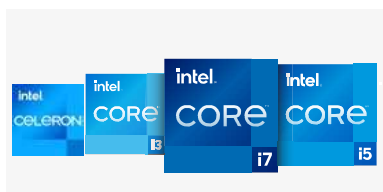




Heavy Industry Panel PC Product Family

The PPC2 panel PC series is designed for heavy industrial uses that need high degree of computing. Integrated with 12th Gen Intel® Core™ processor, the panel PC supports up to 64GB DDR4 memory, Intel® UHD Graphics and a PCIe Gen4 x16 slot for expansion of functionality. Its IP65 projected capacitive touchscreen with anti-glare/UV coating not only ensures readability and durability, but also allows gloved/wet hand operation. Moreover, the built-in power supply with AC input simplifies power delivery to the system and maximizes energy efficiency for diverse applications such as edge AI, industrial automation or machine vision.



12th Gen Intel® Core™ Desktop and Intel® Celeron® Processors

- 12th Gen Intel® Core™ i7/i5/i3 Desktop Processors
- Intel® Celeron® Processor J6412



Front IP65 Ingress Protection

Rugged aluminum die-casting front bezel framed with strong waterproof gasket seal on the back to protect against pressure water



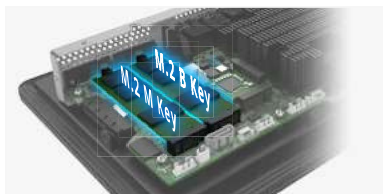
Expand AI Capability with High-bandwidth PCIe Gen4 x16

Hardware acceleration by graphics cards and AI accelerators. (PPC2-Cxx-ADL series)



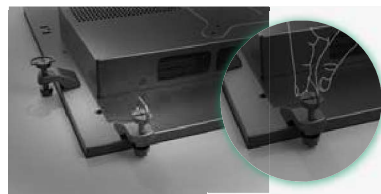
Graphical BIOS Interface

The graphical BIOS interface can be navigated with fingers, no keyboard and mouse are required to operate.



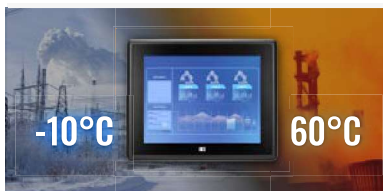
M.2 B Key & M.2 M Key

Dual M.2 ultra-high-speed expansion supporting SSD & AI accelerator to enhance efficiency. (PPC2-Cxx-EHL series)



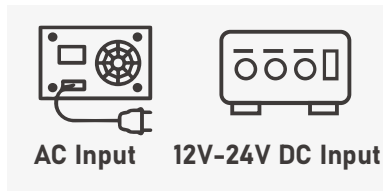
Toolless Panel Mounting Design

The easy to use panel mount kit can be fastened by hand and no screwdriver required.



-10°C to 60°C Wide Operating Temperature

Dual M.2 ultra-high-speed expansion supporting SSD & AI accelerator to enhance efficiency. (PPC2-Cxx-EHL series)



AC-In or 12V-24V DC Power Input Maximizes Industrial Convenience

- Built-in 250W 90~264VAC PSU (PPC2-Cxx-ADL series)
- 12-24V DC input with lockable terminal block (PPC2-Cxx-EHL series)



Resilient, Responsive PCAP Touch Technologies

- 10-point multi-touch PCAP touchscreen
- 7H hardness glass
- Anti-UV, anti-glare coating, support gloves and wet hands operation

Selection Guide

Size (Resolution)	8" (800 x 600)	10.4" (800 x 600)	12.1" (1024 x 768)	15" (1024 x 768)	15.6" (1920 x 1080)	17" (1280 x 1024)	19" (1280 x 1024)	18.5" (1920 x 1080)	21.5" (1920 x 1080)
12th Gen Intel® Core™ Desktop Processors				PPC2-C15-ADL	PPC2-CW15-ADL	PPC2-C17-ADL	PPC2-C19-ADL	PPC2-CW19-ADL	PPC2-CW22-ADL
Intel® Celeron® Processor J6412	PPC2-C08-EHL	PPC2-C10-EHL	PPC2-C12-EHL	PPC2-C15-EHL	PPC2-CW15-EHL	PPC2-C17-EHL	PPC2-C19-EHL	PPC2-CW19-EHL	PPC2-CW22-EHL

