



System Specifications

PROCESSOR SYSTEM

- CPU: Intel® Atom™ D525
 - Dual-core, 1.8GHz, 1M cache
- Chipset: Intel® ICH8M

MEMORY

- 2 DDR3 800MHz SODIMM sockets
- Supports up to 4GB memory
- Single channel memory interface

GRAPHICS

- Intel® GMA 3150
- Supports 2 independent displays
- VGA display resolution up to 2048x1536 @ 60Hz
- DVI display resolution up to 1920x1080 @ 60Hz
- Display outputs: 1 VGA and 1 DVI

STORAGE

- 2.5" SATA drive bay
 - Standard: 1 drive bay for 1 SATA drive
 - Option: 1 drive bay for 2 SATA drives (Available upon request. Please contact your sales representative for more information.)
- 1 CompactFlash socket
- Supports 1 mSATA module via the Mini PCIe socket

ETHERNET

- 2 Realtek® RTL8111DL Gigabit Ethernet controllers
- 3 Intel® WG82574L PCI Express Gigabit Ethernet controllers (EC220-LR4G65)

AUDIO

- Realtek® ALC262 High Definition Audio
- 2 watt, 4Ω power amplifier

POWER

- Power input voltage: 19-24V DC (Standard Voltage)
- Power input voltage: 9-36V DC (Wide Voltage)

Features

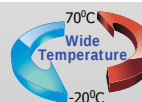
- Fanless, compact design for industrial applications
- Intel® Atom™ D525 and ICH8M
- Supports DDR3 SODIMM; up to 4GB
- 1 2.5" SATA drive bay, 1 CF socket
- PCIe x1 and PCI expansions



EC220/ 221 T Series

* Wide voltage: 9V~36V

* Wide temperature: -20°C~70°C



EXPANSION

- EC220 series
 - 2 PCI slots
 - 1 Mini PCIe slot
 - 1 XCT0-3G riser card supports 3G (option)
 - 1 Mini PCIe slot (USB signal)
 - 1 SIM slot
- EC221 series
 - 1 PCIe x1 slot
 - 1 PCI slot
 - 1 Mini PCIe slot
 - 1 XCT0-3G riser card supports 3G (option)
 - 1 Mini PCIe slot (USB signal)
 - 1 SIM slot

ENVIRONMENT

- Temperature
 - Operating: 0°C ~ 50°C (Standard Temperature)
 - Operating: -20°C ~ 70°C (Wide Temperature)
 - Storage: -20°C ~ 70°C
- Operating Vibration
 - MIL-STD-810F 514-5C-2 (HDD)
- Operating Shock
 - Half sine wave 15G, 11ms, 3 shock per axis

CONSTRUCTION

- Aluminum + SECC

MOUNTING

- Wall/VESA mount

DIMENSIONS

- 275mm x 110mm x 211mm (W x H x D)

