

PE1000U

Ultra-compact and rugged fanless DIN-rail computer with Intel® Core™ Ultra processor (Series 2)

Features

- Intel® Core™ Ultra processor (Series 2), with up to 64 GB DDR5
- Rich I/O, up to 4 x LAN, 4 x USB and 4 x COM
- Rich expansion capacity including DIO / LAN ports
- Wide voltage range: 9 to 36V
- Wide operating temperature range: -25°C to 70°C*
- Onboard 2 x CANBUS 2.0

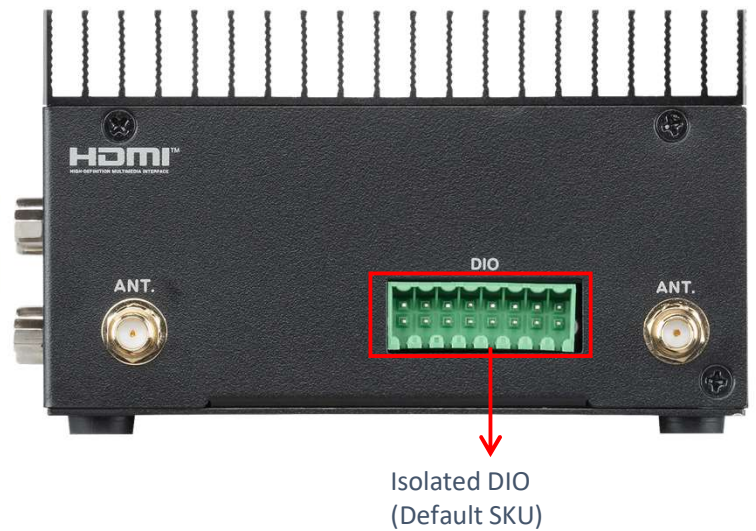
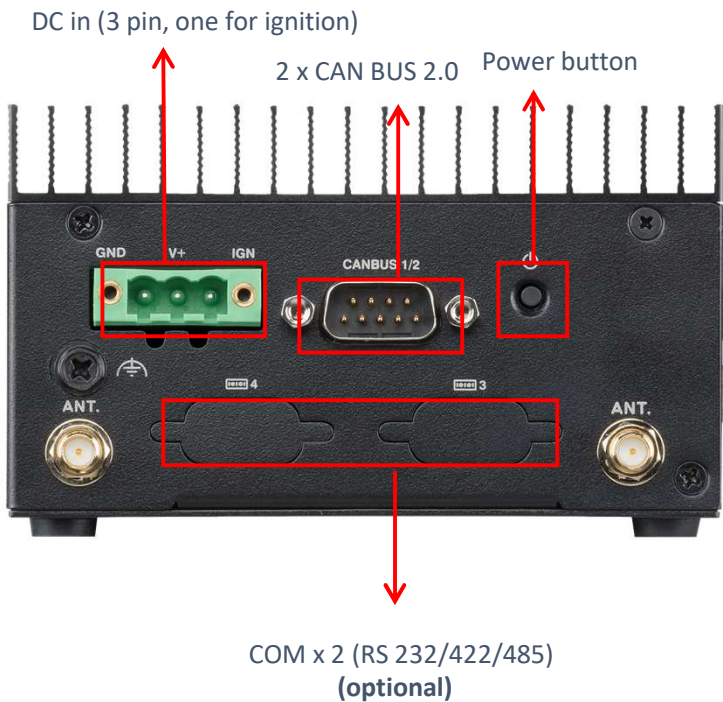
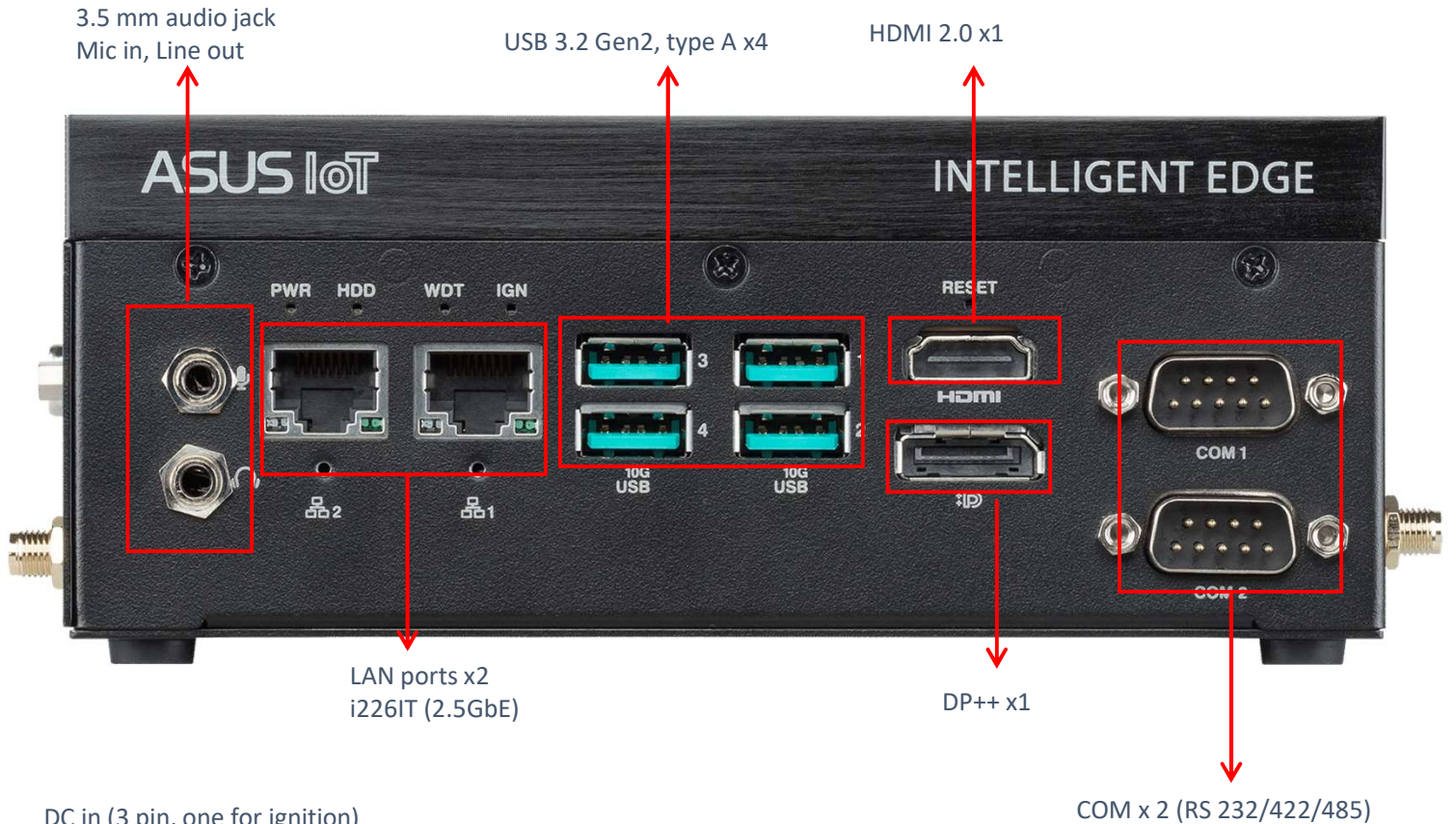


