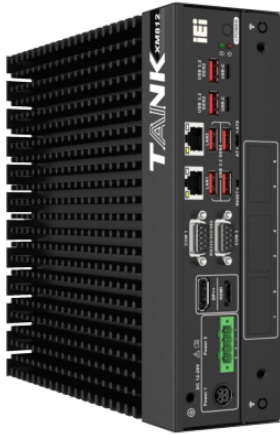


## TANK-XM812

High-Performance AMD Ryzen™ 7000/8000 Series AM5 Processor, Fanless Embedded Computer



## Features

### » Supported CPUs:

AMD Ryzen™ 7000/8000 Series AM5 Processor

AMD Ryzen™ 7 8700G 4.2GHz (up to 5.1GHz, 8-core, 65W)

AMD Ryzen™ 5 8600G 4.3GHz (up to 5.0GHz, 6-core, 65W)

» 2 x 2.5GbE ports

» Multiple USB ports and serial ports

» Multiple internal expansion boards for flexible selection

» Various optional backplanes and chassis

» CE/FCC compliant

## Specifications

| Form factor     |                                                               |
|-----------------|---------------------------------------------------------------|
| SBC Form Factor | » CPU:                                                        |
|                 | AMD Ryzen™ 7000/8000 Series AM5 Processor                     |
|                 | AMD Ryzen™ 7 8700G 4.2GHz (up to 5.1GHz, 8-core, 65W)         |
|                 | AMD Ryzen™ 5 8600G 4.3GHz (up to 5.0GHz, 6-core, 65W)         |
|                 | » Chipset:                                                    |
|                 | AMD B650                                                      |
|                 | » System Memory:                                              |
|                 | 2 x SO-DIMM DDR5 5200 (8GB pre-installed) (up to 96GB)        |
|                 | » Power:                                                      |
|                 | DC Jack: 12 V~28 V DC                                         |
|                 | Terminal Block: 12 V~28 V DC                                  |
|                 | Consumption: 12V @ 6.95A (AMD Ryzen™ 7 8700G with 8GB memory) |
| I/O Interface   |                                                               |
| I/O Ports       | » USB:                                                        |
|                 | 6 x USB 3.2 Gen2                                              |
|                 | » Ethernet:                                                   |
|                 | 2 x RJ-45: 2.5 GbE by Intel® I226V (colay I226LM)             |
|                 | » COM Port:                                                   |
|                 | 2 x RS-232/422/485                                            |
|                 | 4 x RS-232                                                    |
|                 | » Digital I/O:                                                |
|                 | 12-bit Digital I/O (6-in/ 6-out)                              |
|                 | » Display:                                                    |
|                 | 1 x HDMI                                                      |
|                 | 1 x DP++                                                      |
|                 | 2 x USB Type-C (Display + USB 3.2 Gen2)                       |
|                 | » Audio:                                                      |
|                 | 1 x Mic                                                       |
|                 | 1 x Line-out                                                  |
|                 | » TPM:                                                        |
|                 | 1 x 20pin TPM connector (Optional TPM-IN03 module)            |

|                             |                                                         |
|-----------------------------|---------------------------------------------------------|
|                             | » Watchdog Timer:                                       |
|                             | Programmable 1 ~ 255 sec/min                            |
| Expansion Slots             |                                                         |
| Expansion Slots             | » M.2:                                                  |
|                             | 1 x 2280 M-key (PCIe Gen4 x4)                           |
|                             | 1 x 2230 A-key (USB 2.0 + PCIe Gen3 x1)                 |
|                             | » Backplane: Optional                                   |
| System                      |                                                         |
| Cooling method / System Fan | Fanless                                                 |
|                             | 4-pin external system fan connector                     |
| Drive Bays                  | 2 x 2.5" SATA 6Gb/s HDD/SSD bay (RAID 0/1 supported)    |
| Indicator&Buttons           |                                                         |
| Buttons                     | 1 x Power button                                        |
|                             | 1 x Reset button                                        |
|                             | 1 x AT/ATX switch                                       |
| Indicators                  | 1 x Power LED (green)                                   |
|                             | 1 x HDD LED (yellow)                                    |
| Physical Characteristics    |                                                         |
| Construction                | Extruded aluminum alloy                                 |
| Color                       |                                                         |
| Color                       | Black                                                   |
| Dimensions                  |                                                         |
| Dimensions                  | 230.6 x 255 x 68.7                                      |
| Weight                      |                                                         |
| Weight                      | 3.18/5 kg                                               |
| Environment                 |                                                         |
| Operating Temperature       | -20°C ~ 60°C (CPU TDP50W & SSD)                         |
|                             | -20°C ~ 50°C (CPU TDP65W & SSD)                         |
| Humidity                    | 10% ~ 95% non-condensing                                |
| Operating Vibration         | IEC68-2-27 half-sine, 5G, 11ms, 100 shocks (With SSD)   |
| Operating Shock             | Random Vibration Mode, MIL-STD-810H 514.8C-I (With SSD) |
| Safety & EMC                | CE/FCC compliant                                        |
| OS Support                  |                                                         |
| OS Support                  | Microsoft Windows 10 / Windows 11, Linux                |

## Ordering Information

|                     |                                                                                                                                                                                     |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TANK-XM812-87AC-R10 | Ruggedized Fanless embedded system with AMD Ryzen™ 5 8700G, (up to 5.1 GHz, 8 Core, TDP 65W), 8GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCIe x1, HDMI/DP/USB4, 12~28V DC, RoHS |
| TANK-XM812-85AC-R10 | Ruggedized Fanless embedded system with AMD Ryzen™ 5 8600G, (up to 5.0 GHz, 6 Core, TDP 65W), 8GB DDR5 pre-installed memory, PCIe x8/PCIe x4/PCIe x1, HDMI/DP/USB4, 12~28V DC, RoHS |

## Packing List

|                       |                |
|-----------------------|----------------|
| 1 x Wall mounting kit | 1 x Screw pack |
| 2 x Terminal block    | 1 x SATA cable |