2 x 260-Pin SO-DIMM		
Max. Capacity	64GB		
Display			
Graphic Engine	Intel® UHD Graphics		
Multiple Display	3		
Display Port	1 x DP, Max Resolution 4096x2160		
VGA	1 x VGA, Max Resolution 1920x1200		
DVI-D	1 x DVI-D, Max Resolution 1920x1200		
Storage			
2.5" SSD/HDD	4 x Removable 2.5" HDD		
mSATA	2 x mSATA (Shared by 2 x CFast)		
Cfast	2 x CFast (Shared by 2 x mSATA)		
RAID	RAID 0/1/5/10		
I/O Interface			
LAN	1 x 1.0GbE (Intel® I219-LM), 2 x 1.0GbE (Intel® I210-AT) 4 x GbE Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window)		
PoE+	4 x PoE+ Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window)		
Serial	6 x RS232/422/485		
USB	6 x USB3.2 Gen1 and 2 x USB2.0		
Audio	1 x Mic-In, 1 x Line-Out		
GPIO	8 x DI and 8 x DO		
Flexible I/O Window	4		
Expansion			
Mini-PCIe	2 x Full-size Mini-PCIe (PCIe, USB2.0 and SIM) 2 x Full-size Mini-PCIe (PCIe, SATA III and SIM) (mux with mSATA)		
SIM Holder	4 x SIM Holders		
PCIe	N/A	1 x PCIe x16 Slot (Half Size)	1 x PCIe x16 Slot (Half Size) 1 x PCIe x8 Slot (4-lane)
Power			
Power Mode	AT/ATX		
Voltage	9~48VDC		
Connector Type	1 x 3-Pin Terminal Block		
Mechanical			
Material	Aluminum & SECC		
Mounting	Wall Mount		
Thermal Dissipation	Fanless 35W		
Dimension WxDxH (mm)	92.6 x 231 x 241.5mm	127 x 231 x 241.5mm	148 x 231 x 241.5mm
Weight (kg)	3.95kg	5.2kg	5.35kg
Environment			
Operating Temperature (°C)	-40°C~70°C		
Storage Temperature (°C)	-40°C~80°C		
Others			
Certification	CE/FCC Class A		
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux		

IP66 Waterproof Computer



Model	SB-5825B
Processor System	
CPU	Intel® Core™ Ultra 5 onboard Processor 225U
BIOS	UEFI
TPM	Onboard TPM 2.0
Memory	
Technology	Dual Channel DDR5 5600/6400MHz
Type	2 x 262-pin SO-DIMM
Max. Capacity	32GB
Display	
Graphic Engine	Intel® Graphics
Multiple Display	2
HDMI	2 x HDMI, Max Resolution 7680 x 4320 (IP67 Connector)
Storage	
2.5" SSD	1 x 2.5" SATA SSD
M.2	1 x M.2 M-Key 2280 (PCIe Gen4 x4 and SATA III)
RAID	Intel® SATA RAID 0/1
I/O Interface	
USB	1 x USB3.2 Gen2 (IP67 Connector) , 2 x USB2.0 (from 1 x M12 Connector)
Serial	2 x RS-232/422/485 (M12 Connector)
Ethernet	2 x 2.5GbE (Intel® I226V & I226LM) (M12 Connector)
CAN Bus	1 x Optional isolated CAN2.0B (M12 Connector)
GPIO	4 x DI and 4 x DO (M12 Connector)
Antenna Hole	7
Expansion	
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB 2.0 and SIM)
M.2	1 x M.2 E-Key 2230 (PCIe, CNVi)
SIM Holder	1 x Nano-SIM Holder
Power	
Power Mode	AT/ATX
Voltage	9-36V DC Input
Connector Type	M12 Connector
Mechanical	
Material	Aluminum & SECC
Mounting	Wall Mount
Thermal Dissipation	Fanless System
Dimension WxDxH (mm)	228 x 270 x 96mm
Weight (kg)	5.05kg
Environment	
Operating Temperature (°C)	-20°C~+60°C
Storage Temperature (°C)	-30°C~+70°C
Operating Humidity	10~95%@40°C, Non-Condensing
Storage Humidity	10~95%@60°C, Non-Condensing
Others	
Vibration	1.5Grms, 5 - 500 Hz, 0.5 hr/axis
Shock	50Grms, Half-sine 11ms
Certification	CE/FCC Class A
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux

In-Vehicle Fanless Computer



Model	BPC-5097
Processor System	
CPU	Intel® Alder Lake-N N97 Processor
BIOS	AMI SPI 256 Mbit
Memory	
Technology	Single Channel DDR5 4800MHz
Type	1 x 262-pin SO-DIMM
Max. Capacity	32GB
Display	
Graphic Engine	Intel® UHD Graphics
Multiple Display	1
HDMI	1 x Lockable HDMI 2.0b, Max resolution up to 4096 x 2160@60Hz
Storage	
2.5" SSD/HDD	1 x 2.5" SATA SSD
M.2	1 x M.2 M-key 2242/2280 with PCIe Gen3 x1 and SATA3 for SSD
I/O Interface	
USB	3 x USB2.0
Serial	1 x RS-232/422/485 (supports 5V/12V/RI) , 3 x RS-232 (supports 5V/12V/RI)
Ethernet	2 x GbE LAN (Intel® I210-AT) (M12 Connector)
Expansion	
M.2	1 x M.2 E-Key 2230 with PCIe Gen3 x1, USB 2.0 and CNVi for Wireless 1 x M.2 B-Key 3042/3052 with PCIe Gen3 x1, USB 2.0 and SIM for 4G/5G
SIM Holder	1 x SIM socket connected to M.2 key B
Power	
Power Mode	AT/ATX
Voltage	9-36V DC Input
Connector Type	1 x DC Power Connector, 1 x 2-Pin Terminal Block
Mechanical	
Material	Aluminum & SECC
Mounting	Wall Mount
Thermal Dissipation	Fanless System
Dimension WxDxH (mm)	238 x 245 x 68mm
Weight (kg)	3.5kg
Environment	
Operating Temperature (°C)	-20°C~+60°C
Storage Temperature (°C)	-30°C~+70°C
Operating Humidity	10~95%@40°C, Non-Condensing
Storage Humidity	10~95%@60°C, Non-Condensing
Others	
Vibration	1.5Grms, 5 - 500 Hz, 0.5 hr/axis
Shock	50G, Half Sine, 11ms
Certification	CE/FCC Class A
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux

