

# PE3000G

Rugged fanless edge AI computer supporting NVIDIA® or Intel® MXM GPU and 12<sup>th</sup> Gen Intel® Core™ processor



## Features

- Support NVIDIA® Ampere/Turing™ or Intel® Arc™ A-series MXM GPU, for varied edge AI computing
- 12th Gen Intel® Core™ (Alder Lake-P, H) 45W CPU, up to 64GB DDR5 4800 SDRAM
- Patented system architecture and thermal design to ensure -20°C to 60°C fanless operation\*
- 3x 2.5 GbE and 1x GbE ports with optional PoE+ support
- 1x M.2 M key (NVMe), 1x M.2 B key (4G/ 5G NR), 1x M.2 E key (WiFi 6)
- 8~48V wide range DC input with built-in Ignition power control
- MIL-STD-810H and withstand 5 Grms vibration

\* R.O.C patent pending

## Specifications

System	CPU	Intel® Core® i7-12800HE	Intel® Core® i5-12600HE	Intel® Core® i3-12300HE
	TDP	45W	45W	45W
	# of Cores	14	12	8
	P Core Base Freq.	2.4	2.5	1.9
	Max Turbo Freq.	4.6	4.5	4.3
	Graphics	Integrated Intel® Iris® Xe Graphics (i7/i5) Integrated Intel® UHD Graphics (i3)		
	Memory	2 x SO-DIMM, up to 64GB DDR5 SDRAM (two SODIMM slots)		
	AMT	Supports Intel® vPro / AMT		
TPM	Supports dTPM 2.0			
I/O Interface	Display	2x HDMI 1.4, supports up to 4096 x 2304 2x DP ++, supports up to 4096 x 2304		
	Display (MXM Graphics)	4x DP, supports 4K @ 60Hz (based on MXM GPU Spec.)		
	Ethernet * Optional for PoE+	3 x Intel®I226-IT (2.5 GbE), RJ45 with screw-lock 1 x Intel®I219-LM (Gigabit), RJ45 with screw-lock * Optional for IEEE 802.3at PoE + PSE; 100W total power budget (4 ports)		
	USB	3x USB 3.2 Gen2x1 (10 Gbps) , type A with screw-lock 1x USB 2.0, type A with screw-lock		
	Audio	Mic in and Line out		
	COM	2 x COM: RS-232/422/485, DB9 2 x COM: RS-232, DB9 (internal COM3/ COM4)* 2 ports for CanBus module (COM3/ COM4)* *Optional and either one		
LED Indicator	LED	PWR/ Storage/ Watch dog/ Ignition		
Storage Interface	SATA HDD	2x hot swappable SATA port for 2.5" HDD/ SSD installation, supporting RAID 0/ 1		
	M.2 NVMe	1x M.2 2280 M key NVMe socket ( PCIe Gen4x4) for NVMe SSD		
Expansion	Mini PCIe	1 x Mini PCIe socket, full size, support cellular module		
	M.2 E Key	1 x M.2 2242/ 2252 E-key for selected WiFi module (WiFi5/ WiFi6)		
	M.2 B Key	1 x M.2 3042/3052 B-Key with SIM slot support 5G/ 4G module		
Power	System Power	1 x 3 pin pluggable terminal block for 8-48V DC input 1 x Power button 1 x Reset power button Built-in ignition power control, header for remote power button		
	Power Supply	330W(Optional) /480W (Optional)		
Mechanical	Mounting	Desktop Mount / Wall Mount		
	Dimension	240 x 230 x 125.7 mm		
	Weight	8.2 kg		
Environment	Operating Temp.	Preliminary -20 C ~ 60 C (w/ 50W MXM, 45W CPU)		
	Storage Temp.	-40~85°C		
	Relative Humidity	10 to 95% (non-condensing)		
	EMC	CE/FCC Class B, according to EN 55032 & EN 55035, BSMI		
	Safety	CB,CE-LVD,BSMI		
	Vibration	Operating: MIL-STD 810H Method 514.8, Category 4 (Truck transportation over US highways) & 5Grms, 5-500 Hz, 3 Axes		
Shock	Operating: MIL-STD 810H Method 516.8, Procedure I, Table 516.6-II; 20 G			
Green	GA (RoHS)			
Others	Watch dog timer	HW WDT Enable (WDT_EN)		
	OS	Windows 10 IoT Enterprise		