Specifications

	CPU	Intel® Core™ Ultra 7 processor 265U	Intel® Core™ Ultra 5 processor 235U
System	TDP	15W	15W
	# of Cores	12	12
	Base Freq.	2.1GHz	2GHz
	Max Turbo Freq.	5.3GHz	4.9GHz
	Memory	2 x SO-DIMM, DDR5 supports up to 6400 MHz, max 64 GB	
	AMT	Supports Intel® vPro / AMT	
I/O Interfaces	Display	1 x HDMI 2.0, supports up to 4096 x 2160 @ 60 Hz 1 x DP ++, supports up to 5120 x 3200 @ 60 Hz	
	Ethernet	2 x 2.5 GbE, RJ45 (Intel® i226-IT) 2 x GbE, RJ45 (Intel® i210) (optional, 2 x 1GbE LAN and DIO are mutually exclusive options.)	
	USB	4 x USB3.2(Gen2x1) type A , 10G	
	COM	4 x RS-232/422/485 (2 for optional)	
	Audio	1 x Mic-in, phone jack 1 x Line-out, phone jack	
	CANBUS	2 x CANBUS 2.0 (1 x DB9)	
	DIO	4 x DI, 4 x DO support isolation (DIO is configured as the default SKU. Either DIO or 2 x 1GbE LAN can be selected; both cannot be supported simultaneously.)	
Storage	2.5" SATA	1 x 2.5" SSD	
	M.2 M Key	1 x M.2 2280 M-key socket (NVMe SSD) PCIe x4	
Expansion Slot	M.2 E Key	1 x M.2 2230 E key socket (support CNVi, PCIe x1, USB 2.0)	
	M.2 B Key	1 x M.2 3042/3052 B key socket with nano-SIM slot (PCIe x1, USB 3.2 Gen 1, USB 2.0)	
Power	Power input	9 to 36 V DC-in, 3-pin terminal block (V+, GND, ING)	
Mechanical	Mounting	Din Rail (wall mount optional)	
	Dimensions	63 (H) x 110 (W) x 160 (D) mm	
	Weight	1 kg	
Environment	Operating Temp.	-25~70°C(*) (*)60°C-70°C (with industrial 2.5" SSD and memory)	
	Storage Temp.	-40° C to 85° C	
	Relative Humidity	10 to 95% (non-condensing)	
	EMC	CE, FCC, IC, BSMI	
	Safety	CE-LVD, UKCA, CB, BSMI	
	Vibration	Operating: MIL-STD 810H Method 514.8, Category 4 & 3Grms, 5-500 Hz, 3 Axes , 5GRMS	
Security	Shock	Operating: MIL-STD 810H Method 516.8, Procedure I, Table 516.6-II; 40 G 11ms	
	Green	GA (RoHS)	
	TPM	TPM 2.0	
	Watchdog timer	Supported	
Others	OS	Windows® 11 IoT Enterprise (64-bit) Linux by Project support	