In-Vehicle Fanless Computer



Model	BPC-5064	BPC-5012
Processor System		
CPU	Intel® Elkhart Lake Celeron® J6412 Processor	Intel® Core™ i5-1235U Processor
BIOS	UEFI	
Memory		
Technology	Dual Channel DDR4-3200MHz (Un-Buffered, Non-ECC)	
Type	1x 260-Pin SO-DIMM	2x 260-Pin SO-DIMM
Max. Capacity	64GB	
Display		
Graphic Engine	Intel® UHD Graphics	
Multiple Display	1	
HDMI	1 x Lockable HDMI 2.0, Max resolution up to 4096 x 2160	
Storage		
2.5" SSD/HDD	1 x SATA III (6.0Gb/s)	
M.2	1 x M.2 M-Key 2280 (PCIe x2 and SATA III)	1 x M.2 M-Key 2280 (PCIe Gen4x4 and SATA 6Gb/s)
I/O Interface		
USB	2 x USB3.2 (Gen1)(M12 Connector)	2 x USB3.2 (Gen2) (M12 Connector)
Serial	2 x RS232/422/485, 2 x RS232	1 x RS-232/422/485 (supports 5V/12V/RI), 3 x RS-232/422/485
Ethernet	2 x GbE(Intel® I210-AT) (M12 Connector)	2 x 2.5GbE (Intel® I226-V) (M12 Connector)
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0, and SIM)	
M.2	N/A	1 x M.2 E-Key 2230 with PCIe Gen3 x1, USB 2.0 and CNVi for Wireless
SIM Holder	1 x SIM socket connected to Mini-PCIe	
Power		
Power Mode	AT/ATX	
Voltage	12~36VDC	9-36VDC
Connector Type	1 x DC Power Connector, 1 x 2-Pin Terminal Block	
Mechanical		
Material	Aluminum & SECC	
Mounting	Wall Mount	
Thermal Dissipation	Fanless 10W CPU	Fanless 15W CPU
Dimension WxDxH (mm)	238 x 245 x 68mm	
Weight (kg)	3.5kg	
Environment		
Operating Temperature (°C)	-20°C~+60°C	
Storage Temperature (°C)	-30°C~+70°C	
Operating Humidity	10~95% @40°C, Non-Condensing	
Storage Humidity	10~95% @60°C, Non-Condensing	
Others		
Vibration	1.5Grms, 5 - 500 Hz, 0.5 hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux	

03.

IP GRADE PANEL PC

The PPC-Z Series, featuring the grade of IP66/69K rating, is completely dustproof and waterproof. The stainless-steel design makes it ideal for environments where exposure to liquids, sprays, and even corrosive substances. The stainless-steel Panel PCs are widely used for application in Food and Beverage and other industries that put hygiene as their top priority.



Model	PPC-Z 2412PW/RW	PPC-Z 2112PW/RW	PPC-Z 1912P/R	PPC-Z 1512P/R	PPC-Z 1012PW/RW
IP Rating	IP66/69K Full System				
Display					
Panel Size	24"	21.5"	19"	15"	10.1"
Brightness	300cd/m2	250cd/m2	350cd/m2	350cd/m2	500cd/m2
Max. Resolution	1920 x 1080 (FHD)	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)
Aspect Ratio	16:9	16:9	4:3	4:3	16:10
Max. Color	16.7M	16.7M	16.7M	16.2M	16.2M
Contrast Ratio	5000:1	5000:1	1000:1	2500:1	800:1
Backlight MTBF	50,000Hrs	30,000Hrs	70,000Hrs	70,000Hrs	50,000Hrs
Touchscreen					
	P-CAP			Resistive	
Touch Type	P-CAP (Projected Capacitive)			5-Wire Resistive	
Surface Hardness	7 Mohs			3 Mohs	
Transparency	90% (±3%)			80% (±3%)	
Mechanical					
Enclosure	Full SUS304 Stainless Steel (Optional SUS316)				
Mounting	VESA (100x100, 200x100mm), Yoke/Wall				VESA (100x100mm)
Dimension WxHxD (mm)	625 x 450 x 70mm	570 x 430 x 66.5mm	499 x 420 x 66.5mm	435 x 350 x 66.5mm	310 x 210 x 65.5mm
Weight(kg)	14.90kg	12kg	10.35kg	7.50kg	3.15kg
Option	N/A				
CPU	Intel® Core™ i5-1235U				
System Memory	2 x DDR4-3200MHz 260-Pin SO-DIMM, up to 64GB				
Storage	1 x M.2 2280 M-Key (PCIe x4, SATA) 1 x 2.5" SSD/HDD (SATA RAID 0/1) (Optional)				
I/O					
LAN	2 x 2.5GbE (Intel® I226-V) M12 Connectors				
HDMI	2 x HDMI 2.0 Reserved				
DP	N/A				
VGA	N/A				
Serial	2 x M12 RS232/422/485 Reserved 2 additional RS232/422/485				2 x M12 RS232/422/485
USB	1 x USB3.2 Gen2 (M12 x 1) 2 x USB2.0 (M12 x 1) 1 x USB3.2 Gen2 (IP67 connector)		1 x USB3.2 Gen2 (M12 x 1) 2 x USB2.0 (M12 x 1)		
Audio	Reserved 1 x Mic-In, 1 x Line-Out				
Expansion	Internal, 1 x M.2 2280 M-Key (PCIe Gen4, SATA), 1 x M.2 2230 E-Key, 1 x Full-Size mPCIe with SIM Slot				
Others	RFID Reader		N/A		
Power Input	9~36VDC (M12 Connector)				
Environment					
Operating Temperature (°C)	-10°C~+60°C				
Storage Temperature (°C)	-30°C~+70°C				
Operating Humidity	10~95%@40°C, Non-Condensing				
Storage Humidity	10~95%@60°C, Non-Condensing				
Certification	CE/FCC Class A				
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux				



Model	PPC-Z 2464PW/RW	PPC-Z 2164PW/RW	PPC-Z 1964P/R	PPC-Z 1564P/R	PPC-Z 1064PW/RW
IP Rating	IP66/69K Full System				
Display					
Panel Size	24"	21.5"	19"	15"	10.1"
Brightness	300cd/m2	250cd/m2	350cd/m2	350cd/m2	500cd/m2
Max. Resolution	1920 x 1080 (FHD)	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)
Aspect Ratio	16:9	16:9	4:3	4:3	16:10
Max. Color	16.7M	16.7M	16.7M	16.2M	16.2M
Contrast Ratio	5000:1	5000:1	1000:1	2500:1	800:1
Backlight MTBF	50,000Hrs	30,000Hrs	70,000Hrs	70,000Hrs	50,000Hrs
Touchscreen					
	P-CAP			Resistive	
Touch Type	P-CAP (Projected Capacitive)			5-Wire Resistive	
Surface Hardness	7 Mohs			3 Mohs	
Transparency	90% (±3%)			80% (±3%)	
Mechanical					
Enclosure	Full SUS304 Stainless Steel (Optional SUS316)				
Mounting	VESA (100x100, 200x100mm), Yoke/Wall				VESA (100x100mm)
Dimension WxHxD (mm)	625 x 450 x 70mm	570 x 430 x 66.5mm	499 x 420 x 66.5mm	435 x 350 x 66.5mm	310 x 210 x 65.5mm
Weight(kg)	14.90kg	12kg	10.35kg	7.50kg	3.15kg
Option	N/A				
CPU	Intel® Celeron® J6412				
System Memory	2 x DDR4-3200MHz 260-Pin SO-DIMM, up to 32GB				
Storage	1 x M.2 2280 M-Key (PCIe x2, SATA) 1 x 2.5" SSD/HDD (Optional)				
I/O					
LAN	2 x GbE (Intel® I211-AT) M12 Connectors				
HDMI	2 x HDMI 2.0 Reserved				
DP	N/A				
VGA	N/A				
Serial	2 x M12 RS232/422/485 Reserved 2 additional RS232				2 x M12 RS232/422/485
USB	1 x USB3.2 Gen1 (M12 x 1) 2 x USB2.0 (M12 x 1) 1 x USB3.2 Gen1 (IP67 connector)		1 x USB3.2 Gen1 (M12 x 1) 2 x USB2.0 (M12 x 1)		
Audio	Reserved 1 x Line-Out				
Expansion	Internal, 1 x M.2 2280 M-Key (PCIe x2, SATA), 1 x Full-Size mPCIe with SIM Slot				
Others	RFID Reader		N/A		
Power Input	12~36VDC (M12 Connector)				
Environment					
Operating Temperature (°C)	-10°C~+60°C				
Storage Temperature (°C)	-30°C~+70°C				
Operating Humidity	10~95%@40°C, Non-Condensing				
Storage Humidity	10~95%@60°C, Non-Condensing				
Certification	CE/FCC Class A				
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux				

