TANK-GM45A

Extended Temperature Fanless Embedded System with Intel® Core™ 2 Duo Processor

Features

◆ Socket P Intel® 45nm Mobile Core™2 Duo Processor
◆ Extended Temperature Fanless design supports -20ºC~70ºC
◆ High Performance MPEG-2 Decoding, WMV9 (VC-1) and H.264 (AVC)
◆ Built-in DDR2 SO-DIMM 2GB memory
◆ Supports 2 x COM, 4 x USB 2.0, 2 x Intel® GbE LAN
◆ IEI One Key Recovery solution allows you to create rapid OS backup and recovery

One Key Recovery | Fanless | -20℃~70℃

Extended Temperature System with Multi−Function

The TANK-GM45A supports an extended temperature range from -20ºC up to 70ºC with one industrial 2.5" SATA Flash Disk. IEI IFD 2.5" SSD supports SATA SLC solutions and features anti-vibration, low power consumption, high performance and perfect reliability. SSD not only performs much better IOPS than HDD, it also can be operated anytime without mobile components like a motor, bearing or rotating head. In addition, SSD can perform in any harsh environment.

Single 12V Power Input
4-pin Power Jack with Lock for 12V DC power input

12V DC

12V DC power supply

Power adapter

Power cable

COM with Isolation
1. On-board +15KV ESD protection
2. Isolated 1200VDC protection

An integrated circuit (IC) connected to external port is susceptible to damaging electrostatic discharge (ESD) pulses from the operating environment and peripherals.

Additional protection can violate stringent signaling requirements, leaving design engineers with the need to balance performance and reliability.

COM 1   COM 3

COM1: Isolated RS-232
COM3: Isolated RS-422
(optional for RS-485)

DIO Signal
RC+ DIO   **RC-** GND

Turn off the system: more than **1 V** input
Turn on the system: less than **0.5 V** input

The GPIO terminal block connects to a remote control device. Users can control the system power on/off by inputting high or low voltage into the terminal block.

One 2.5" SATA HDD Space

AT/ATX Mode by external switch
The TANK-GM45A supports AT and ATX power modes. The setting can be made through the AT/ATX switch on the external peripheral interface panel.

LAN 1   LAN 2   ATX   AT   ATX ◄► AT

High Performance Intel® GbE
• **Intel® 82574L**

The 82574 provides one PCIe lane operating at 2.5 GHz with sufficient bandwidth to support 1000 Mb/s transfer rate. It supports 9018-byte jumbo packets, 40 KB of on-chip buffering mitigates instantaneous receive bandwidth demands and eliminates transmit under–runs by buffering the entire outgoing packet prior to transmission.

• **Intel® WG82567LM**

The 82567 is a single port GbE Physical Layer Transceiver (PHY) that connects to its Media Access Controller (MAC) through a dedicated interconnect and supports operation at data rate of 10/100/1000 Mb/s. Supports up to 9 kB jumbo frames (full duplex).
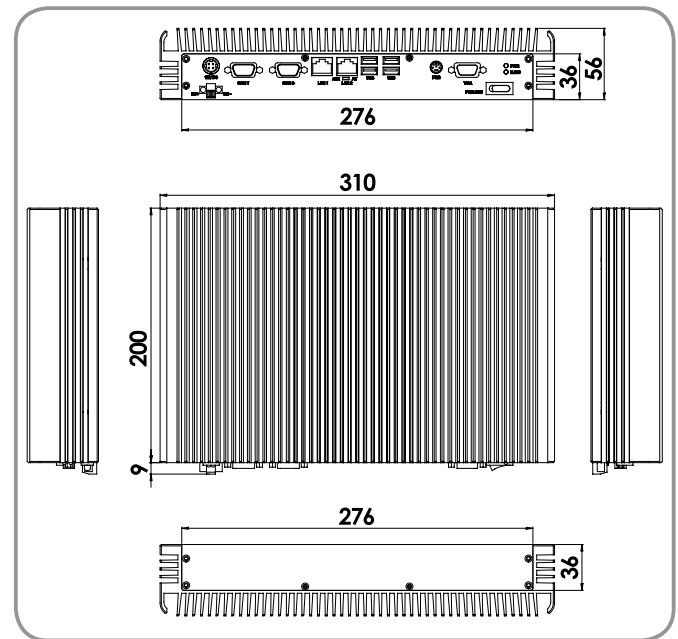
IP Video Surveillance

