

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 /iBMC modules
- Wide voltage range: 9 to 36V
- Wide operating temperature range: -25°C to 70°C*
- Onboard 2 x CANBUS 2.0

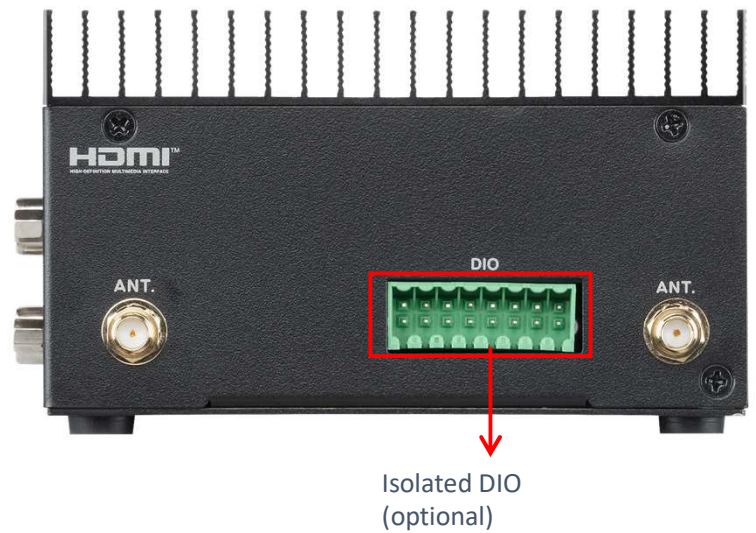
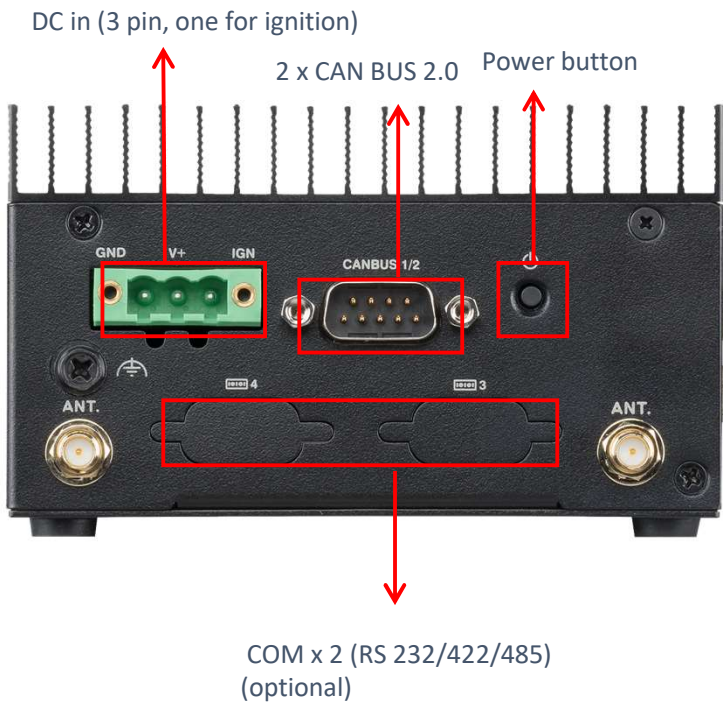
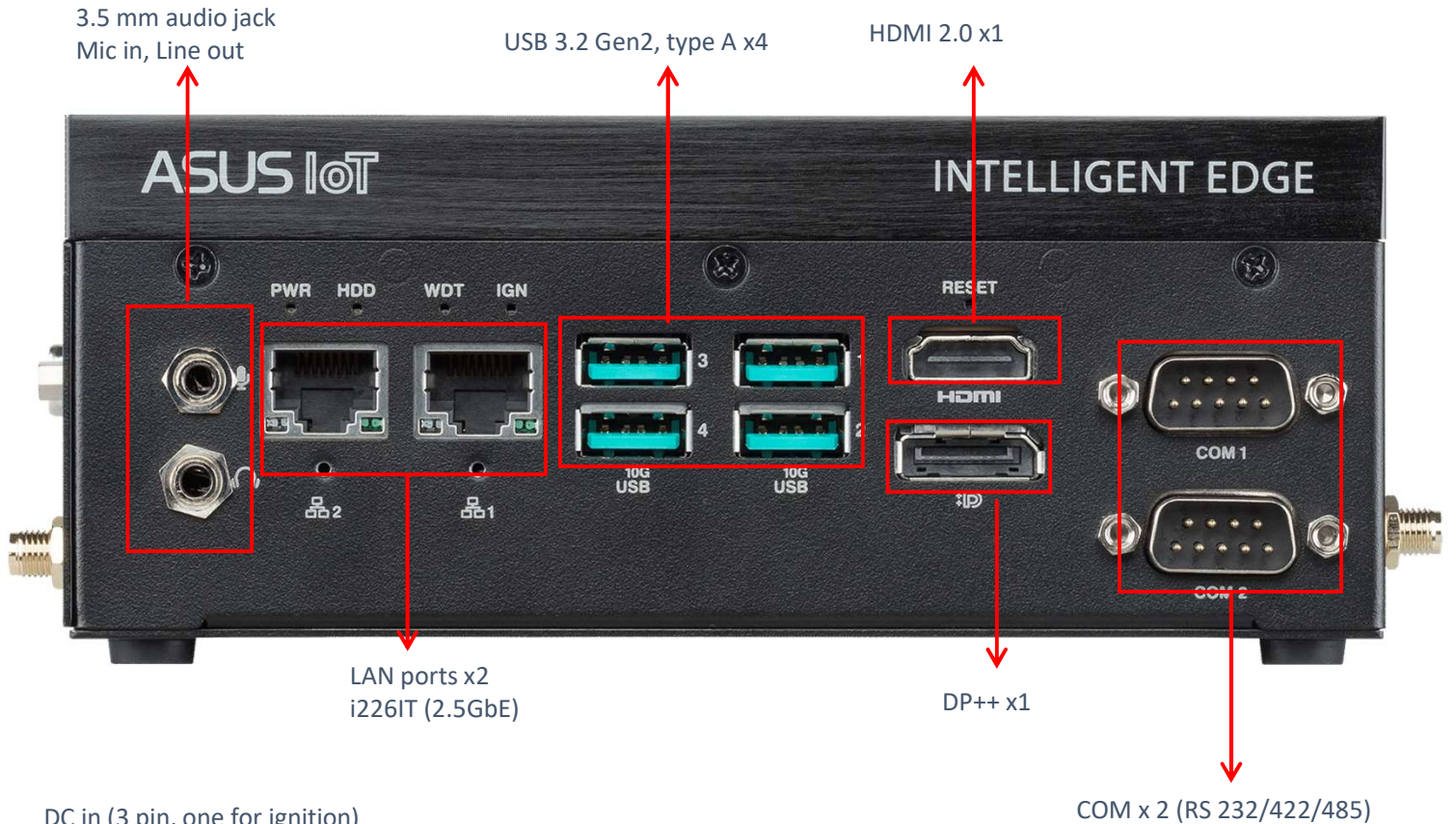