Front IP Stainless Front IP66



Model	PPC-S 2112PW/RW	PPC-S 1912P/R	PPC-S 1512P/R	PPC-S 1212P/R	PPC-S 1012PW/RW
IP Rating	IP66 Front Panel				
Display					
Panel Size	21.5"	19"	15"	12.1"	10.1"
Brightness	250cd/m2	350cd/m2	350cd/m2	600cd/m2	500cd/m2
Max. Resolution	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)
Aspect Ratio	16:9	4:3	4:3	4:3	16:10
Max. Color	16.7M	16.7M	16.2M	16.7M	16.2M
Contrast Ratio	5000:1	1000:1	2500:1	1000:1	800:1
Backlight MTBF	30,000Hrs	70,000Hrs	70,000Hrs	50,000Hrs	50,000Hrs
Touchscreen					
	P-CAP			Resistive	
Touch Type	P-CAP (Projected Capacitive)			5-Wire Resistive	
Surface Hardness	7 Mohs			3 Mohs	
Transparency	90% (±3%)			80% (±3%)	
Mechanical					
Enclosure	304 Stainless Steel Front Panel + SECC Back Cover				
Mounting	VESA (100x100mm) / Panel				
Dimension WxHxD (mm)	568 x 364 x 58.5mm	521 x 415 x 58.5mm	406.7 x 330.3 x 58.5mm	359 x 297 x 61.2mm	296 x 214.6 x 60.7mm
Weight(kg)	7.97kg	8.5kg	6.5kg	4.65kg	3kg
Option	N/A				
CPU	Intel® Core™ i5-1235U				
System Memory	2 x DDR4-3200MHz 260-Pin SO-DIMM, up to 64GB				
Storage	1 x 2.5" SSD/HDD (SATA RAID 0/1)				
I/O					
LAN	2 x 2.5GbE (Intel® I226-V)				
HDMI	2 x HDMI 2.0				
DP	N/A				
VGA	N/A				
Serial	1 x RS232/422/485 Reserved 2 additional RS232/422/485				
USB	4 x USB3.2 Gen2				
Audio	Reserved 1 x Mic-In, 1 x Line-Out				
Expansion	Internal, 1 x M.2 2280 M-Key (PCIe Gen4, SATA), 1 x M.2 2230 E-Key, 1 x Full-Size mPCIe with SIM Slot				
Power Input	9~36VDC (2-Pin Terminal Block, Phoenix Connector)				
Environment					
Operating Temperature (°C)	-20°C~+60°C				
Storage Temperature (°C)	-30°C~+70°C				
Operating Humidity	10~95%@40°C, Non-Condensing				
Storage Humidity	10~95%@60°C, Non-Condensing				
Certification	CE/FCC Class A				
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux				

Front IP Stainless Front IP66



Model	PPC-S 2164PW/RW	PPC-S 1964P/R	PPC-S 1564P/R	PPC-S 1264P/R	PPC-S 1064PW/RW
IP Rating	IP66 Front Panel				
Display					
Panel Size	21.5"	19"	15"	12.1"	10.1"
Brightness	250cd/m2	350cd/m2	350cd/m2	600cd/m2	500cd/m2
Max. Resolution	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)
Aspect Ratio	16:9	4:3	4:3	4:3	16:10
Max. Color	16.7M	16.7M	16.2M	16.7M	16.2M
Contrast Ratio	5000:1	1000:1	2500:1	1000:1	800:1
Backlight MTBF	30,000Hrs	70,000Hrs	70,000Hrs	50,000Hrs	50,000Hrs
Touchscreen					
	P-CAP			Resistive	
Touch Type	P-CAP (Projected Capacitive)			5-Wire Resistive	
Surface Hardness	7 Mohs			3 Mohs	
Transparency	90% (±3%)			80% (±3%)	
Mechanical					
Enclosure	304 Stainless Steel Front Panel + SECC Back Cover				
Mounting	VESA (100x100mm) / Panel				
Dimension WxHxD (mm)	568 x 364 x 58.5mm	521 x 415 x 58.5mm	406.7 x 330.3 x 58.5mm	359 x 297 x 61.2mm	296 x 214.6 x 60.7mm
Weight(kg)	7.97kg	8.5kg	6.5kg	4.65kg	3kg
Option	N/A				
CPU	Intel® Celeron® J6412				
System Memory	2 x DDR4-3200MHz 260-Pin SO-DIMM, up to 32GB				
Storage	1 x 2.5" SSD/HDD				
I/O					
LAN	2 x GbE (Intel® I211-AT)				
HDMI	2 x HDMI 2.0				
DP	N/A				
VGA	N/A				
Serial	Reserved 2 additional RS232/422/485				
USB	4 x USB3.2 Gen1				
Audio	Reserved 1 x Line-Out				
Expansion	Internal, 1 x M.2 2280 M-Key (PCIe x2, SATA), 1 x Full-Size mPCIe with SIM Slot				
Power Input	12~36VDC (2-Pin Terminal Block, Phoenix Connector)				
Environment					
Operating Temperature (°C)	-20°C~+60°C				
Storage Temperature (°C)	-30°C~+70°C				
Operating Humidity	10~95%@40°C, Non-Condensing				
Storage Humidity	10~95%@60°C, Non-Condensing				
Certification	CE/FCC Class A				
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux				



