# TANK-760-HM86

- Intel® HM86 mobile solution
- Three independent video outputs

## **Features**

- Intel® Core™ i7-4700EQ 2.4 GHz qual-core processor Intel® Core™ i5-4400E 2.7 GHz dual-core processor Intel® Celeron® 2000E 2.2 GHz dual-core processor
- One CFast socket
- Support three independent video outputs
- Built-in two 2.5" SATA 6Gb/s HDD bays
- 9 V~36 V DC input
- Support IEI iRIS-2400 (IPMI 2.0 compliant)



















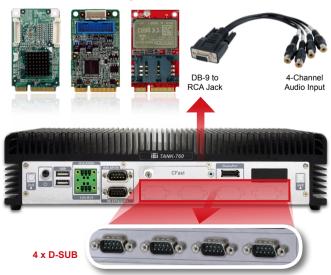
#### Vehicle Control Center -



## Flexible Expansion Design

The TANK-760 is designed with four D-sub knockout holes and three PCIe Mini card slots for installing I/O expansion cards, such as video/audio capture cards or COM port cards.

#### PCIe Mini Video/Audio Capture Card



## Dual 2.5" SATA HDD/SSD Bay-

2 x 2.5" SATA 6Gb/s

With two 2.5" SATA HDD/SSD bays, users can fulfill large storage requirement and use it as a terminal for data acquisition. The easy-to-assemble design reduces user fatigue in system installation.



## **Dual CAN-Bus Port**

#### Controller Area Network (CAN or CAN-bus) is a vehicle bus standard designed to communicate SOLATION or detect errors with each other within a vehicle, industrial automation and medical equipment. The TANK-760 has two CAN-bus interfaces, which allow customers to connect more devices in vehicle application.

## Triple Display-

The TANK-760 contains VGA, DisplayPort and HDMI video outputs, which can be applied to multi-display application and support high Full HD video quality.

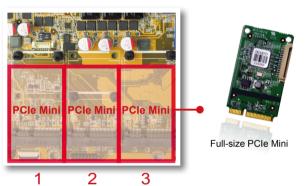


## Three PCIe Mini ·

There are lots of different PCIe Mini cards for various applications, such as Wi-Fi, 3G and GPS cards. With three PCle Mini cards, customers can add extra functions via PCIe Mini cards to apply the TANK-760 in different environments

# Military Compliant

The TANK-760 is compliant with MIL-STD-810F standard for shock and vibration. The MIL-STD-810 test series is approved for use by all departments and agencies of the United States Department of Defense (DoD).







## E-Mark Compliant -



E-Mark is a commonly recognized certificate in the automobile industry in Europe. E-mark is from the Economic Commission for Europe (Economic Commission of Europe, referred to as ECE) and including 28 countries currently. It is compulsory for vehicles application.

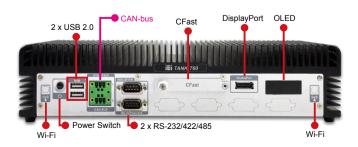
## iRIS Solution



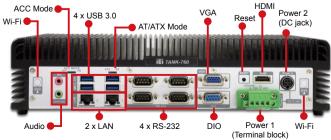
By installing the IEI iRIS-2400 module, the TANK-760 is capable to complete your IoT application through the advanced remote control features, such as power management and control, remote KVM for device status monitoring, sending active alerts and warning

