TANK-6000-C226

♦ Support IPMI 2.0 via IEI iRIS solution

♦ Intel® E3 1225 v3/i3 4330 high performance CPU

New

Features

- Workstation with Intel® C226 chipset
- Intel® E3 1225 v3/i3 4330 high performance CPU
- Support two PCIe by 8 expansion cards
- 4 x LAN port (two SFP fiber combo ports)
- 3 x 2.5'' HDD/SSD bay
- Support IPMI 2.0 via IEI iRIS solution
- Support programable OLED disply module

| iRIS™ IPMI 2.0 Compliant | 2 x PCIe Expansion | SFP Fiber | SUPERSPEED CERTIFIED USB USB 3.0 | Four LAN | Triple HDD |

New Intelligent Machine Vision Solution

On the industrial field, machine vision is the most popular application, and it has grown over last 10 years. Machine vision is widely related to all kinds of fields from automobile, food inspection, traffic surveillance and even handset inspection. Machine vision connects our daily life.

There are a variety of camera types that can be connected for vision applications, such as USB cameras, GigE cameras and even the Camera Link high level cameras. The TANK-6000 contains many great features which can meet different requirements mentioned above.

■ Machine vision application fields

Automobile	Retail	Food
Electronics validation	Consumer goods	Medical
Aerospace	Graphics and animation	Gaming

USB Camera

The latest USB 3.0 provides 5Gb/s bandwidth speed, which is 10 times more than USB 2.0. Compared with USB 2.0, USB 3.0 provides higher power (0.9A) and supports up to five longer cable connections. Those advantages make USB 3.0 cameras become more and more popular in the field. It is particularly suited to all multi-camera and 3D applications due to its high-resolution and high-performance sensors, and its high data transfer rate.

■ Food inspection

The TANK-6000 contains four USB 3.0 ports. When used for food inspection, these USB ports can be connected to multiple USB 3.0 cameras to fulfill demands in a production line or an inspection line. The cameras can be easily configured for simultaneous multiple measurement of 3D contours and colors, and for the NG goods detection in different angles. In addition, the TANK-6000 supports two PCIe x8 slots (Gen 3) for adding a motion control card to control robots to filter out the bad one.
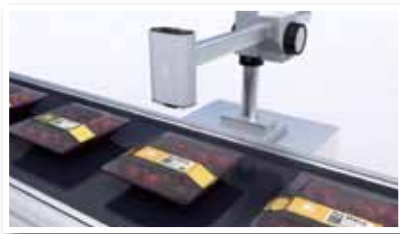
- Image scanning
- Defeat detection
- Product recognition

GigE Camera

GigE camera is a type of digital video camera commonly employed for surveillance and machine vision. With LAN connected, GigE camera can transmit real-time video to the TANK-6000 and identify captured images.

■ High Speed Image Identification

The TANK-6000 contains four GbE LAN ports, which allow users to link multiple cameras. With Intel® HD GT2 technology, the TANK-6000 supports hardware decoding, encoding and transcoding capabilities as well as video and alarm management. The three 2.5'' HDD bays support RAID function to ensure data safety. Furthermore, with the integrated iRIS solution, users can use the remote power control function for power maintenance. Wherever you are, IEI iRIS technology allows you to remotely control and monitor your devices via Internet connection.
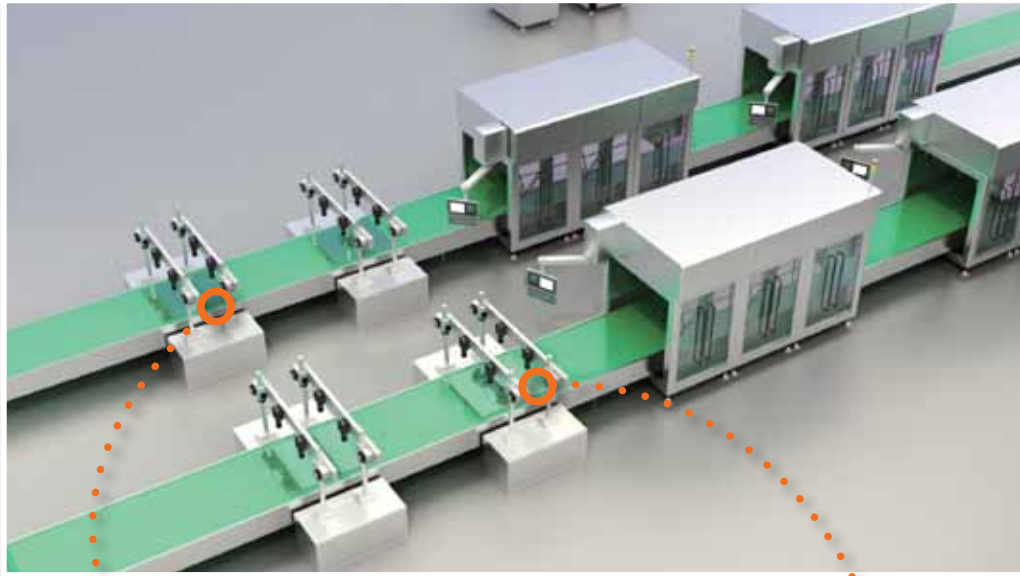
QNAP® NAS