Specifications

	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)		
	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 (1xDB9)		
	DIO	4 x DI, 4 x DO support isolation (optional)		
	iBMC	1 (optional, support basic function, reset, turn on, turn off and force shutdown)		
	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	
M.2 E Key		1 x M.2 2230 E key socket (support CNVi, PCIe1,USB 2.0)		
Expansion Slot	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		
Shock		Operating: MIL-STD 810H Method 516.8, Procedure I, Table 516.6-II; 40 G 11ms		
Security	Green	GA (RoHS)		
	TPM	TPM 2.0		
	Watchdog timer	Supported		
Others	OS	Windows® 11 IoT Enterprise (64-bit) Linux by Project support		

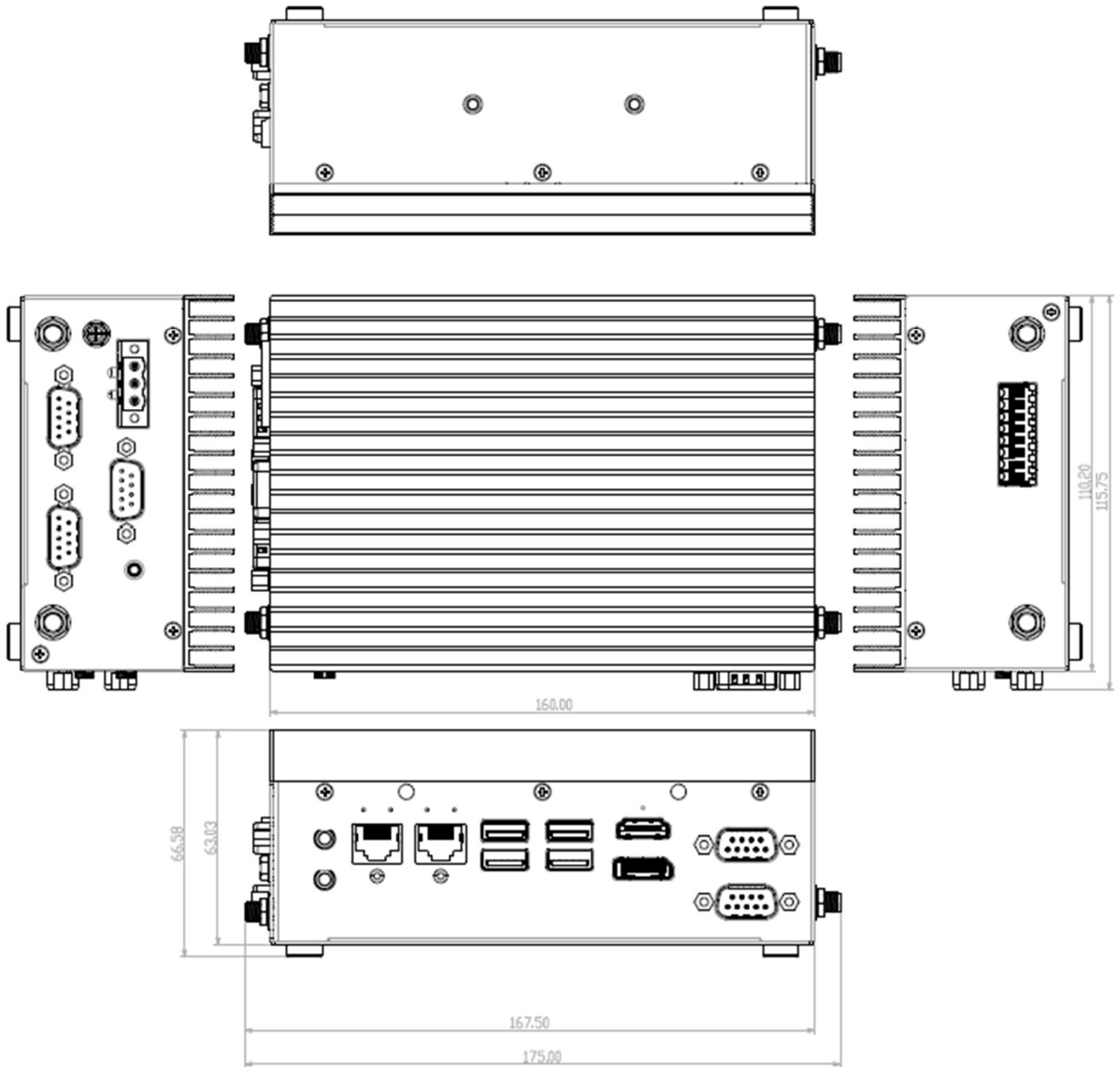
1. For wide temperature demand, the industrial memory & storage are required; Ambient with air flow.

Appearance



Other options are dual LAN/iBMC

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 BUS	iBMC
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	--
iBMC	Intel® Core™ Ultra 7 265U	--	2	1	2	1	1	1	2/4	4	2	1
	Intel® Core™ Ultra 5 235U	--	2	1	2	1	1	1	2/4	4	2	1

COM3/ COM4 support RS-232/422/485 (optional)
 LAN3 / LAN4 support 1GbE RJ45 (optional) by M.2 E key

- 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