WEIGHT

- 3.6 kg

OS SUPPORT

- Windows 7 Embedded, Windows 7, Windows XP SP3, Windows XP Embedded, Linux

OTHER FEATURES

- Watchdog Timer function

CERTIFICATION

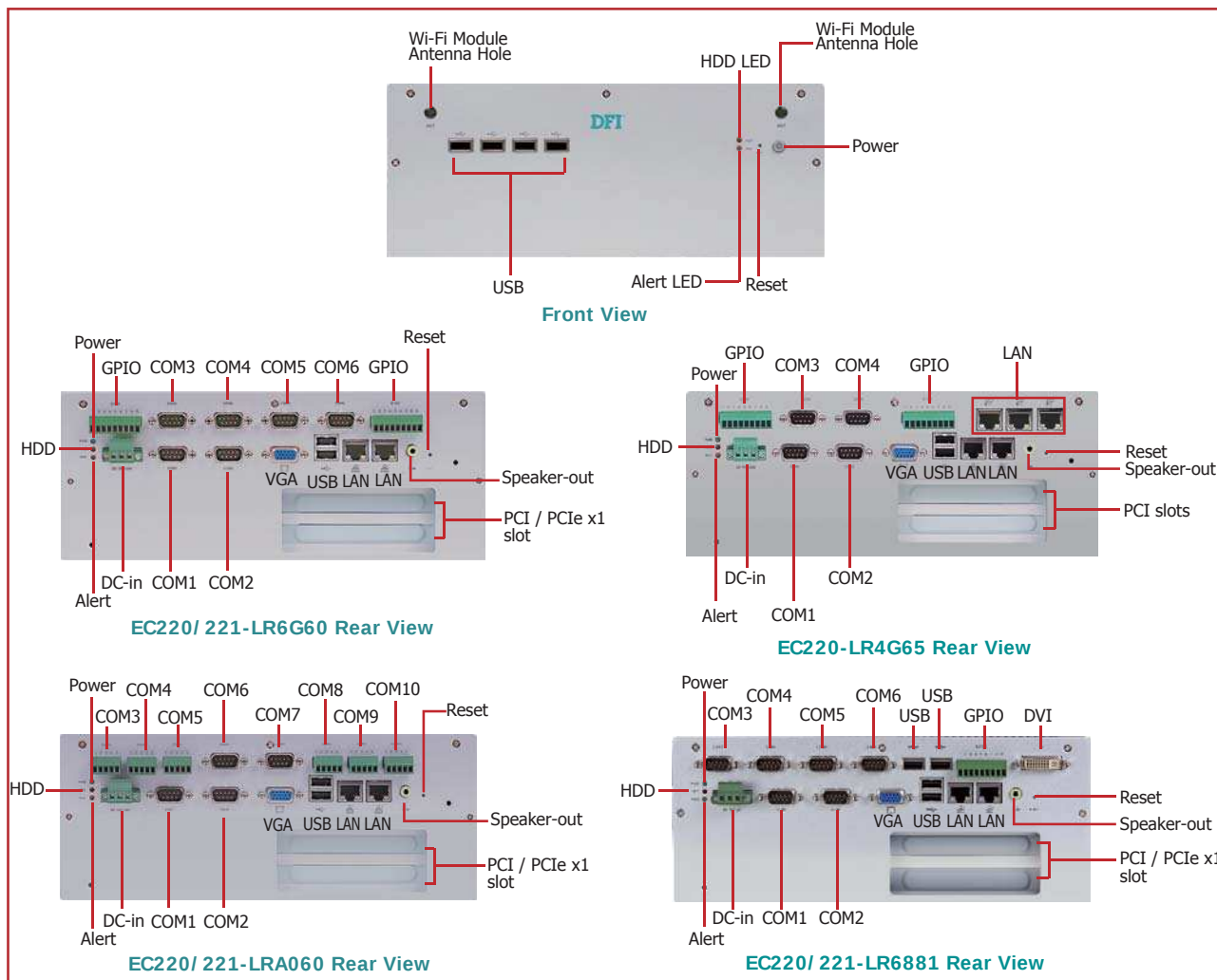
- CE, FCC Class A, UL and RoHS

Rear I/O Ports	System Models			
Wide Voltage/ Temp	EC220/ 221-LRT6881	EC220/ 221-LRT6G60	EC220/ 221-LRTA060	
Standard Voltage/ Temp	EC220/ 221-LR6881	EC220/ 221-LR6G60	EC220/ 221-LRA060	EC220-LR4G65
Power jack	1	1	1	1
Speaker-out	1	1	1	1
VGA	1	1	1	1
DVI	1	0	0	0
LAN	2	2	2	5
COM DB-9	6	6	4	4
COM 9-pole terminal block	0	0	0	0
COM 5-pole terminal block	0	0	6	0
USB 2.0	4	2	2	2
GPIO 9-pole terminal block	8-bit	16-bit	0	16-bit
Reset button	1	1	1	1
Power LED	1	1	1	1
HDD LED	1	1	1	1
Alert LED	1	1	1	1
Front I/O Ports				
USB 2.0	4	4	4	4
Power button with indicator	1	1	1	1
Reset button	1	1	1	1
HDD LED	1	1	1	1
Alert LED	1	1	1	1
Wi-Fi module antenna hole	2	2	2	2