Camera link

"Camera Link" is a serial communication protocol standard designed for computer vision applications based on the National Semiconductor interface Channel-link. It is designed for industrial video products and usually in PCIe card type, such as PCIe x4 or higher specifications.

■ LCD panel inspection

The TANK-6000 equips two PCIe x8 Gen 3 slots, which have 8GT/s (giga-transfer per second) bandwidth. Compared to 5GT/s of Gen 2, it provides higher bandwidth for data transmission. A camera link card can be added into the TANK-6000 to fulfill high-speed vision processing requirements in applications such as Automated Optical Inspection (AOI) in factories. With iRIS intelligent remote solution integrated, users can benefit from its group control or remote monitoring features to reduce the cost of maintenance and enhance system stability. Furthermore, the TANK-6000 is installed with the workstation-grade Intel® C226 chipset plus Xeon® E3 CPU. This combination will be really achieving high-performance processing requirements. Compared to the RACK server, the TANK-6000 is a compact-size system and is ideal for space-saving production line environments. All the abovementioned features make TANK-6000 suitable for inspection application in production industry.

IPMI 2.0 Compliant

Group A

Group B

Web-based management	Group management
Alert message via e-mail or SMS	Remote diagnosis
Real-time monitoring	Hardware monitor

QNAP® NAS

IEI iRIS Technology (IPMI 2.0 Compliant)

TANK-6000 supports the IPMI 2.0 compliant IEI iRIS module, which helps users manage the system remotely even when it is shut-down or no OS installed. Besides, remote update or monitor can save considerable cost than on-side repair.
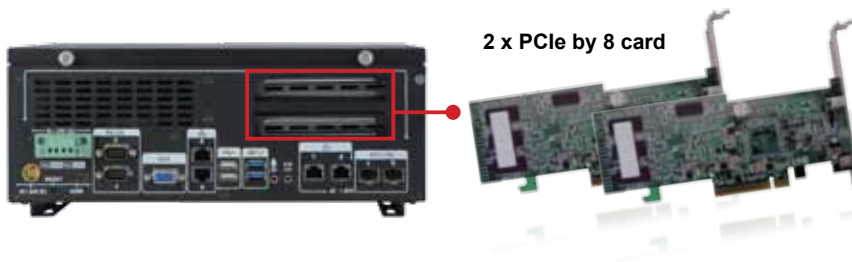
IPMI 2.0 Compliant
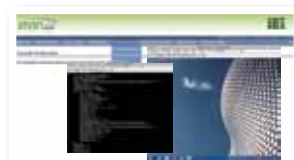
Remote Control (KVM over IP)

iRIS QNAP NAS App

Two PCIe x8 Cards

TANK-6000 supports two PCIe x8 cards which is compliant with PCI Express 3.0 with up to 8 GT/s per lane. Users can install expansion cards into the system for different applications, such as DAQ cards, vision cards or graphics cards.