Model	PPC-2112PW/RW	PPC-1912P/R	PPC-1512P/R	PPC-1212P/R	PPC-1012PW/RW
IP Rating	Front Panel IP54				
Display					
Panel Size	21.5"	19"	15"	12.1"	10.1"
Brightness	250cd/m2	350cd/m2	350cd/m2	600cd/m2	500cd/m2
Max. Resolution	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)
Aspect Ratio	16:9	4:3	4:3	4:3	16:10
Max. Color	16.7M	16.7M	16.2M	16.7M	16.2M
Contrast Ratio	5000:1	1000:1	2500:1	1000:1	800:1
Backlight MTBF	30,000Hrs	70,000Hrs	70,000Hrs	50,000Hrs	50,000Hrs
Touchscreen					
	P-CAP			Resistive	
Touch Type	P-CAP (Projected Capacitive)			5-Wire Resistive	
Surface Hardness	7 Mohs			3 Mohs	
Transparency	90% (±3%)			80% (±3%)	
Mechanical					
Enclosure	SECC Front Panel + Aluminum Back Cover				
Mounting	VESA (100x100mm) / Panel				
Dimension WxHxD (mm)	580.6 x 372.1 x 58.5mm	458 x 383 x 64.5mm	364.6 x 290.6 x 59.5mm	319.6 x 253.6 x 60.8mm	304.6 x 223.2 x 61mm
Weight(kg)	6.99kg	5.68kg	4.37kg	3.75kg	2.52kg
Option	N/A				
CPU	Intel® Core™ i5-1235U				
System Memory	2 x DDR4-3200MHz 260-Pin SO-DIMM, up to 64GB				
Storage	1 x 2.5" SSD/HDD (SATA RAID 0/1) 1 x M.2 2280 M-Key (PCIe x4, SATA)				
I/O					
LAN	2 x 2.5GbE (Intel® I226-V)				
HDMI	2 x HDMI 2.0				
DP	N/A				
VGA	N/A				
Serial	1 x RS232/422/485 Reserved 2 additional RS232/422/485				
USB	4 x USB3.2 Gen2				
Audio	Reserved 1 x Mic-In, 1 x Line-Out				
Expansion	Internal, 1 x M.2 2280 M-Key (PCIe Gen4, SATA), 1 x M.2 2230 E-Key, 1 x Full-Size mPCIe with SIM Slot				
Power Input	9~36VDC (2-Pin Terminal Block, Phoenix Connector)				
Environment					
Operating Temperature (°C)	-20°C~+60°C				
Storage Temperature (°C)	-30°C~+70°C				
Operating Humidity	10~95%@40°C, Non-Condensing				
Storage Humidity	10~95%@60°C, Non-Condensing				
Certification	CE/FCC Class A				
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux				



Model	PPC-2164PW/RW	PPC-1964P/R	PPC-1564P/R	PPC-1264P/R	PPC-1064PW/RW
IP Rating	Front Panel IP54				
Display					
Panel Size	21.5"	19"	15"	12.1"	10.1"
Brightness	250cd/m2	350cd/m2	350cd/m2	600cd/m2	500cd/m2
Max. Resolution	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)
Aspect Ratio	16:9	4:3	4:3	4:3	16:10
Max. Color	16.7M	16.7M	16.2M	16.7M	16.2M
Contrast Ratio	5000:1	1000:1	2500:1	1000:1	800:1
Backlight MTBF	30,000Hrs	70,000Hrs	70,000Hrs	50,000Hrs	50,000Hrs
Touchscreen					
	P-CAP			Resistive	
Touch Type	P-CAP (Projected Capacitive)			5-Wire Resistive	
Surface Hardness	7 Mohs			3 Mohs	
Transparency	90% (±3%)			80% (±3%)	
Mechanical					
Enclosure	SECC Front Panel + Aluminum Back Cover				
Mounting	VESA (100x100mm) / Panel				
Dimension WxHxD (mm)	580.6 x 372.1 x 58.5mm	458 x 383 x 64.5mm	364.6 x 290.6 x 59.5mm	319.6 x 253.6 x 60.8mm	304.6 x 223.2 x 61mm
Weight(kg)	6.99kg	5.68kg	4.37kg	3.75kg	2.52kg
Option	N/A				
CPU	Intel® Celeron® J6412				
System Memory	2 x DDR4-3200MHz 260-Pin SO-DIMM, up to 32GB				
Storage	1 x 2.5" SSD/HDD 1 x M.2 2280 M-Key (PCIe x2, SATA)				
I/O					
LAN	2 x GbE (Intel® I211-AT)				
HDMI	2 x HDMI 2.0				
DP	N/A				
VGA	N/A				
Serial	Reserved 2 additional RS232/422/485				
USB	4 x USB3.2 Gen1				
Audio	Reserved 1 x Line-Out				
Expansion	Internal, 1 x M.2 2280 M-Key (PCIe x2, SATA), 1 x Full-Size mPCIe with SIM Slot				
Power Input	12~36VDC (2-Pin Terminal Block, Phoenix Connector)				
Environment					
Operating Temperature (°C)	-20°C~+60°C				
Storage Temperature (°C)	-30°C~+70°C				
Operating Humidity	10~95%@40°C, Non-Condensing				
Storage Humidity	10~95%@60°C, Non-Condensing				
Certification	CE/FCC Class A				
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux				



Model	PPC-664R
IP Rating	Front Panel IP54
	Display
Panel Size	6.5"
Brightness	800cd/m ²
Max. Resolution	640 x 480
Aspect Ratio	4:3
Max. Color	16.2M
Contrast Ratio	600:1
Backlight MTBF	50,000Hrs
	Touchscreen
	Resistive
Touch Type	5-Wire Resistive
Surface Hardness	3 Mohs
Transparency	80% (±3%)
	Mechanical
Enclosure	SECC Front Panel + Aluminum Back Cover
Mounting	VESA (100x100mm) / Panel
Dimension WxHxD (mm)	191.4 x 158.2 x 73mm
Weight(kg)	1.55kg
Option	N/A
CPU	Intel® Celeron® J6412 Processor
System Memory	Dual Channel DDR4 3200MHz (un-buffered and non-ECC)
Storage	Internal 1 x 2.5" SSD/HDD Internal 1 x M.2 2280 M-Key (PCIe x2, SATA)
	I/O
LAN	2 x GbE LAN Ports (Intel® I211-AT)
HDMI	2 x HDMI 2.0, Max Resolution 4096 x 2160
Serial	Optional for 2 x RS232/422/485
USB	4 x USB3.2 Gen1
Audio	1 x Line-out
Expansion	1 x Full-Size Mini-PCIe with SIM slot (PCIe, USB2.0 and SIM), 1 x M.2 2280 M-Key (PCIe x2, SATA)
Power Input	9~36VDC (2-Pin Terminal Block, Phoenix Connector)
	Environment
Operating Temperature (°C)	-20°C~+60°C
Storage Temperature (°C)	-30°C~+70°C
Operating Humidity	10~95%@40°C, Non-Condensing
Storage Humidity	10~95%@60°C, Non-Condensing
Certification	CE/FCC Class A
O/S Support	Windows 10 IoT, Windows 11 IoT/Professional, Linux

04.

IP GRADE TOUCH DISPLAY

IP Grade Panel Display has three sections which are distinguished by Stainless, Aluminum and SECC. It's the idea for Kiosk, Ticketing and Vending Machine, HMI, and Factory Automation.

