

# TANK-871-Q170

- High-Performance 6<sup>th</sup>/7<sup>th</sup> Generation Intel® Core™ Processor
- Fanless Embedded Computer

## Features

- 6<sup>th</sup>/7<sup>th</sup> Gen Intel® Core™ processor platform with Intel® Q170 chipset and DDR4 memory
- Triple independent display with high resolution support
- Rich high-speed I/O interfaces on one side for easy installation
- IEI iRIS-2400 solution

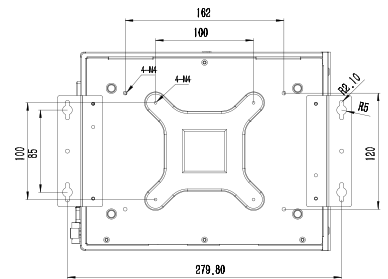
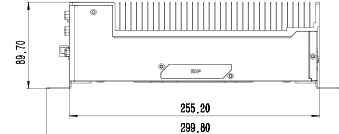
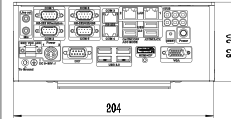
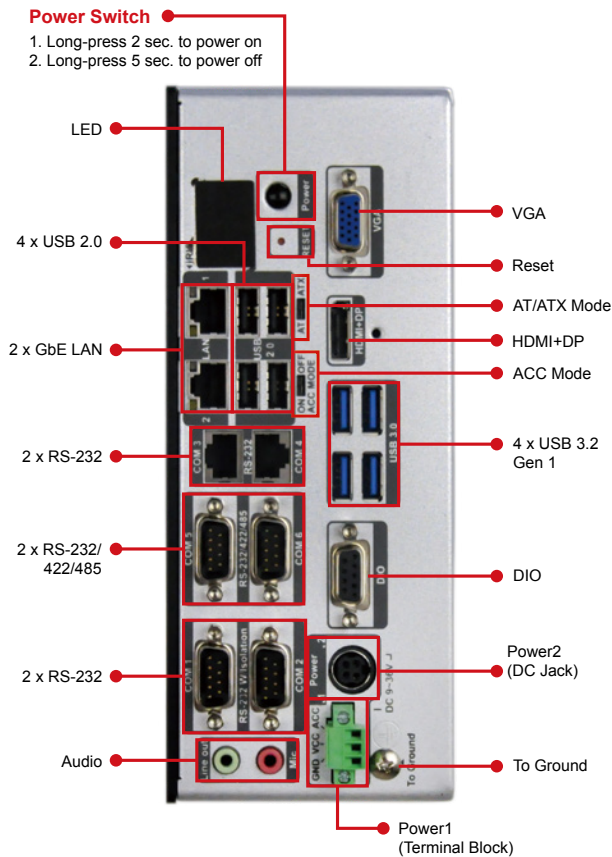


## Specifications

| Model Name     |                                | TANK-871-Q170                                                                                                                                          |
|----------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chassis        | Color                          | Black C + Silver                                                                                                                                       |
|                | Dimensions (WxDxH) (mm)        | 82.2 x 255.2 x 204                                                                                                                                     |
|                | System Fan                     | Fanless                                                                                                                                                |
|                | Chassis Construction           | Extruded aluminum alloy                                                                                                                                |
| Motherboard    | CPU                            | 7 <sup>th</sup> Gen Intel® Core™ CPU & Intel® Core™ i7-6700TE (2.4 GHz, quad-core, TDP=35W)<br>Intel® Core™ i5-6500TE (2.3 GHz, quad-core, TDP=35W)    |
|                | Chipset                        | Intel® Q170                                                                                                                                            |
|                | System Memory                  | 2 x 260-pin DDR4 SO-DIMM, pre-installed one 4GB (system max: 32GB)                                                                                     |
| IPMI           | iRIS solution                  | 1 x iRIS-2400 (optional)                                                                                                                               |
| Storage        | Hard Drive                     | 2 x 2.5" SATA 6Gb/s HDD/SSD bay (RAID 0/1 support)                                                                                                     |
| I/O Interfaces | USB 3.2 Gen 1 (5Gb/s)          | 4                                                                                                                                                      |
|                | USB 2.0                        | 4                                                                                                                                                      |
|                | Ethernet                       | 2 x RJ-45<br>LAN1 (iRIS): Intel® I210 PCIe controller<br>LAN2: Intel® I219LM PCIe controller                                                           |
|                | COM Port                       | 4 x RS-232 (2 x RJ-45, 2 x DB-9 w/2.5kV isolation protection)<br>2 x RS-232/422/485 (DB-9)                                                             |
|                | Digital I/O                    | 8-bit digital I/O, 4-bit input / 4-bit output                                                                                                          |
|                | Display                        | 1 x VGA, 1 x HDMI+DP, 1 x iDP (optional)                                                                                                               |
|                | Resolution                     | 1 x VGA (up to 1920 x 1200@60Hz)<br>1 x HDMI/DP (up to 3840x2160@30Hz / 4096x2304@60Hz)                                                                |
|                | Audio                          | 1 x Line-out ; 1 x Mic-in                                                                                                                              |
|                | Wireless                       | 1 x 802.11a/b/g/n/ac (optional)                                                                                                                        |
| Expansions     | PCIe Mini                      | 1 x Half-size (PCIe/ USB 2.0)<br>1 x Full-size (PCIe/ USB 2.0/ SATA)                                                                                   |
| Power          | Power Input                    | DC Jack: 9 V ~ 36 V DC<br>Terminal Block: 9 V ~ 36 V DC                                                                                                |
|                | Power Consumption              | 19 V@3.68 A (Intel® Core™ i7-6700TE with 8 GB memory)                                                                                                  |
| Reliability    | Mounting                       | Wall mount                                                                                                                                             |
|                | Operating Temperature/Humidity | i7-6700TE: -20°C ~ 45°C with air flow (SSD),<br>10% ~ 95%, non-condensing<br>i5-6500TE: -20°C ~ 60°C with air flow (SSD),<br>10% ~ 95%, non-condensing |
|                | Storage Temperature/Humidity   | -40°C ~ 85°C with air flow (SSD), 10% ~ 90%, non-condensing                                                                                            |
|                | Operating Shock                | Half-sine wave shock 5G; 11ms; 100 shocks per axis                                                                                                     |
|                | Operating Vibration            | MIL-STD-810G 514.6 C-1 (with SSD)                                                                                                                      |
|                | Weight (Net/Gross)             | 3.5 kg/4.5 kg                                                                                                                                          |
|                | Safety/EMC                     | CE/FCC/KC                                                                                                                                              |
| OS             | Supported OS                   | Microsoft® Windows® 8 Embedded, Microsoft® Windows® Embedded Standard 7 E, Microsoft® Windows® 10 IoT Enterprise                                       |