Heavy Industry Panel PC

Intel® Core™ Desktop Processors

intel
Alder Lake-S

NEW



NEW



NEW



LCD Size	15"	15.6"	17"
Model	PPC2-C15-ADL	PPC2-CW15-ADL	PPC2-C17-ADL
Max. Resolution	1024 x 768 (4:3)	1920 x 1080 (16:9)	1280 x 1024 (5:4)
Brightness	450 cd/m ²	400 cd/m ²	350 cd/m ²
Contrast Ratio	800:1	500:1	800:1
LCD Color	16.2M	16.2M	16.7M
Pixel Pitch (mm)	0.297 x 0.297	0.252 x 0.252	0.26 x 0.26
Viewing Angle (H-V)	160°/150°	170°/160°	170°/160°
Backlight MTBF	70,000 hours	50,000 hours	50,000 hours
CPU	12th Gen Intel® Core™ i9/i7/i5/i3 and Pentium® Processor (LGA1700)		
Chipset	Intel® H610		
Graphics Engine	New Intel® Xe Graphics architecture with SRIOV, Genlock		
Display Output	1 x HDMI 2.0		
Memory	Two 260-pin 3200 MHz dual-Channel DDR4 SO-DIMM (max. 64GB)		
Touchscreen	Multi-point projected capacitive type Surface hardness: ≥7H		
Touch Controller	Projected capacitive type: EETI 80		
Storage	1 x 2.5" SATA HDD bay		
Ethernet	LAN1: Intel® I225 + LAN2: Intel® I225		
Expansion	1 x PCIe Gen4 x16 slot with x16 Signal 1 x M.2 E-Key 2230 (PCIe Gen3 x1 + CNVio + USB 2.0) 1 x M.2 M Key 2242/2280 NVMe (PCIe Gen3 x4)		
Mounting	VESA 100mm x 100mm Panel, Wall, Rack, Stand and Arm		
Construction Material	Aluminum front cover and sheet metal rear cover		
Enclosure Color	Black C		
I/O Ports, Switches and Buttons	1 x HDMI 2.0 2 x 2.5GbE RJ45 2 x USB 2.0 (Type-A) 2 x USB 3.2 Gen1 (Type-A) (5Gb/s) 2 x USB 3.2 Gen2 (Type-A) (10Gb/s) 1 x RS-232/422/485 (RS-485 support AFC)	4 x RS-232 1 x AC input 1 x Power switch 1 x Clear CMOS button 1 x Reset button 1 x AT/ATX switch	
Power Supply	AC input ATX power supply 250W power supply - Input: 100V~240V AC, 47Hz~63Hz - Output (max.): 3.3V@6A, 5V@12A, 12V@17A, -12V@0.5A, +5Vsb@2A Support AT/ATX mode ErP/EuP Compliant		
Thermal Solution	Smart fan (2 x CPU fan, 2 x System fan)		
TPM	Intel® Platform Trust Technology		
Watchdog Timer	Software Programmable Support 1~255 sec. system reset		
Operating Temperature (with air flow)	-10°C ~ 60°C		
Storage Temperature	-20°C ~ 60°C		
Humidity	10% ~ 95%@40, non-condensing		
IP Level	IP 65 compliant front panel		
Operating Vibration	MIL-STD-810G 514.6C-1 (with SSD)		
Operating Shock	Half-sine wave shock 5G; 11ms; 100 shocks per axis		
Safety and EMC	CE, FCC Class A, UKCA		
ErP	ErP 2009/125/EC		
Dimensions (H x W x D) (mm)	378.5 x 303 x 76.16	400.70 x 253.90 x 86.45	408.40 x 341.40 x 84.70
Net Weight	5.715 kg	5.64 kg	5.73 kg