Front IP Stainless Front IP66



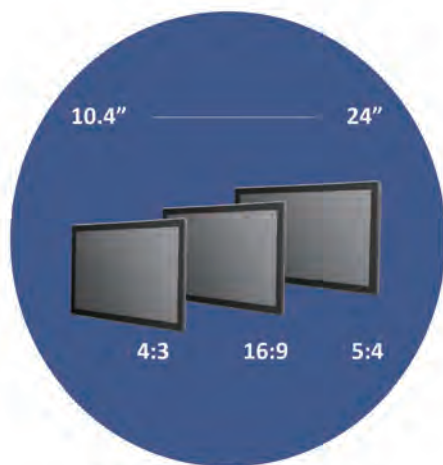
Model	TPM-S 3321PW/RW	TPM-S 3319P/R	TPM-S 3317P/R	TPM-S 3315P/R	TPM-S 3312P/R	TPM-S 3310RW
IP Rating	IP66 Front Panel					
	Display					
Panel Size	21.5"	19"	17"	15"	12.1"	10.1"
Brightness	250cd/m2	350cd/m2	350cd/m2	350cd/m2	600cd/m2	500cd/m2
Max. Resolution	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)
Aspect Ratio	16:9	4:3	4:3	4:3	4:3	16:10
Max. Color	16.7M	16.7M	16.7M	16.2M	16.7M	16.2M
Contrast Ratio	5000:1	1000:1	800:1	2500:1	1000:1	800:1
Backlight MTBF	30,000Hrs	70,000Hrs	50,000Hrs	70,000Hrs	50,000Hrs	50,000Hrs
	Touchscreen					
	P-CAP			Resistive		
Touch Type	P-CAP (Projected Capacitive)			5-Wire Resistive		
Surface Hardness	7 Mohs			3 Mohs		
Transparency	90% (±3%)			80% (±3%)		
	Mechanical					
Enclosure	304 Stainless Steel Front Panel + SECC Back Cover					
Mounting	VESA (100x100mm) / Panel					
Dimension WxHxD (mm)	568 x 364 x 40	521 x 415 x 41	445 x 377 x 44	406.7 x 330.3 x 35.2	359 x 297 x 34.7	290 x 208 x 34.2
Weight(kg)	7.5kg	6.5kg	5.92kg	4.70kg	3.60kg	3.0kg
	I/O Interface					
Display Interface	1 x HDMI and 1 x VGA					
Touch Interface	Projected Capacitive (P-CAP): 1 x USB 5-Wire Resistive: 1 x USB and 1 x RS-232					
	OSD Control					
Function Key	Touch Monitor On/Off, Auto, Menu, Up and Down, Multi-language OSD					
Menu	Brightness, Contrast, Color Adjust, Color Temp, Auto Color, Language					
Power Input	12/24VDC (2-Pin Terminal Block, Phoenix Connector)					
	Environment					
Operating Temperature (°C)	-20°C~+60°C					
Storage Temperature (°C)	-30°C~+70°C					
Operating Humidity	10~95%@40°C, Non-Condensing					
Storage Humidity	10~95%@60°C, Non-Condensing					
Certification	CE/FCC Class A					



Model	TPM-3221PW	TPM-3217P/R	TPM-TPM-3215P/R	TPM-3212P/R
IP Rating	Front Panel IP54			
Display				
Panel Size	21.5"	17"	15"	12.1"
Brightness	250cd/m2	350cd/m2	350cd/m2	600cd/m2
Max. Resolution	1920 x 1080 (FHD)	1280 x 1024 (SXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)
Aspect Ratio	16:9	4:3	4:3	4:3
Max. Color	16.7M	16.7M	16.2M	16.7M
Contrast Ratio	5000:1	800:1	2500:1	1000:1
Backlight MTBF	30,000Hrs	50,000Hrs	70,000Hrs	50,000Hrs
Touchscreen				
	P-CAP		Resistive	
Touch Type	P-CAP (Projected Capacitive)		5-Wire Resistive	
Surface Hardness	7 Mohs		3 Mohs	
Transparency	90% (±3%)		80% (±3%)	
Mechanical				
Enclosure	SECC			
Mounting	VESA (100x100mm) / Panel			
Dimension WxHxD (mm)	519.2 x 331 x 41.2mm	411.4 x 337.5 x 41.6mm	364.6 x 290.6 x 39.8mm	319.6 x 253.6 x 38.55mm
Weight(kg)	5.9kg	4.82kg	3.7kg	2.63kg
I/O Interface				
Display Interface	1 x HDMI and 1 x VGA			
Touch Interface	Projected Capacitive (P-CAP): 1 x USB 5-Wire Resistive: 1 x USB and 1 x RS-232			
OSD Control				
Function Key	Touch Monitor On/Off, Auto, Menu, Up and Down, Multi-language OSD			
Menu	Brightness, Contrast, Color Adjust, Color Temp, Auto Color, Language			
Power Input	12/24VDC (2-Pin Terminal Block, Phoenix Connector)			
Environment				
Operating Temperature (°C)	-20°C~+60°C			
Storage Temperature (°C)	-30°C~+70°C			
Operating Humidity	10~95%@40°C, Non-Condensing			
Storage Humidity	10~95%@60°C, Non-Condensing			
Certification	CE/FCC Class A			

05.

MODULAR DESIGN



Display Module



Video Module (VM)



Touch Monitor

+

OR

=



PC Module (PM)



Panel PC

The Modular Design Series comprises the PM (PC Module) series, VM.(Video Module) series, DM (Display Module) series, and SM (Sunlight Readable Display Module) series. By seamlessly integrating the PM and VM series with the DM and SM series, they transform into a panel PC and touch monitor.

Display Modules High Brightness Sunlight Readable



Model	SM-110P	SM-112P	SM-115P	SM-115PW
IP Rating	IP65 Front Panel			
	Display			
Panel Size	10.4"	12.1"	15"	15.6"
Brightness	1600cd/m2	1500cd/m2	1500cd/m2	1600cd/m2
Max. Resolution	1024 x 768 (XGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1920 x 1080 (FHD)
Aspect Ratio	4:3	4:3	4:3	16:9
Max. Color	16.2M	16.7M	16.2M	16.2M
Viewing Angle	176(H) x 176(V)	178(H)x178(V)	176(H)x176(V)	170(H)x170(V)
Contrast Ratio	1000:1	1000:1	2500:1	800:1
Backlight MTBF	100,000Hrs	50,000Hrs	100,000Hrs	100,000Hrs
	Touchscreen			
Touch Type	P-CAP (Projected Capacitive)			
Surface Hardness	7 Mohs			
Transparency	90% (±3%)			
	Mechanical			
Enclosure	Front Panel Aluminum with Back Cover SECC			
Mounting	VESA (100x100mm) / Panel			
Dimension WxHxD (mm)	280.6 x 227.9 x 27.5mm	327.5 x 262 x 28mm	377 x 301 x 28.5mm	393 x 254 x 29.5mm
Weight(kg)	2.45kg	2.85kg	4.05kg	3.85kg
	OSD Control			
Function Key	Touch Monitor On/Off, Auto, Menu, Up and Down, Multi-language OSD			
Menu	Brightness, Contrast, Color Adjust, Color Temp, Auto Color, Language			
Speaker	2 x 2W Internal Speakers			
	Environment			
Operating Temperature (°C)	-20°C~+60°C			
Storage Temperature (°C)	-30°C~+70°C			
Operating Humidity	10~95%@40°C, Non-Condensing			
Storage Humidity	10~95%@60°C, Non-Condensing			
Certification	CE/FCC Class A			

