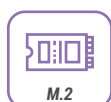


TANK-8700-MPHX

- High-Performance AMD Ryzen™ 7000/8000 Series Mobile Processor
- Fanless Embedded Computer

Features

- Supported CPUs:
AMD Ryzen™ 7000/8000 Series Mobile Processor
AMD Ryzen™ 5 8645HS 4.3 GHz, (up to 5.0 GHz, 6 Core, TDP 45W)
AMD Ryzen™ 7 8845HS 3.8 GHz, (up to 5.1 GHz, 8 Core, TDP 45W)
AMD Ryzen™ 9 8945HS 4.0 GHz, (up to 5.2 GHz, 8 Core, TDP 45W)
- 2 x 2.5G Ethernet ports
- Multiple USB ports and serial ports
- Multiple M.2 expansions and PCIe expansions
- CE/FCC compliant
- Three independent display
- Support IPMI remote management



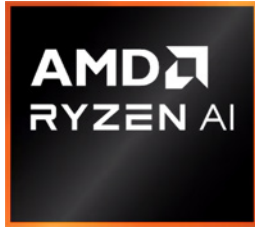
Specifications

Model Name		TANK-8700-MPHX
Chassis	Color	Black C + Iron Gray
	Dimensions (WxDxH) (mm)	254.4 x 205 x 127.2
	System Fan	Fanless
	Chassis Construction	Extruded aluminum alloys
Motherboard	CPU	AMD Ryzen™ 7000/8000 Series Processor AMD Ryzen™ 5 8645HS 4.3 GHz, (up to 5.0 GHz, 6 Core, TDP 45W) AMD Ryzen™ 7 8845HS 3.8 GHz, (up to 5.1 GHz, 8 Core, TDP 45W) AMD Ryzen™ 9 8945HS 4.0 GHz, (up to 5.2 GHz, 8 Core, TDP 45W)
	Chipset	SOC
	Memory	2 x SO-DIMM DDR5 5600 (16GB pre-installed) (up to 96GB)
	HDD Bay	2 x 2.5" SATA 6Gb/s HDD/SSD bay
I/O Interfaces	Ethernet	2 x 2.5 GbE by Realtek 8125B controller 1 x RJ45 by M.2 IRIS2 Module
	USB	3 x USB 3.2 Gen2 (Type-A) (10Gb/s) 3 x USB 2.0
	COM	2 x RS-422/485 (with 2K isolation) (DB9), 3 x RS-232 (DB9)
	Digital I/O	8-bit (4-in/4-out) DB9 (Female)
	Display Interface	1 x DP++, 1 x HDMI™ 1 x USB4 (Display + USB 3.2 Gen2)
Internal Expansions	M.2	1 x M.2 M key (2280, PCIe Gen4 x2) 1 x M.2 A key (2230, PCIe Gen3 x1 & USB 2.0) 1 x M.2 B Key (3042/52/80, PCIe Gen3 x1 or support IRIS2 module)
	Expansion Backplane	1 x PCIe Gen4 x8 1 x PCIe Gen3 x4 1 x PCIe Gen3 x1 (Only supports 3A SKU) 1 x PCI (Only supports 3B SKU)
Power	Power Input	DC Jack: 12 ~ 28V DC Terminal Block: 12 ~ 28V DC (with ACC Mode)
	Remote Power	TBD
	Power Consumption	19V@3.79 A (AMD Ryzen™ 9 7940HS with 8 GB memory)
Reliability	Mounting	Wall mount
	Operating Temperature	-20°C ~ 60°C
	Storage Temperature	-40°C ~ 85°C, 10% ~ 95%, non-condensing
	Operating Shock	Half-sine wave shock 5G, 11ms, 100 shocks per axis (SSD)
	Operating Vibration	MIL-STD-810G 514.6C-1 (with SSD)
	Weight (Net/Gross)	3.96 kg / 5.5 kg
	Safety / EMC	CE, FCC
	Watchdog Timer	Programmable 1 ~ 255 sec/min
OS	Supported OS	Windows® 10/11 IoT Enterprise/ Linux

Built-in AMD Ryzen™ 7000/8000 Series Mobile Processors

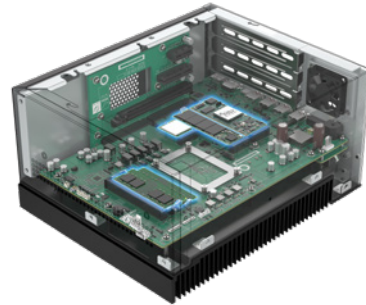
AMD Ryzen™ 7000/8000 Series Mobile Processors adopts 28-45W ultra-low power architecture design, supports up to 8 cores and 16 threads, high frequency, strong performance and lower power consumption.

Using AMD's latest RDNA™ 3 graphics architecture, greatly improving performance and energy efficiency.



