

# ITA-2231

## Intel® 6th Generation Core™ i Processor 2U Fanless System; EN 50121-4 Compliant for Railway Applications

**NEW**

Fully Compliant with  
**EN 50121-4**



### Features

- Built-in Intel® Core™ i7-6822EQ quad-core processor, 2.0GHz
- 16GB of DDR4 memory onboard
- 2U fanless rackmount system
- Supports 3 ITA-EM modules for I/O expansion
- Supports Easy-Swap power module
- Up to 26 GbE or 26 Serial ports with ITA-EM modules
- Compliant with EN 50121-4 for railway applications
- No RED Certification

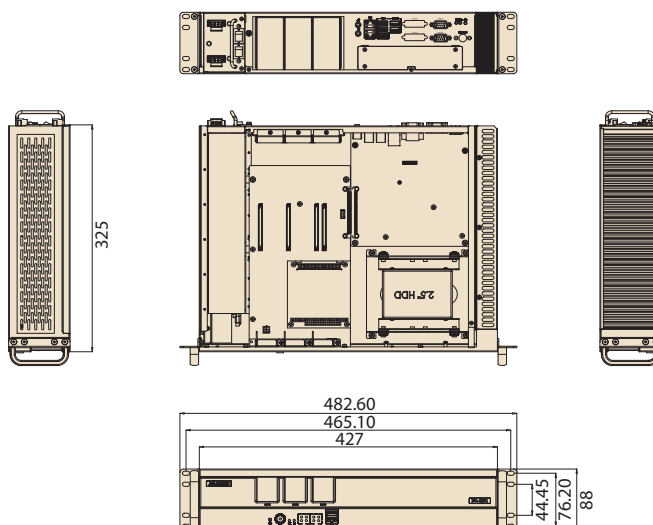


### System Specifications

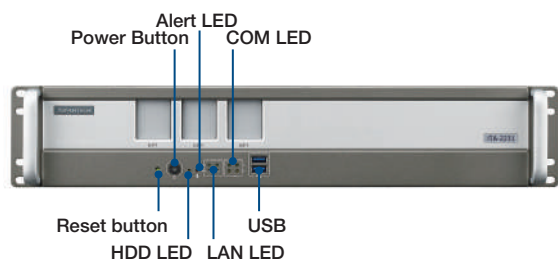
Processor System	CPU	Intel® Core™ i7-6822EQ quad-core processor		
	Max Speed/Turbo Boost	2.0/2.8 GHz		
	L3 Cache	8 MB		
	Chipset	QM170		
Memory	BIOS	AMI® SPI 128 Mb		
	Technology	Dual-channel DDR4 2133		
Graphics	Max. Capacity	Onboard 16 GB (Up to 32 GB with SODIMM)		
	Chipset	Intel® HD Graphics 530		
	VRAM	Shared system memory up to 512 MB SDRAM		
	Dual display	1 x DVI-I and 1 x DVI-D Single channel maximum: 1920 x 1200 @ 60 Hz Dual channel maximum: 1920 x 1200 @ 60 Hz		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	1 x Intel® I219IT, 1 x Intel® I210IT		
	Connector	2 x RJ-45		
Storage	SSD	1 x M.2 (with SATA interface)		
	HDD	1 x 3.5" or 2 x 2.5" HDD bay		
I/O Interface	DVI-I	1		
	DVI-D	1		
	LAN	2		
	USB	4 x USB 3.0, 3 x USB 2.0		
	Serial	2 x DB9 (RS-232/422/485) with 2.5KV Isolation		
Expansion Slots	Audio	1 x Speaker-out with 2 x 4W amplifier, 1 x Mic-in		
	ITA-EM	3		
	PCI104	1		
Power module	Mini PCIe	1		
	Input Range	Single Power Module	Dual Power Module	
	Connector	100 ~ 240 V <sub>AC</sub> /110 V <sub>DC</sub>	Dual 100 ~ 240 V <sub>AC</sub> /110 V <sub>DC</sub>	
	Wattage (60 °C)	1 x 3pin 5.08mm Terminal Block	2 x 3pin 5.08mm Terminal Block	
Watchdog Timer	Wattage (60 °C)	110 W	110W (Load Balance)	
	Output	System Reset		
Environment	Interval	Programmable 1~255 sec/min		
	Temperature	Operating (With SSD)	Operating (With HDD)	Non-Operating
		-25 ~ 60 °C	0 ~ 40 °C	-40 ~ 85 °C
Physical Characteristics	Dimensions (W x H x D)	427 x 88 x 325 mm (16.81" x 3.46" x 12.79")/482.6 x 88 x 344.77 mm (19" x 3.46" x 13.57") with mounting kits		
	EMC	CE/FCC Class A		
Certification	Safety	UL, CB, CCC, BSMI		
	Compliance	EN 50121-4, Level 4 EMS		

## Dimensions

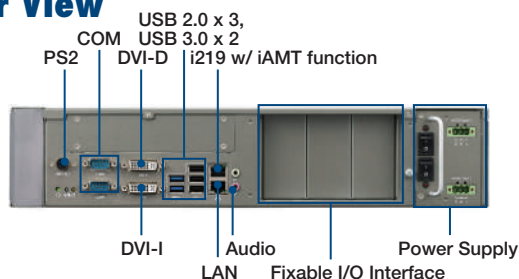
Unit: mm



## Front View

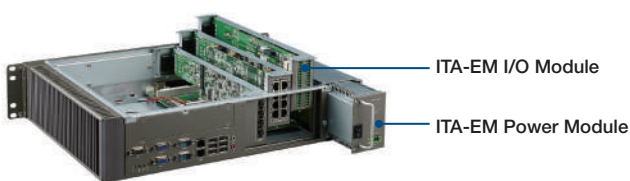


## Rear View



## ITA-EM I/O Module & Power Module

ITA-EM I/O modules provide optional LAN & Serial port expansion, see below:



## Packing List

Part No.	Description	Quantity
2001223100	Startup manual	1
2061223100	Driver CD	1
1700008941	SATA cable*7P	2
1700027461-01	SATA power cable 2*15P/1*4P	1
1700022322-11	SATA power cable*5P	1
1960018229N100	2.5" HDD bracket	2
1656303100	Terminal block*3P	2
1960018229N100	2U Rack mount ear	2
1960021557S000	Handle bracket	2

## Ordering Information

Part No.	Description
ITA-2231-00A1E	Intel Core i7, 16G on board DDR, Single AC/DC power input, 2U Rackmount RAID 0/1/5
ITA-2231-10A1E	Intel Core i7, 16G on board DDR, Dual AC/DC power input, 2U Rackmount RAID 0/1/5
ITA-2231-20A1E	Intel Core i7, 16G on board DDR, Single AC-IN jack input, 2U Rackmount RAID 0/1/5
ITA-2231-30A1E	Intel Core i7, 16G on board DDR, Dual AC-IN jack input, 2U Rackmount RAID 0/1/5

## Optional Accessories

Part No.	Description
ITA-EM-SR21-10A1E	8-port RS-232/422/485 ITA-EM module
ITA-EM-SR21-00A1E	8-port RS-232/422/485 ITA-EM module with 2.5KV isolation
ITA-EM-NC21-C0A1E	8-port GbE ITA-EM module with RJ45 connector
ITA-EM-NC22-C0A1E	4-port GbE ITA-EM module with RJ45 connector
ITA-EM-NC22-F0A1E	4-port GbE ITA-EM module with SFP connector
ITA-EM-NC23-00A1E	2-port GbE and 2-port CAN ITA-EM module
1700025366-01	Power cable: 3P terminal block -> AC-IN Jack, 10cm