Heavy Industry Panel PC

Intel® Core™ Desktop Processors

intel
Alder Lake-S



LCD Size	18.5"	19"	21.5"
Model	PPC2-CW19-ADL	PPC2-C19-ADL	PPC2-CW22-ADL
Max. Resolution	1920 x 1080 (16:9)	1280x 1024 (5:4)	1920x 1080 (16:9)
Brightness	400 cd/m ²	350 cd/m ²	350 cd/m ²
Contrast Ratio	1000:1	1000:1	1000:1
LCD Color	16.7M	16.7M	16.7M
Pixel Pitch (mm)	0.3 x 0.3	0.294 x 0.294	0.3 x 0.3
Viewing Angle (H-V)	170°/160°	170°/160°	170°/160°
Backlight MTBF	50,000 hours	50,000 hours	50,000 hours
CPU	12th Gen Intel® Core™ i9/i7/i5/i3 and Pentium® Processor (LGA1700)		
Chipset	Intel® H610		
Graphics Engine	New Intel® Xe Graphics architecture with SRIOV, Genlock		
Display Output	1 x HDMI 2.0		
Memory	Two 260-pin 3200 MHz dual-Channel DDR4 SO-DIMM (max. 64GB)		
Touchscreen	Multi-point projected capacitive type Surface hardness: ≥7H		
Touch Controller	Projected capacitive type: EETI 80		
Storage	1 x 2.5" SATA HDD bay		
Ethernet	LAN1: Intel® I225 + LAN2: Intel® I225		
Expansion	1 x PCIe Gen4 x16 slot with x16 Signal 1 x M.2 E-Key 2230 (PCIe Gen3 x1 + CNVlo + USB 2.0) 1 x M.2 M Key 2242/2280 NVMe (PCIe Gen3 x4)		
Mounting	VESA 100mm x 100mm Panel, Wall, Rack, Stand and Arm		
Construction Material	Aluminum front cover and sheet metal rear cover		
Enclosure Color	Black C		
I/O Ports, Switches and Buttons	1 x HDMI 2.0 2 x 2.5GbE RJ45 2 x USB 2.0 (Type-A) 2 x USB 3.2 Gen1 (Type-A) (5Gb/s) 2 x USB 3.2 Gen2 (Type-A) (10Gb/s) 1 x RS-232/422/485 (RS-485 support AFC)	4 x RS-232 1 x AC input 1 x Power switch 1 x Clear CMOS button 1 x Reset button 1 x AT/ATX switch	
Power Supply	AC input ATX power supply 250W power supply - Input: 100V~240V AC, 47Hz-63Hz - Output (max.): 3.3V@6A, 5V@12A, 12V@17A, -12V@0.5A, +5Vsb@2A Support AT/ATX mode ErP/EuP Compliant		
Thermal Solution	Smart fan (2 x CPU fan, 2 x System fan)		
TPM	Intel® Platform Trust Technology		
Watchdog Timer	Software Programmable Support 1~255 sec. system reset		
Operating Temperature (with air flow)	-10°C ~ 60°C		
Storage Temperature	-20°C ~ 60°C		
Humidity	10% ~ 95%@40, non-condensing		
IP Level	IP 65 compliant front panel		
Operating Vibration	MIL-STD-810G 514.6C-1 (with SSD)		
Operating Shock	Half-sine wave shock 5G; 11ms; 100 shocks per axis		
Safety and EMC	CE, FCC Class A, UKCA		
ErP	ErP 2009/125/EC		
Dimensions(H x W x D) (mm)	468.80 x 288.20 x 82	447.4 x 372.4 x 82.2	550.40 x 358.40 x 81.66
Net Weight	6.965 kg	7.66 kg	9 kg