## Fully Integrated I/O -

## Front View



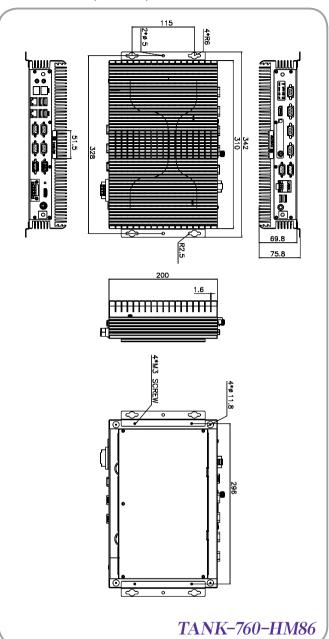
#### Rear View



# Specifications

| Color   |            |
|---|------------|
| Dimensions (WxDxH) (mm)   310 x 200 x 69.8     System Fan   Fanless     Chassis   Extruded aluminum alloys     Intel® Core™ i7-4700EQ 2.4 GHz     Intel® Core™ i5-4400E 2.7 GHz     Intel® Celeron® 2000E 2.2 GHz     Chipset   Intel® HM86     System Memory   2 x 204-pin DDR3 SO-DIMM,   |            |
| (WxDxH) (mm)         310 x 200 x 69.8           System Fan         Fanless           Chassis Construction         Extruded aluminum alloys           Intel® Core™ i7-4700EQ 2.4 GHz Intel® Core™ i5-4400E 2.7 GHz Intel® Celeron® 2000E 2.2 GHz           Motherboard         Chipset         Intel® Celeron® 2000E 2.2 GHz           Chipset         Intel® HM86           2 x 204-pin DDR3 SO-DIMM,   |            |
| System Fan Chassis Construction Extruded aluminum alloys  Intel® Core™ i7-4700EQ 2.4 GHz Intel® Core™ i5-4400E 2.7 GHz Intel® Celeron® 2000E 2.2 GHz  Chipset Intel® HM86 System Memory  System Memory  System Memory  Fanless Extruded aluminum alloys  Extruded aluminum alloys  Intel® Core™ i7-4700EQ 2.4 GHz  Intel® Core™ i5-4400E 2.7 GHz  Intel® HM86  2 x 204-pin DDR3 SO-DIMM,  |            |
| Construction    Extruded aluminum alloys  |            |
| CPU         Intel® Core™ i5-4400E 2.7 GHz           Intel® Celeron® 2000E 2.2 GHz           Chipset         Intel® HM86           System Memory         2 x 204-pin DDR3 SO-DIMM,   |            |
| Chipset Intel® HM86  2 x 204-pin DDR3 SO-DIMM,  |            |
| System Memory   |            |
| one 4GB pre-installed (system max: 16 GB)   |            |
| iRIS Module iRIS Solution 1 x iRIS-2400 (optional)  |            |
| Storage 2 x 2.5" SATA 6Gb/s HDD/SSD bay   |            |
| CF Card/CFast 1 x CFast   |            |
| USB 3.0 4   |            |
| USB 2.0 2   |            |
| 2 x RJ-45  Ethernet 1 x PCIe GbE by Intel® I210 1 x PCIe GbE by Intel® I217LM   |            |
| COM Port 4 x RS-232 (DB-9, with isolation) 2 x RS-232/422/485 (DB-9, with isolation)  |            |
| Digital I/O 8-bit digital I/O, 4-bit input/4-bit output   |            |
| I/O Interfaces CAN-bus 2 x Phoenix terminal block with isolation  |            |
| Display 1 x VGA, 1 x HDMI, 1 x DisplayPort  |            |
| VGA: Up to 1920 x 1200@60Hz  Resolution   |            |
| Audio 1 x Line-out, 1 x Mic-in  |            |
| Wireless 1 x 802.11b/g/n (optional)   |            |
| Other Reserved IO window for PCle Mini card expa  | sion       |
| Expansions  PCIe Mini  1 x Full-size PCIe Mini slot 1/2 1 x Full-size PCIe Mini slot 3 (supports mSAT colay with SATA)  | A,         |
| Power Input DC Jack: 9 V~36 V DC Terminal Block: 9 V~36 V DC  |            |
| Power 19 V@3.2 A Consumption 19 Verified 19 Test 19 Verified 19 V | <b>(</b> ) |
| Mounting Wall mount   |            |
| $ \begin{array}{ccc} -20^{\circ}\text{C} & \sim 70^{\circ}\text{C} \text{ with air flow (SSD)} \\ \textbf{Operating} & \text{for } i5\text{-}4400\text{E & } 2000\text{E} \\ \textbf{Temperature} & -20^{\circ}\text{C} & \sim 50^{\circ}\text{C} \text{ with air flow (SSD)} \\ \text{for } i7\text{-}4700\text{EQ} \\ \end{array} $   |            |
| Reliability Operating Shock Half-sine wave shock 5G, 11ms, 3 shocks per axis  |            |
| Operating Vibration MIL-STD-810F 514.5C-2 (with SSD)  |            |
| Weight (Net/Gross) 4.2 kg/6.9 kg  |            |
| Safety/EMC CE/FCC   |            |
| OS Supported OS Microsoft® Windows® 8 Embedded, Microsoft® Windows® Embedded Standard 7   | 'E         |

## Dimensions (Unit: mm)



# Ordering Information

| Part No.                 | Description  |
|--------------------------|--|
| TANK-760-HM86i-i7/4G-R10 | Fanless embedded system , Intel® Core™ i7-4700EQ Quad core 2.4GHz, TDP 47W, 4GB DDR3 pre-installed memory , VGA/HDMI/Displayport, iRIS-2400 optional, 9~36V DC, RoHs, R10                      |
| TANK-760-HM86i-i5/4G-R10 | Fanless embedded system, Intel® Core™ i5 dual-core i5-4400E 2.7 GHz, TDP 37W, 4GB DDR3 pre-installed memory, VGA/HDMI/DisplayPort, iRIS-2400 optional, 9 V~36 V DC, RoHs, R10                  |
| TANK-760-HM86i-C/4G-R10  | Fanless embedded system, Intel® Celeron® dual-core 2000E 2.2 GHz, TDP 37W, 4GB DDR3 pre-installed memory, VGA/HDMI/DisplayPort, iRIS-2400 optional, 9 V~36 V DC, RoHs, R10                     |
| TANK-760-QGW-i5/8G-R10   | Fanless embedded system, Intel® Core™ i5 dual-core i5-4400E 2.7 GHz, TDP 37W, 2 x 4GB DDR3 pre-installed memory, VGA/HDMI/DisplayPort, iRIS-2400 optional, with QTS-Gateway, 9 V~36 V DC. RoHs |

# **Options**

| Part No.                | Description  |  |
|-------------------------|--|--|
| iRIS-2400-R10           | IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface                                  |  |
| EMB-WIFI-KIT01-R11      | 1T1R Wi-Fi module kit for embedded system, IEEE802.11b/g/n, 1 x Wi-Fi module, 2 x RF cable , 2 x Antenna, RoHs |  |
| TANK-760-HM86-WES7E-R10 | OS Image with Windows® Embedded Standard 7 E for TANK-760 HM86 Series, CD-ROM, RoHS                            |  |

# Packing List

| 1 x Utility CD          | 1 x Power Adapter | 1 x Chassis Screw    |
|-------------------------|-------------------|----------------------|
| 1 x One Key Recovery CD | 1 x Power Cord    | 1 x Mounting Bracket |