## Fully Integrated I/O

## Dimensions (Unit: mm)



TANK-871-Q170

## Ordering Information

| Part No.                 | Description                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TANK-871-Q170i-i7/4G-R10 | Ruggedized fanless embedded system with Intel® Core™ i7-6700TE 2.4 GHz (up to 3.4 GHz, quad core, TDP 35W), 4GB DDR4 pre-installed memory, VGA/HDMI+DP/iDP, iRIS-2400 optional, 9 ~ 36V DC, RoHS |
| TANK-871-Q170i-i5/4G-R10 | Ruggedized fanless embedded system with Intel® Core™ i5-6500TE 2.3 GHz (up to 3.3 GHz, quad core, TDP 35W), 4GB DDR4 pre-installed memory, VGA/HDMI+DP/iDP, iRIS-2400 optional, 9 ~ 36V DC, RoHS |

## Options

| Part No.                   | Description                                                                                                                                                                  |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 32000-000002-RS            | European power cord                                                                                                                                                          |
| 63040-010120-300-RS        | Adapter Power;FSP;FSP120-AHAN3;9NA1206708;Active PFC;Vin:90 ~ 264VAC;120W;Dim:75.6*151.3*25.4mm;Plug=6.5mm;Cable=1500mm;Erp(NO LOAD 0.15W);Vout:12VDC;Din 4Pin/lock;CCL;RoHS |
| iRIS-2400-R10              | IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface                                                                                                |
| EMB-WIFI-KIT01-R20         | 1T1R wifi module kit for embedded system, IEEE802.11a/b/g/n/ac WiFi with Bluetooth 4.0/3.0+HS, 1 x wifi module, 2 x 250mm RF cable, 2 xAntenna, RoHS                         |
| E-MPCIE-DLAN-R10           | PCIe Mini card supports 2-port GbE with Intel I211 controller, with PMS 194C I/O bracket and 250mm cable                                                                     |
| E-MPCIE-LAN-R10            | PCIe Mini card supports 1-port GbE with Realtek RTL8111E controller, with PMS 194C I/O bracket and 250mm cable                                                               |
| E-MPCIE-UART-KIT01-R10     | PCI Express Mini supports quad RS-232/422/485 port module                                                                                                                    |
| TANK-870-Q170-WES7E64-R10  | OS Image with Windows® Embedded Standard 7 E 64-bit for TANK-870-Q170 Series, with DVD-ROM, RoHS                                                                             |
| TANK-870-Q170-W10E64-H-R10 | OS Image with Windows® Embedded Standard 10 E High End 64-bit for TANK-870-Q170-i7 Series, with DVD-ROM, RoHS                                                                |
| TANK-870-Q170-W10E64-V-R10 | OS Image with Windows® Embedded Standard 10 E Value 64-bit for TANK-870-Q170-i5 Series, with DVD-ROM, RoHS                                                                   |

## Packing List

1 x Chassis Screw

1 x Mounting Bracket

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

IEI:

[TANK-871-Q170i-i5/4G-R10](#) [TANK-871-Q170i-i7/4G-R10](#)