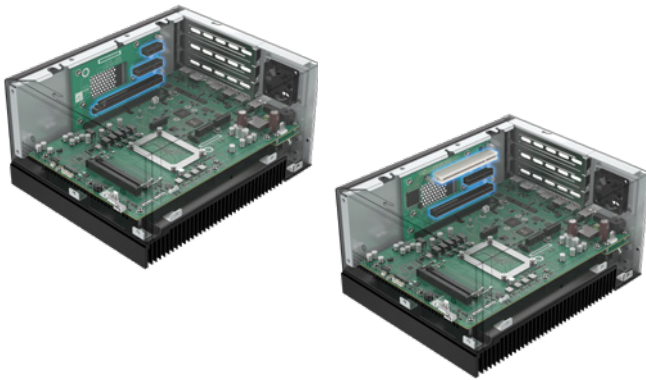
Internal M.2 Expansion

The system board has one M.2 A Key, one M.2 B key, and one M.2 M Key. A key supports Wi-Fi or Bluetooth expansion; M Key supports NVME storage, and B Key (standard PCIe Gen3 x1 signal + IEI custom signal) supports standard B Key storage or acceleration card, and also supports IEI IRIS2 remote management module, realizing remote management function by reserving RJ45 for external use.



Flexible Expansion

Two three-slot solutions are provided, PCIe Gen4 x8 + PCIe Gen3 x4 + PCIe Gen3 x1 or PCIe Gen4 x8 + PCIe Gen3 x4 + PCI combination. Customers can choose the type of expansion slot according to their needs.



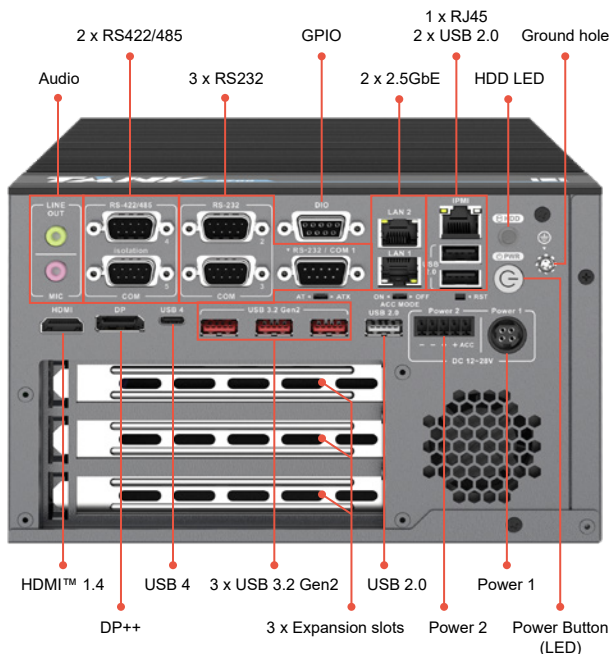
External Fan

Installing an external fan helps to increase system performance in harsh environment.