2 x PCIe by 8 card

Type	Application
10GbE/Fiber card	Networking Storage
SSD card	Data center
Graphic card	Vision capture/Vison recognition
Camera Link card	LCD/Wafer inspection
SAS/RAID card	Server industry/Data protection

Easy Installation

It is easy to install internal components in the TANK-6000. Users can easily open the top cover and access internally by using the thumb screws.
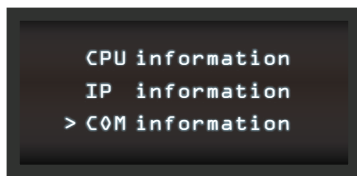
**Easy access via thumb screws**   **Add-on card installation**   **HDD installation**

OLED

TANK-6000 contains programmable OLED indicators for users. Users can program their own APIs to show any information on the display. Besides, IEI provides the protocol and demo source code for customers to do their own design.

```
CPU information
IP  information
> COM information
```

OLED information	
Active Area (WxH)	35.04 mm x 17.51 mm
Resolution (HxV)	128 Dots x 64 Dots
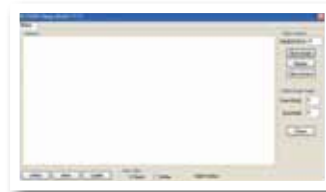
OLED Image Editor

- **Programmable OLED display**
  Customers can edit their own APIs to show information on OLED display.
- **Programmable function keys**
  Users can program four keys to control TANK-6000.
- **Open protocol and demo source code**
  IEI provides protocol and source code for users.

Fully Integrated I/O

Front view

OLED   Power switch

2 x USB 3.0

Rear view

IPMI

2 x RS-232   VGA

2 x USB 2.0   2 x PCIe x8

Power 1
(terminal block)

Power 2
(DC jack)

HDMI   2 x RJ-45 LAN   2 x USB 3.0   Audio   AT/ATX Mode

2 x RJ-45/SFP
Combo LAN
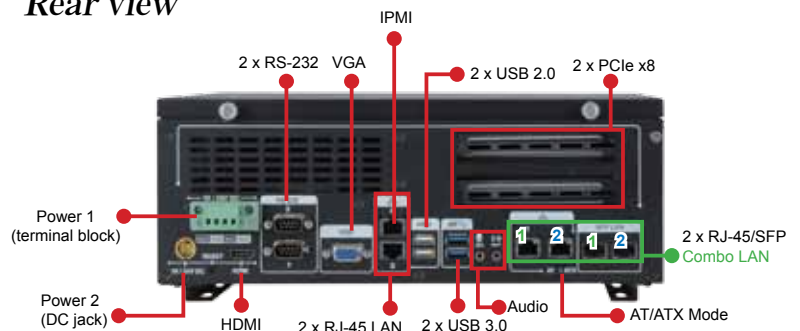
Specifications

Model Name		TANK-6000-C226
Chassis	Color	Black
	Dimensions (WxHxD) (mm)	310 x 199.5 x 112
	System Fan	92 mm x 92 mm x 25 mm
	Chassis Construction	Extruded aluminum alloys
Motherboard	CPU	Intel® Xeon® E3 1225-v3 3.2 GHz Intel® Core™ i3 4330 3.5 GHz
	Chipset	Intel® C226
	System Memory	4 x 240-pin DDR3 U-DIMM, 4 GB pre-installed (system max: 32 GB)
IPMI	iRIS Solution	1 x iRIS-2400 on board
Storage	Hard Drive	3 x 2.5" SATA 6Gb/s HDD/SSD drive bay
I/O Interfaces	USB 3.0	4
	USB 2.0	2
	Ethernet	4 x RJ-45 1 x PCIe GbE by Intel® i217 PHY 3 x PCIe by GbE Intel® i210
	Fiber	2 x Combo (SFP Fiber/RJ-45), combo with LAN 1/LAN 2
	COM Port	2 x RS-232 (DB-9)
	Display	1 x HDMI, 1 x VGA
	Resolution	HDMI: Up to 1920 x 1200@60Hz VGA: Up to 1920 x 1200@60Hz
	Audio	1 x Line-out, 1 x Mic in
Expansions	PCIe	2 x PCIe x8 (Gen 3)
Power	Power Input	DC Jack: 19 V/24 V DC
	Power Consumption	19 V@4.8 A (Intel®Xeon® E3-1225 v3 with 8 GB memory)
Reliability	Mounting	Wall mount
	Operating Temperature	-20°C ~ 55°C with air flow (SSD), 5% ~ 95%, non-condensing
	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)	2.5 kg/4.6 kg
	Safety/EMC	CE/FCC
OS	Supported OS	Microsoft® Windows® 8 Embedded, Microsoft® Windows® Embedded Standard 7 E