Display Modules High Brightness Sunlight Readable



Model	SM-117P	SM-119P	SM-121PW	SM-124PW
IP Rating	IP65 Front Panel			
Display				
Panel Size	17"	19"	21.5"	24"
Brightness	1500cd/m2	1600cd/m2	1600cd/m2	1500cd/m2
Max. Resolution	1280x1024 (SXGA)	1280x1024 (SXGA)	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Aspect Ratio	5:4	5:4	16:9	16:9
Max. Color	16.7M	16.7M	16.7M	16.7M
Viewing Angle	160(H)x140(V)	170(H)x160(V)	178(H)x178(V)	178(H)x178(V)
Contrast Ratio	800:1	1000:1	5000:1	5000:1
Backlight MTBF	50,000Hrs	80,000Hrs	50,000Hrs	70,000Hrs
Touchscreen				
Touch Type	P-CAP (Projected Capacitive)			
Surface Hardness	7 Mohs			
Transparency	90% (±3%)			
Mechanical				
Enclosure	Front Panel Aluminum with Back Cover SECC			
Mounting	VESA (100x100mm) / Panel			
Dimension WxHxD (mm)	407.3 x 338.7 x 30mm	449.7 x 374.4 x 31mm	527 x 323 x 30mm	584 x 353 x 35mm
Weight(kg)	4.85kg	5.85kg	6.05kg	8.1kg
OSD Control				
Function Key	Touch Monitor On/Off, Auto, Menu, Up and Down, Multi-language OSD			
Menu	Brightness, Contrast, Color Adjust, Color Temp, Auto Color, Language			
Speaker	2 x 2W Internal Speakers			
Environment				
Operating Temperature (°C)	-20°C~+60°C			
Storage Temperature (°C)	-30°C~+70°C			
Operating Humidity	10~95%@40°C, Non-Condensing			
Storage Humidity	10~95%@60°C, Non-Condensing			
Certification	CE/FCC Class A			

Display Modules



Model	DM-110P	DM-112P	DM-115P	DM-115PW
IP Rating	IP65 Front Panel			
	Display			
Panel Size	10.4"	12.1"	15"	15.6"
Brightness	500cd/m2	600cd/m2	350cd/m2	450cd/m2
Max. Resolution	1024 x 768 (XGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1920 x 1080 (FHD)
Aspect Ratio	4:3	4:3	4:3	16:9
Max. Color	16.2M	16.2M	16.2M	16.7M
Viewing Angle	176(H) x 176(V)	178(H)x178(V)	176(H)x176(V)	170(H)x170(V)
Contrast Ratio	1000:1	1000:1	2500:1	800:1
Backlight MTBF	30,000Hrs	50,000Hrs	70,000Hrs	50,000Hrs
	Touchscreen			
Touch Type	P-CAP (Projected Capacitive)			
Surface Hardness	7 Mohs			
Transparency	90% (±3%)			
	Mechanical			
Enclosure	Front Panel Aluminum with Back Cover SECC			
Mounting	VESA (100x100mm) / Panel			
Dimension WxHxD (mm)	280.6 x 227.9 x 27.5mm	327.5 x 262 x 28mm	377 x 301 x 28.5mm	393 x 254 x 29.5mm
Weight(kg)	2.45kg	2.85kg	4.05kg	3.85kg
	OSD Control			
Function Key	Touch Monitor On/Off, Auto, Menu, Up and Down, Multi-language OSD			
Menu	Brightness, Contrast, Color Adjust, Color Temp, Auto Color, Language			
Speaker	2 x 2W Internal Speakers			
	Environment			
Operating Temperature (°C)	-20°C~+60°C			
Storage Temperature (°C)	-30°C~+70°C			
Operating Humidity	10~95%@40°C, Non-Condensing			
Storage Humidity	10~95%@60°C, Non-Condensing			
Certification	CE/FCC Class A			

Display Modules



Model	DM-117P	DM-119P	DM-121PW	DM-124PW
IP Rating	IP65 Front Panel			
Display				
Panel Size	17"	19"	21.5"	24"
Brightness	350cd/m2	350cd/m2	250cd/m2	300cd/m2
Max. Resolution	1280x1024 (SXGA)	1280x1024 (SXGA)	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Aspect Ratio	5:4	5:4	16:9	16:9
Max. Color	16.7M	16.7M	16.7M	16.7M
Viewing Angle	160(H)x140(V)	170(H)x160(V)	178(H)x178(V)	178(H)x178(V)
Contrast Ratio	800:1	1000:1	5000:1	5000:1
Backlight MTBF	50,000Hrs	70,000Hrs	30,000Hrs	50,000Hrs
Touchscreen				
Touch Type	P-CAP (Projected Capacitive)			
Surface Hardness	7 Mohs			
Transparency	90% (±3%)			
Mechanical				
Enclosure	Front Panel Aluminum with Back Cover SECC			
Mounting	VESA (100x100mm) / Panel			
Dimension WxHxD (mm)	407.3 x 338.7 x 30mm	449.7 x 374.4 x 31mm	527 x 323 x 30mm	584 x 353 x 35mm
Weight(kg)	4.85kg	5.85kg	6.05kg	8.1kg
OSD Control				
Function Key	Touch Monitor On/Off, Auto, Menu, Up and Down, Multi-language OSD			
Menu	Brightness, Contrast, Color Adjust, Color Temp, Auto Color, Language			
Speaker	2 x 2W Internal Speakers			
Environment				
Operating Temperature (°C)	-20°C~+60°C			
Storage Temperature (°C)	-30°C~+70°C			
Operating Humidity	10~95%@40°C, Non-Condensing			
Storage Humidity	10~95%@60°C, Non-Condensing			
Certification	CE/FCC Class A			



Model	PM-2210	PM-2260
Processor System		
CPU	Intel® Processor N150	Intel® Core™ i3-N355
BIOS	AMI 256Mbit	
TPM	TPM 2.0	
Memory		
Technology	Single Channel DDR5 4800MHz	
Type	1 x 262-pin SO-DIMM	
Max. Capacity	16GB	
Display		
Graphic Engine	Intel® HD Graphics	
Multiple Display	2	
Display Port	2 x DisplayPort 1.4a, Max Resolution 4096 x 2160 (Included 1 output from Type-C)	
Storage		
2.5" SSD/HDD	1 x Removable 2.5" SATA HDD Bay	
I/O Interface		
LAN	2 x 2.5GbE Intel® I226-IT, RJ45	
Serial	2 x RS232/422/485	
USB	3 x USB3.2 Gen2 Type-A 1 x USB3.2 Gen2 Type-C (Supports DP 1.4a display output) 1 x USB2.0 Type-A	
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	4 x DI and 4 x DO, 2 x 5-pin Terminal Block	
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)	
M.2	1 x M.2 2230/2242/2280 B-key (PCIe, USB3.0 and SIM)	
SIM Holder	2 x SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x DC Power Connector, 1 x 3-pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	VESA Mount(100x100mm)	
Thermal Dissipation	Fanless System	
Dimension WxDxH (mm)	168 x 135 x 47mm	
Weight (kg)	1.18kg	
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 3Axis	
Shock	50Grms, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux	