1. For wide temperature demand, the industrial memory & storage are required; Ambient with air flow.

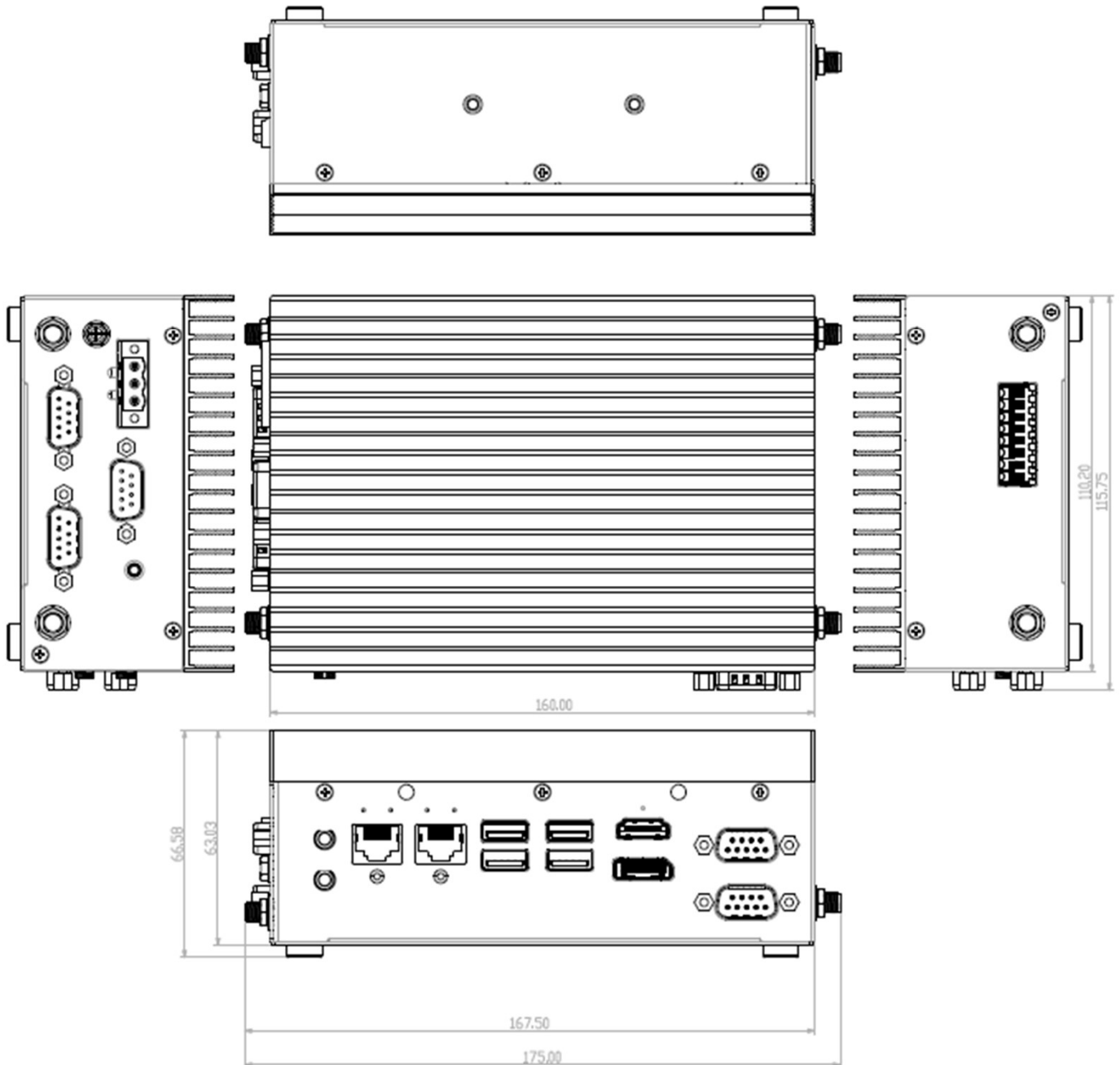
Appearance



Other options is dual LAN (2 x 1GbE)

DIO is configured as the default SKU.
Either DIO or 2 x 1GbE LAN can be selected;
both cannot be supported simultaneously.

Dimension (mm) – DIO SKU



Ordering Information

SKU	CPU	DIO	RAM	2.5" SATA	LAN	M.2 B-key	M.2 E-key	M.2 M-key	COM	USB	CAN BUS2.0
Standard SKU (DIO)	Intel® Core™ Ultra 7 265U	1	2	1	2	1	1	1	2/4	4	2
	Intel® Core™ Ultra 5 235U	1	2	1	2	1	1	1	2/4	4	2
4 LAN SKU	Intel® Core™ Ultra 7 265U	--	2	1	4	--	1	1	2/4	4	2
	Intel® Core™ Ultra 5 235U	--	2	1	4	--	1	1	2/4	4	2

- COM3/ COM4 support RS-232/422/485 (optional)
- LAN3/LAN4 support 1GbE RJ45 via optional M.2 B-Key module; *LTE and 5G module cannot be supported simultaneously.*
- M.2 M-key: M.2 SSD or dual 1GbE LAN module
- M.2 B-key: LTE/ 5G module
- M.2 E-key: WIFI/BT module
- In environments operating at temperatures between 60°C and 70°C, the use of industrial-grade 2.5" SSDs and memory is strongly recommended to ensure system stability and reliability.
- In barebone configuration, memory, M.2 SSD, and DIO are not pre-installed. Installation should be performed according to the instructions described in the user manual.
- The part number might vary for different regulations and package. Please consult the local sales representative for the exact 90PN.
- Please check with your importer or integrator for system level certification.

Packing list

Description	Qty
Power terminal block	1
Din rail clip and screw pack	1
2.5" SSD screw pack (optional, if there is no 2.5" SSD in the system)	1

Optional Accessories (purchased separately)

Part Number	Description
ADAPTER	Power adapter, 160W 20V, input voltage 100 to 264VAC, output voltage 20VDC with 8A DC load, -25 to 60°C operating temperature
POWER CORD	Power cord with United States (US) plug
	Power cord with Europe (EU) plug
	Power cord with China (CN) plug
	Power cord with Australia (AU) plug
	Power cord with United Kingdom (UK) plug
	Power cord with Korea (KR) plug
	Power cord with Taiwan (TW) plug