Dimensions (Unit: mm)
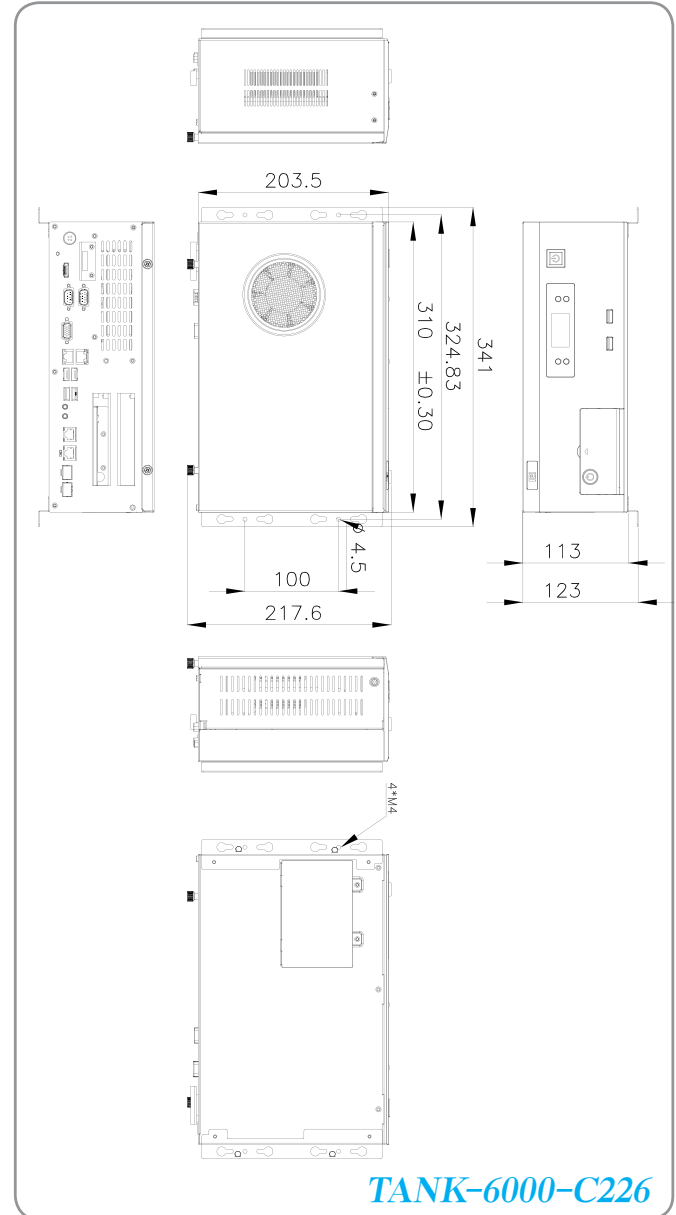
TANK-6000-C226

Ordering Information

Part No.	Description
TANK-6000-C226i-E3/4G-R11	Embedded System with Intel® C226 chipset, Intel® quad-core Xeon® E3-1225 v3 3.2 GHz, TDP 84W, OLED indicator, two PCIe by 8 expansion, three 2.5" SATA HDD bays, DDR3 U-DIMM 4GB pre-installed (2 x 2GB), iRIS-2400 supported, 19 V/24 V DC, RoHS, R11
TANK-6000-C226i-i3/4G-R11	Embedded System with Intel® C226 chipset, Intel® dual-core i3- 4330 3.5 GHz, TDP 54W, OLED indicator, two PCIe by 8 expansion, three 2.5" SATA HDD bays, DDR3 U-DIMM 4GB pre-installed (2 x 2GB), iRIS-2400 supported, 19 V/24 V DC, RoHS, R11

Options

Part No.	Description
TANK-6000-C226-WES7E-R10	OS Image with Windows® Embedded Standard 7 E for TANK-6000 Series, CD-ROM, RoHS

Packing List

Item	Qty	Description
Power Adapter (With PSE & ErP Certified)	1	Power adapter, FSP, FSP220-ABAN2, 9NA2200401, Vin: 90 V~264 V AC, 220W, ErP, Vout:19 V DC, Din 4Pin, CCL, RoHS
Wall mount kit	1	Mounting bracket, NCT processing formation, TANK-6000, PAINTING, PMS Black C, 41020-0378XX, NCT(N), SECC, VER: 00, CCL, RoHS
Screw pack	1	TANK-6000 screw pack
One Key Recovery CD	1	DVD-ROM Disk, V1.4, RECOVERYV14.ISO, FOR ONE KEY RECOVERY, RoHS
Utility CD	1	Drivers and user manual