Digital Security Surveillance

Specifications
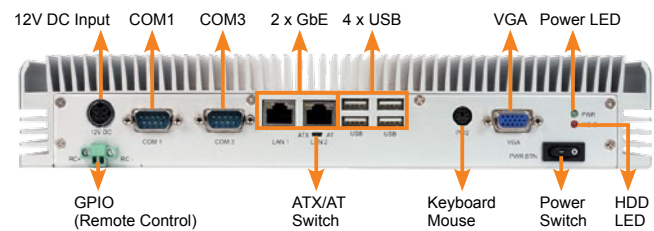
Model Name		TANK-GM45A
Chassis	Color	Sliver
	Dimensions (WxDxH)	310 x 200 x 55 mm
	System Fan	Fanless
	Chassis Construction	Aluminum alloy with heavy duty metal
Motherboard	CPU	Intel® Core™ Duo P8400 2.26GHz Intel® Celeron® M 575 2.0GHz
	Chipset	Intel® GM45 + ICH9M
	System Memory	Pre-installed 2GB DDR2 SO-DIMM (System Max 2GB)
Storage	Hard Drive	1 x 2.5" SATA HDD Bay
I/O interfaces	PS2 (KB/MS)	1
	USB 2.0	4
	Ethernet	2 x RJ-45 LAN1: Intel® 82574L Ethernet Controller LAN2: Intel® WG82567LM Ethernet PHY
	RS-232	1 x DB-9 w/isolation
	RS-232/422/485	1 x DB-9 Default RS-422 w/isolation
	Digital I/O	DIO signal for remote on/off control
	Display	1 x VGA
	Resolution	VGA: Up to 2048 x 1536 @ 75Hz
Power	Power Input	Terminal / DC Jack: 12V DC
	Power Consumption	12V@3.85A (Intel® Core™ 2 Duo P8600 with DDR2 2GB)
Reliability	Mounting	Wall mount
	Operating Temperature	-20°C ~ 70°C with air flow (SSD), 5% ~ 95%, non-condensing
	Operating Shock	Half-sine wave shock 3G, 11ms, 3 shocks per axis
	Operating Vibration	MIL-STD-810F 514.5C-1
	Weight (Net/Gross)	3.5kg/4.2kg
	Safety / EMC	CE/FCC
OS	Supported OS	Microsoft® WES7E, Microsoft® Windows® XP Embedded

Dimensions (Unit: mm)

Integrated I/O

12V DC Input | COM1 | COM3 | 2 x GbE | 4 x USB | VGA | Power LED

GPIO (Remote Control) | ATX/AT Switch | Keyboard Mouse | Power Switch | HDD LED

Packing List

1 x Power Cable (Terminal Block DC in Cable) (Part No.: 32002-002000-100-RS)	
1 x Screw Set for Wall Mount Kit	
2 x Wall Mount Backets	1 x QIG
1 x One Key Recovery CD	1 x CD

Power Cable

Wall Mount Bracket

Ordering Information

Part No.	Description
TANK-GM45A-R10/P8400/2GB	Extend temperature fanless embedded system with Intel® Core™ 2 Duo P8400 2.26 GHz 3MB L2 cache and GM45 chipset, with 2GB DDR2 memory, 12VDC, -20°C~70°C, RoHS
TANK-GM45A-R10/CM575/2GB	Extended temperture fanless embedded system with Intel® Celeron® M 575 2.0 GHz 1MB L2 cache and GM45 chipset, with 2GB DDR2 memory, 12VDC, -20°C~70°C, RoHS
63000-FSP060DBAB1554-RS	Power adapter, FSP060-DBAB1554, input VAC: 90~264V, output: 12V/60W with ERP and PSE certificates
63000-FSP096AHB-RS	Power adapter, FSP096-AHB, input VAC: 90~264V, output: 12V/96W with ERP and PSE certificates
32000-000002-RS	17.5cm European Standard Power Cord
32000-000025-RS	18.3cm American Standard Power Cord
32006-00300-100-RS	PS2 KB/MS Y Cable
IFD-2510WT-XXXXX	iFD 2.5" SATA 3.0 2510WT SLC SSD Wide Temp. Grade -40°C~85°C (8GB~128GB)
IFD-2510RW-XXXXX	iFD 2.5" SATA 3.0 2510RW SLC SSD Wide Temp. Grade -40°C~85°C (1GB~32GB)
IFD-2000JW-XXXXX	iFD 2.5" SATA 3.0 2000JW SLC SSD Wide Temp. Grade -40°C~85°C (8GB~128GB)

XXXXX=Capacity