Heavy Industry Panel PC

Intel® Celeron® Processor



LCD Size	8"	10.4"	12"	15"	15.6"
Model	PPC2-C08-EHL	PPC2-C10-EHL	PPC2-C12-EHL	PPC2-C15-EHL	PPC2-CW15-EHL
Resolution	800 x 600 (4:3)	800 x 600 (4:3)	1024 x 768 (4:3)	1024 x 768 (4:3)	1920 x 1080 (16:9)
Brightness	500 cd/m ²	400 cd/m ²	500 cd/m ²	450 cd/m ²	400cd/m ²
Contrast Ratio	500:1	700:1	700:1	800:1	500:1
LCD Color	262K	16.2M	16.2M	16.2M	16.2M
Pixel Pitch (mm)	0.2025 x 0.0675	0.264 x 0.264	0.24 x 0.24	0.297 x 0.297	0.252 x 0.252
Viewing Angle (H-V)	140°/120°	160°/140°	160°/140°	160°/150°	170°/160°
Backlight MTBF	50,000 hours	30,000 hours	50,000 hours	70,000 hours	50,000 hours
CPU (SoC)	Intel® Celeron® Processor J6412 1.5M Cache, up to 2.60 GHz / TDP 10W				
Memory	Dual channel 8GB LPDDR4x on board				
Touchscreen	Multi-point projected capacitive type (anti-UV / anti-glare coating, support gloves) Surface hardness: ≥7H				
Touch Controller	Projected capacitive type: EETI 80				
Storage	N/A	N/A	1 x 2.5" HDD/SSD drive bay	1 x 2.5" HDD/SSD drive bay	1 x 2.5" HDD/SSD drive bay
Ethernet	2 x 2.5GbE LAN via Intel I225-V				
Expansion	1 x M.2 2242/2280 B key (PCIe Gen3 x1 + USB 3.0) 1 x M.2 2242 M key (PCIe Gen3 x2)				
Mounting	VESA 75 Panel, Wall, Stand and Arm	VESA 75/100 Panel, Wall, Rack, Stand and Arm			
Construction Material	Aluminum front cover and sheet metal rear cover				
Enclosure Color	Black				
I/O Ports, Switches and Buttons	1 x HDMI output 2 x 2.5GbE RJ-45 2 x USB 3.2 Gen 2x1 (10Gb/s) 2 x USB 2.0 1 x RS-232/422/485 1 x RS-232 1 x 12V-24V power jack 1 x Power terminal block (2-pin) 1 x AT/ATX switch 1 x Power button 1 x Reset button 1 x Clear CMOS button	1 x HDMI output 2 x 2.5GbE RJ-45 2 x USB 3.2 Gen 2x1 (10Gb/s) 2 x USB 2.0 1 x RS-232/422/485 1 x RS-232 1 x 12V-24V power jack 1 x Power terminal block (2-pin) 1 x AT/ATX switch 1 x Power button 1 x Reset button 1 x Clear CMOS button PPC2-XIO-03-R10: 1 x RS-232 DB9 1 x M.2 B key 2242/2280 (PCIe Gen3 x 2 + USB 2.0)	1 x HDMI output 2 x 2.5GbE RJ-45 2 x USB 3.2 Gen 2x1 (10Gb/s) 2 x USB 2.0 1 x RS-232/422/485 1 x RS-232 1 x 12V-24V power jack 1 x Power terminal block (2-pin) 1 x AT/ATX switch 1 x Power button 1 x Reset button 1 x Clear CMOS button PPC2-XIO-01-R10: 2 x USB 2.0 2 x RS-232 DB9 1 x M.2 B key 2242/2280 (PCIe Gen3 x 2 + USB 2.0)	1 x HDMI output 2 x 2.5GbE RJ-45 2 x USB 3.2 Gen 2x1 (10Gb/s) 2 x USB 2.0 1 x RS-232/422/485 1 x RS-232 1 x 12V-24V power jack 1 x Power terminal block (2-pin) 1 x AT/ATX switch 1 x Power button 1 x Reset button 1 x Clear CMOS button PPC2-XIO-02-R10: 2 x USB 2.0 3 x RS-232 DB9 1 x M.2 B key 2242/2280 (PCIe Gen3 x 2 + USB 2.0)	
Power Input	12 V ~ 24 V DC				
Power Adapter	36W power adapter	36W power adapter	60W power adapter	60W power adapter	60W power adapter
Thermal Solution	Fanless				
TPM	Intel® Platform Trust Technology				
Watchdog Timer	Software Programmable support 1~255 sec. system reset				
Operating Temperature (with air flow)	-10°C ~ 60°C				
Storage Temperature	-20°C ~ 60°C				
Humidity	10% ~ 90%@40°C, non-condensing				
Operating Vibration	MIL-STD-810G 514.6C-1 (with SSD)				
Operating Shock	Half-sine wave shock 5G; 11ms; 100 shocks per axis				
IP Level	IP 65 compliant front panel				
Safety and EMC	CE, FCC Class A				
ErP	ErP 2009/125/EC				
Dimensions (H x W x D) (mm)	222.2 x 182.2 x 49.7	285.2 x 232.4 x 49.9	322.2 x 262.2 x 53	378.5 x 303 x 53.2	400.10 x 253.30 x 58.45
Net Weight	1.610KG	2.335KG	3.095KG	3.940KG	3.875KG