Model	PM-2200	PM-2250
Processor System		
CPU	Intel® Alder Lake-N Processor N97	Intel® Alder Lake Core™ i3-N305
BIOS	AMI UEFI	
TPM	TPM 2.0	
Memory		
Technology	Single Channel DDR5 5600MHz	
Type	1 x 262-Pin SO-DIMM	
Max. Capacity	16GB	
Display		
Graphic Engine	Intel® UHD Graphics	
Multiple Display	2	
Display Port	2 x DisplayPort 1.4a, Max Resolution 4096 x 2160 (Included 1 output from Type-C)	
Storage		
2.5" SSD/HDD	1 x Removable 2.5" SATA HDD Bay	
I/O Interface		
LAN	2 x 2.5GbE (Intel® I226-IT)	
Serial	2 x RS232/422/485	
USB	3 x USB3.2 Gen2 Type-A 1 x USB3.2 Gen2 Type-C (Supports DP 1.4a display output) 1 x USB2.0 Type-A	
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	4 x DI and 4 x DO	
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)	
M.2	1 x M.2 2230/2242/2280 B-key (PCIe SATA, USB3.0 and SIM)	
SIM Holder	2 x SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x 3-Pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	VESA Mount(100x100mm)	
Thermal Dissipation	Fanless 15W	
Dimension WxDxH (mm)	168 x 135 x 47mm	
Weight (kg)	1.18kg	
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux	



Model	PM-2000	PM-2100
Processor System		
CPU	Intel® Celeron® J1900	Intel® Pentium® N4200
BIOS	AMI UEFI	
Memory		
Technology	Single Channel DDR3L-1333MHz	Single Channel DDR3L-1866MHz
Type	2 x 204-Pin SO-DIMM	
Max. Capacity	8GB	
Display		
Graphic Engine	Intel® UHD Graphics	Intel® HD Graphics 505
Multiple Display	2	
HDMI	N/A	1 x HDMI 1.4b, Max Resolution 4096x2160 (Optional)
Display Port	1 x DP, Max Resolution 2560x1600	1 x DP1.4a, Max Resolution 4096x2160
VGA	1 x VGA, Max Resolution 1920x1200	1 x VGA, Max Resolution 1920x1200
Storage		
2.5" SSD/HDD	1 x Removable 2.5" SATA HDD Bay	
mSATA	1 x mSATA (Shared by 1 x Mini-PCIe and CFast)	1 x mSATA (Shared by 1 x Mini-PCIe)
CFast	1 x CFast (Shared by mSATA)	N/A
I/O Interface		
LAN	1 x 1.0GbE (Intel® I210-AT)	
Serial	2 x RS232/422/485	
USB	1 x USB3.0, 4 x USB2.0	2 x USB3.2 Gen1, 2 x USB2.0
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	4 x DI and 4 x DO	
Expansion		
Mini-PCIe	1 x Full-size Mini-PCIe (SATA, USB2.0 and SIM) (shared by mSATA) 1 x Full-size Mini-PCIe (PCIe, USB2.0 and SIM)	
SIM Holder	2 x SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x 3-Pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	VESA Mount(100x100mm)	
Thermal Dissipation	Fanless 15W	
Dimension WxDxH (mm)	168 x 135 x 47mm	
Weight (kg)	1.15kg	1.1kg
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Linux	Windows 10 IoT, Windows 11 IoT/Professional, Linux



Model	PM-5000	PM-3100
Processor System		
CPU	Intel® 14th/13th/12th Gen Core™ (35W)	Intel® 9th/8th Gen Core™ (35W)
Chipset	Intel® R680E	Intel® Q370
BIOS	AMI 256 Mbit SPI Flash	
TPM	TPM 2.0	
Memory		
Technology	Dual Channel DDR5 5600MHz	Dual Channel DDR4 2666MHz
Type	2 x 262-Pin SO-DIMM	2 x 260-Pin SO-DIMM
Max. Capacity	64GB	64GB
Display		
Graphic Engine	Intel® UHD Graphics	
Multiple Display	4	3
Display Port	3 x DP, Max Resolution 4096x2160	1 x DP, Max solution 4096x2160
VGA	1 x VGA, Max Resolution 1920x1200	1 x VGA, Max Resolution 1920x1200
DVI-D	N/A	1 x DVI-D, Max Resolution 1920x1200
Storage		
2.5" SSD/HDD	2 x Internal 2.5" SATA HDD	1 x Removable and 1 x Internal 2.5" SATA HDD
M.2	1 x M.2 2280 M-Key (SATA) 1 x M.2 2280 M-Key (PCIe x4 and SATA)	N/A
mSATA	N/A	2 x mSATA (Shared by 2 x CFAST)
CFAST	N/A	2 x CFAST (Shared by 2 x mSATA)
RAID	RAID 0/1/5/10	
I/O Interface		
LAN	2 x 2.5GbE (Intel® I226-IT)	1 x 1.0GbE (Intel® i219-LM) 2 x 1.0GbE (Intel® i210-AT)
Serial	6 x RS232/422/485	6 x RS232/422/485
USB	9 x USB3.2 Gen2	6 x USB3.2 Gen1 and 2 x USB2.0
Audio	1 x Mic-In, 1 x Line-Out	
GPIO	8 x DI and 8 x DO	
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)	1 x Full-size Mini-PCIe (PCIe, USB2.0 and SIM), 1 x Full-size Mini-PCIe (PCIe, SATA III and SIM) (mux with mSATA)
M.2	1 x M.2 2242/3042/3052 B-Key (PCIe, USB 3.0 and SIM), 1 x M.2 2230 E-Key (PCIe, CNVi)	N/A
SIM Holder	2 x Mini-SIM Holders	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	1 x 3-Pin Terminal Block	
Mechanical		
Material	Extruded Aluminum with Heavy Duty Metal	
Mounting	VESA Mount(100x100mm)	
Thermal Dissipation	Fanless 35W	
Dimension WxDxH (mm)	240.5 x 200 x 88mm	241.5 x 230 x 73mm
Weight (kg)	3.8kg	3.3kg
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux	

Video Modules



Model	VM-2100
	Video Interface
DP	1 x Display Port Input
VGA	1 x VGA Input
DVI	1 x DVI Input
	Touchscreen Interface
USB	1 x USB2.0
Serial Port	1 x RS232
Audio	1 x Audio Input
	Others
External Switch	1 x External Power On/Off Connector, 2-pin Terminal Block; 1 x PC/Car Mode Connector
	Power
Power Ignition	Power Ignition Sensing
Voltage	9~48VDC
Connector Type	1 x 3-pin Terminal Block Connector
Power Adapter	1 x Optional AC/DC 12V/5A, 60W Power Adapter
Protection	Over Voltage Protection (OVP) up to 52V Reverse Voltage Protection (RVP) up to -48V Over Current Protection (OCP) 20A
	Mechanical
Material	Extruded Aluminum with Heavy Duty Metal
Mounting	VESA Mount(100x100mm)
Dimension WxDxH (mm)	168 x 135 x 39mm
Weight (kg)	0.8kg
	Environment
Operating Temperature (°C)	-10°C~60°C
Storage Temperature (°C)	-20°C~70°C
Operating Humidity	10~90% (non-condensing)
Storage Humidity	10~90% (non-condensing)
	Others
Vibration	1.5Grms, 5-500Hz, 3Axis
Shock	20 Grms, Half-sine 11ms