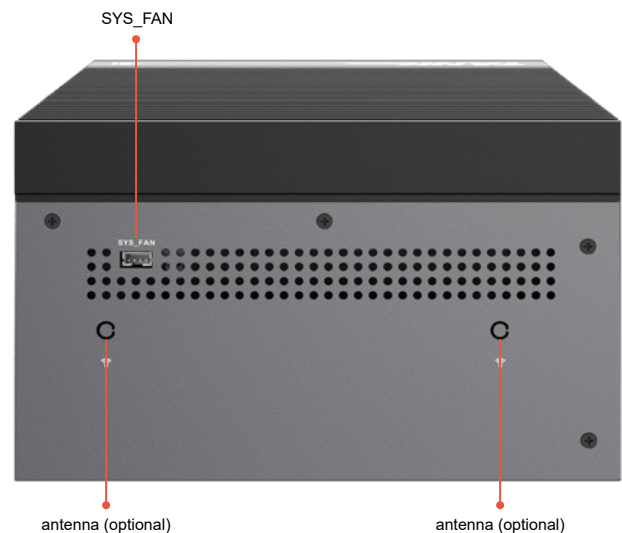


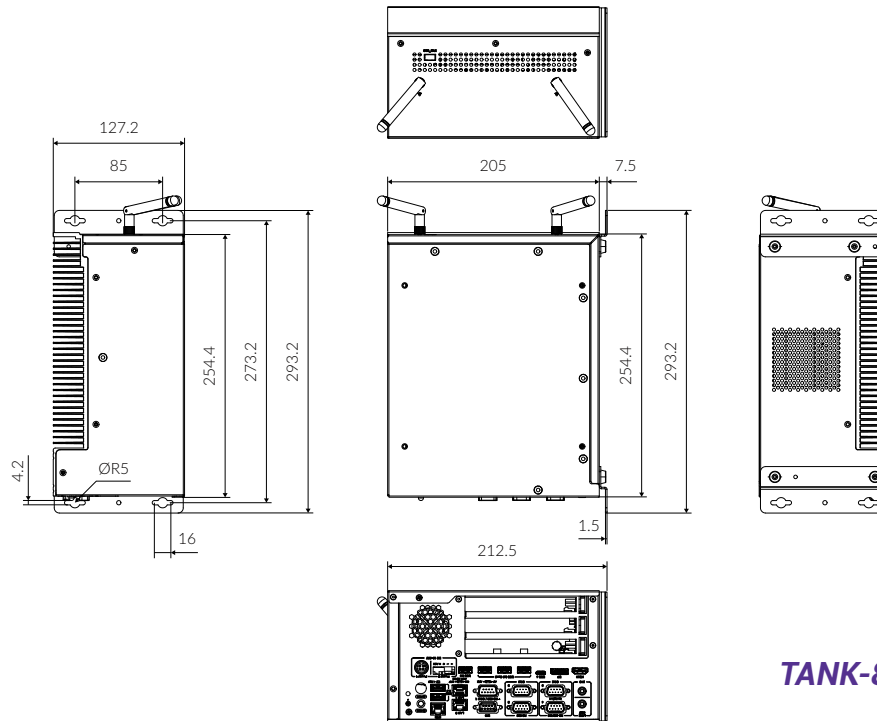
Fully Integrated I/O

Front View



Top View



Dimensions (Unit: mm)**TANK-8700-MPHX****Ordering Information**

Part No.	Description
TANK-8700-MPHX-89AD-3A-R10	Ruggedized Fanless embedded system with AMD Ryzen™ 9 8945HS 4.0 GHz, (up to 5.2 GHz, 8 Core, TDP 45W), 16GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCIe x1, HDMI™/DP/USB4, 12~28V DC, RoHS
TANK-8700-MPHX-89AD-3B-R10	Ruggedized Fanless embedded system with AMD Ryzen™ 9 8945HS 4.0 GHz, (up to 5.2 GHz, 8 Core, TDP 45W), 16GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCI, HDMI™/DP/USB4, 12~28V DC, RoHS
TANK-8700-MPHX-87AD-3A-R10	Ruggedized Fanless embedded system with AMD Ryzen™ 7 8845HS 3.8 GHz, (up to 5.1 GHz, 8 Core, TDP 45W), 16GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCIe x1, HDMI™/DP/USB4, 12~28V DC, RoHS
TANK-8700-MPHX-87AD-3B-R10	Ruggedized Fanless embedded system with AMD Ryzen™ 7 8845HS 3.8 GHz, (up to 5.1 GHz, 8 Core, TDP 45W), 16GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCI, HDMI™/DP/USB4, 12~28V DC, RoHS
TANK-8700-MPHX-85AD-3A-R10	Ruggedized Fanless embedded system with AMD Ryzen™ 5 8645HS 4.3 GHz, (up to 5.0 GHz, 6 Core, TDP 45W), 16GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCIe x1, HDMI™/DP/USB4, 12~28V DC, RoHS
TANK-8700-MPHX-85AD-3B-R10	Ruggedized Fanless embedded system with AMD Ryzen™ 5 8645HS 4.3 GHz, (up to 5.0 GHz, 6 Core, TDP 45W), 16GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCI, HDMI™/DP/USB4, 12~28V DC, RoHS

Options

Part No.	Description
EMB-WIFI-KIT02I3-R10	2T2R M.2 wifi module kit for embedded system, IEEE 802.11 a/b/g/n/ac/ax, 1 x M.2 AE Key Wireless LAN & Bluetooth 5.2; Intel; AX210.NGWWG Module, 2 x RF cable, 2 x Antenna; RoHS
63040-010180-200-RS	Adapter Power; FSP; FSP180-ABAN3; 9NA1804008; Active PFC; Vin: 90~264VAC; 180W; Dim: 75.6*151.3*25.4mm; Plug=6.5mm; Cable=1500mm; Erp(NO LOAD 0.5W); Vout: 19VDC; Din 4Pin/lock; CCL; RoHS
32702-000202-100-RS	POWER CORD; EUROPEAN CODE(VDE); 1000mm; 300V; (A) PLUG: SH-005(16A/250V); (B) CONNECTOR: C13(SH-006, 10A/250V)
SF-TANK-87-00-R10	External fan for TANK-8700 Series
iRIS2-2600-R10	IPMI 2.0 adapter card with AST2600 BMC chip with KVM function for iEi iRIS2 Connector IPMI 2.0 module
TPM-IN03-R10	20-pin Infineon SPI TPM2.0 module, software management tool
SF-TANK-87-01-R10	Internal fan module for TANK-8700 Series ¹

¹ For high-power expansion cards, an internal fan module is required.**Packing List**

1 x Screw pack

1 x Terminal block

1 x Mounting bracket