Heavy Industry Panel PC

Intel® Celeron® Processor



LCD Size	17"	19"	18.5"	21.5"
Model	PPC2-C17-EHL	PPC2-C19-EHL	PPC2-CW19-EHL	PPC2-CW22-EHL
Resolution	1280 x 1024 (5:4)	1280 x 1024 (5:4)	1920 x 1080 (16:9)	1920 x 1080 (16:9)
Brightness	350 cd/m ²	350 cd/m ²	400cd/m ²	400cd/m ²
Contrast Ratio	800:1	1000:1	1000:1	1000:1
LCD Color	16.7M	16.7M	16.7M	16.7M
Pixel Pitch (mm)	0.26 x 0.26	0.294 x 0.294	0.3 x 0.3	0.3 x 0.3
Viewing Angle (H-V)	170°/160°	170°/160°	170°/160°	170°/160°
Backlight MTBF	50,000 hours	50,000 hours	50,000 hours	50,000 hours
CPU (SoC)	Intel® Celeron® Processor J6412 1.5M Cache, up to 2.60 GHz / TDP 10W			
Memory	Dual channel 8GB LPDDR4x on board			
Touchscreen	Multi-point projected capacitive type (anti-UV / anti-glare coating, support gloves) Surface hardness: ≥7H			
Touch Controller	Projected capacitive type: EETI 80			
Storage	1 x 2.5" HDD/SSD drive bay			
Ethernet	2 x 2.5GbE LAN via Intel I225-V			
Expansion	1 x M.2 2242/2280 B key (PCIe Gen3 x1 + USB 3.0) 1 x M.2 2242 M key (PCIe Gen3 x2)			
Mounting	VESA 75/100 Panel, Wall, Rack, Stand and Arm			
Construction Material	Aluminum front cover and sheet metal rear cover			
Enclosure Color	Black			
I/O Ports, Switches and Buttons	1 x HDMI output 2 x 2.5GbE RJ-45 2 x USB 3.2 Gen 2x1 (10Gb/s) 2 x USB 2.0 1 x RS-232/422/485 1 x RS-232 1 x 12V-24V power jack 1 x Power terminal block (2-pin)		1 x AT/ATX switch 1 x Power button 1 x Reset button 1 x Clear CMOS button PPC2-XIO-02-R10: 2 x USB 2.0 3 x RS-232 DB9 1 x M.2 B key 2242/2280 (PCIe Gen3 x 2 + USB 2.0)	
Power Input	12 V ~ 24 V DC			
Power Adapter	60W power adapter			
Thermal Solution	Fanless			
TPM	Intel® Platform Trust Technology			
Watchdog Timer	Software Programmable support 1~255 sec. system reset			
Operating Temperature (with air flow)	-10°C ~ 60°C			
Storage Temperature	-20°C ~ 60°C			
Humidity	10% ~ 90%@40°C			
Operating Vibration	MIL-STD-810G 514.6C-1 (with SSD)			
Operating Shock	Half-sine wave shock 5G; 11ms; 100 shocks per axis			
IP Level	IP 65 compliant front panel			
Safety and EMC	CE, FCC Class A			
ErP	ErP 2009/125/EC			
Dimensions (H x W x D) (mm)	408.40 x 341.40 x 61.80	447.40 x 372.40 x 59.20	468.80 x 288.20 x 59.40	550.40 x 358.40 x 58.50
Net Weight	4.830KG	5.745KG	5.096KG	6.330KG