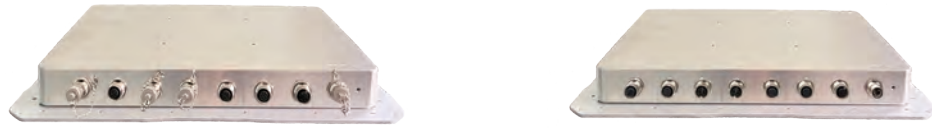
Display Modules



Model	WDM-115P	WDM-117P	WDM-121PW	WDM-124PW
IP Rating	IP67 Full System			
	Display			
Panel Size	15"	17"	21.5"	24"
Brightness	350cd/m2	350cd/m2	250cd/m2	300cd/m2
Max. Resolution	1024 x 768 (XGA)	1280x1024 (SXGA)	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Aspect Ratio	4:3	5:4	16:9	16:9
Max. Color	16.2M	16.7M	16.7M	16.7M
Viewing Angle	176(H)x176(V)	160(H)x140(V)	178(H)x178(V)	178(H)x178(V)
Contrast Ratio	2500:1	800:1	5000:1	5000:1
Backlight MTBF	70,000Hrs	50,000Hrs	30,000Hrs	50,000Hrs
	Touchscreen			
Touch Type	P-CAP (Projected Capacitive)			
Surface Hardness	7 Mohs			
Transparency	90% (±3%)			
	Mechanical			
Enclosure	Front Panel SUS304 (Optional SUS316) Stainless Steel with Back Cover Aluminum			
Mounting	Yoke / Wall Mount			
Dimension WxHxD (mm)	417.5 x 341.5 x33 mm	447.5 x 379 x 32.5mm	567 x 363 x 32mm	624 x 391.5 x 35mm
Weight(kg)	8.05kg	9.7kg	10.8kg	12kg
	Environment			
Operating Temperature (°C)	-20°C~+60°C			
Storage Temperature (°C)	-30°C~+70°C			
Operating Humidity	10~95%@40°C, Non-Condensing			
Storage Humidity	10~95%@60°C, Non-Condensing			
Certification	CE/FCC Class A			



Model	WSM-115P	WSM-117P	WSM-121PW	WSM-124PW
IP Rating	IP67 Full System			
	Display			
Panel Size	15"	17"	21.5"	24"
Brightness	1500cd/m2	1500cd/m2	1600cd/m2	1500cd/m2
Max. Resolution	1024 x 768 (XGA)	1280x1024 (SXGA)	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Aspect Ratio	4:3	5:4	16:9	16:9
Max. Color	16.2M	16.7M	16.7M	16.7M
Viewing Angle	176(H)x176(V)	160(H)x140(V)	178(H)x178(V)	178(H)x178(V)
Contrast Ratio	2500:1	800:1	5000:1	5000:1
Backlight MTBF	100,000Hrs	50,000Hrs	50,000Hrs	70,000Hrs
	Touchscreen			
Touch Type	P-CAP (Projected Capacitive)			
Surface Hardness	7 Mohs			
Transparency	90% (±3%)			
	Mechanical			
Enclosure	Front Panel SUS304 (Optional SUS316) Stainless Steel with Back Cover Aluminum			
Mounting	Yoke / Wall Mount			
Dimension WxHxD (mm)	417.5 x 341.5 x33 mm	447.5 x 379 x 32.5mm	567 x 363 x 32mm	624 x 391.5 x 35mm
Weight(kg)	8.05kg	9.7kg	10.8kg	12kg
	Environment			
Operating Temperature (°C)	-20°C~+60°C			
Storage Temperature (°C)	-30°C~+70°C			
Operating Humidity	10~95%@40°C, Non-Condensing			
Storage Humidity	10~95%@60°C, Non-Condensing			
Certification	CE/FCC Class A			



Model	WPM-2200	WPM-2250
IP Rating	IP67 Full System	
Processor System		
CPU	Intel® Alder Lake-N Processor N97	Intel® Alder Lake Core™ i3-N305
BIOS	AMI UEFI	
TPM	TPM 2.0	
Memory		
Technology	Single Channel DDR5 5600MHz	
Type	1 x 262-Pin SO-DIMM	
Max. Capacity	16GB	
Storage		
2.5" SSD/HDD	1 x 2.5" SATA HDD	
M.2	1 x M.2 2230/2242/2280 M-key (SATA)	
I/O Interface		
LAN	2 x 2.5GbE (Intel® I226-IT) (M12 Connector)	
Display Port	1 x DisplayPort 1.4a, Max Resolution 4096 x 2160 (M12 Connector)	
Serial	2 x RS232/422/485 (M12 Connector)	
USB	2 x USB3.2 Gen2 (M12 Connector)	
Expansion		
Mini-PCIe	1 x Full-Size Mini-PCIe (PCIe, USB2.0 and SIM)	
M.2	1 x M.2 2230/2242/2280 B-key (PCIe, USB3.0 and SIM)	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	M12 Connector	
Mechanical		
Material	SUS 304Stainless Steel (Optional SUS316)	
Mounting	Yoke / Wall Mount	
Dimension WxDxH (mm)	371 x 286 x 44mm	
Weight (kg)	3.96kg	
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Windows 11 (IoT/Professional), Linux	

PC Modules



Model	WPM-2000	WPM-2100
IP Rating	IP67 Full System	
Processor System		
CPU	Intel® Celeron® J1900	Intel® Pentium® N4200
BIOS	AMI UEFI	
Memory		
Technology	Single Channel DDR3L-1333MHz	Single Channel DDR3L-1866MHz
Type	2 x 204-Pin SO-DIMM	
Max. Capacity	8GB	
Storage		
2.5" SSD/HDD	1 x 2.5" SATA HDD	
mSATA	1 x mSATA (Shared by 1 x Mini-PCIe and CFast)	1 x mSATA (Shared by 1 x Mini-PCIe)
CFast	1 x CFast (Shared by mSATA)	N/A
I/O Interface		
LAN	2 x 1.0GbE (Intel® I210-AT) (M12 Connector)	
VGA	1 x VGA, Max Resolution 1920x1200(M12 Connector)	1 x VGA, Max Resolution 1920x1200 (M12 Connector)
Serial	2 x RS232/422/485 (M12 Connector)	
USB	1 x USB3.0 and 2 x USB2.0 (M12 Connector)	1 x USB3.2 Gen1 and 2 x USB2.0 (M12 Connector)
Expansion		
Mini-PCIe	1 x Full-size Mini-PCIe (SATA, USB2.0 and SIM) (shared by mSATA) 1 x Full-size Mini-PCIe (PCIe, USB2.0 and SIM)	
Power		
Power Mode	AT/ATX	
Voltage	9~48VDC	
Connector Type	M12 Connector	
Mechanical		
Material	SUS 304Stainless Steel (Optional SUS316)	
Mounting	Yoke / Wall Mount	
Dimension WxDxH (mm)	381 x 292 x 44mm	
Weight (kg)	3.16kg	
Environment		
Operating Temperature (°C)	-40°C~70°C	
Storage Temperature (°C)	-40°C~80°C	
Operating Humidity	10~90%@40°C, Non-Condensing	
Storage Humidity	10~90%@60°C, Non-Condensing	
Others		
Vibration	5Grms, 5-500Hz, 0.5hr/axis	
Shock	50G, Half Sine, 11ms	
Certification	CE/FCC Class A	
O/S Support	Windows 10 IoT, Linux	Windows 10 IoT, Windows 11 IoT/Professional, Linux



Modular Embedded Computing



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