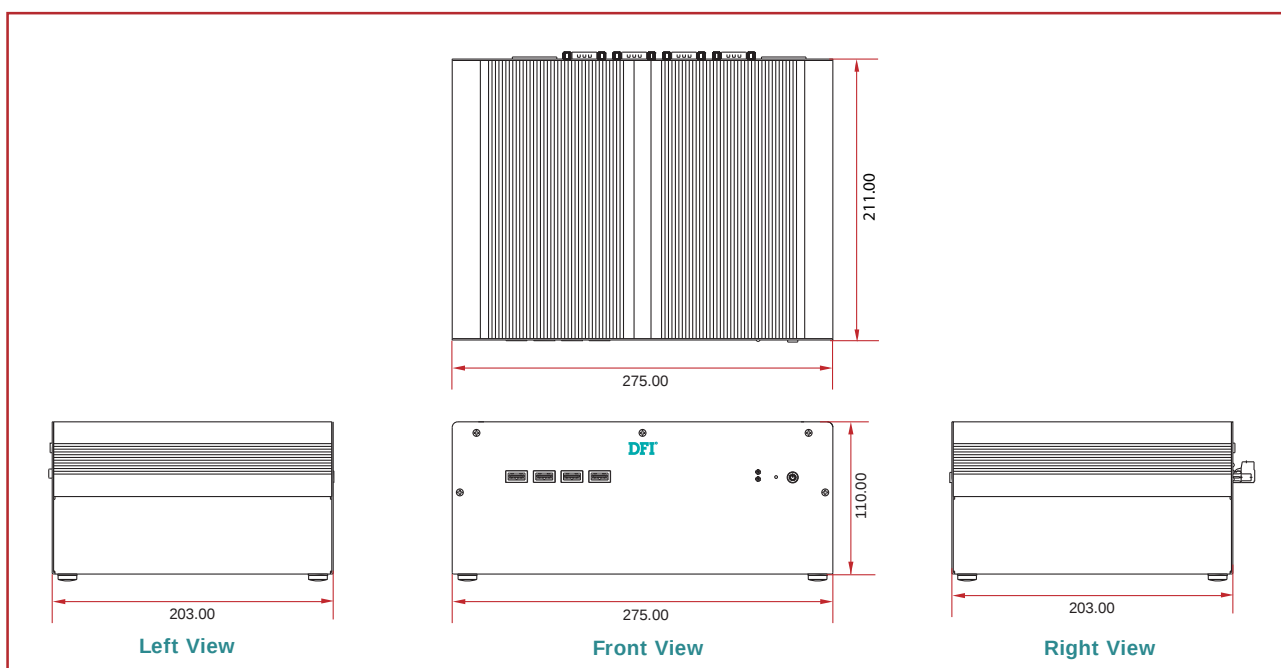
EC220/ 221 Series Embedded Systems

DFI

Panel

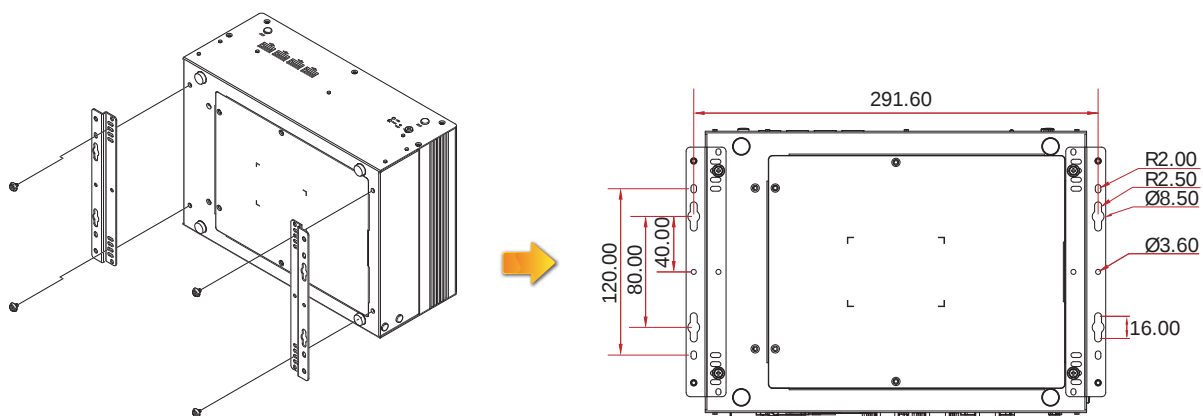


Dimensions

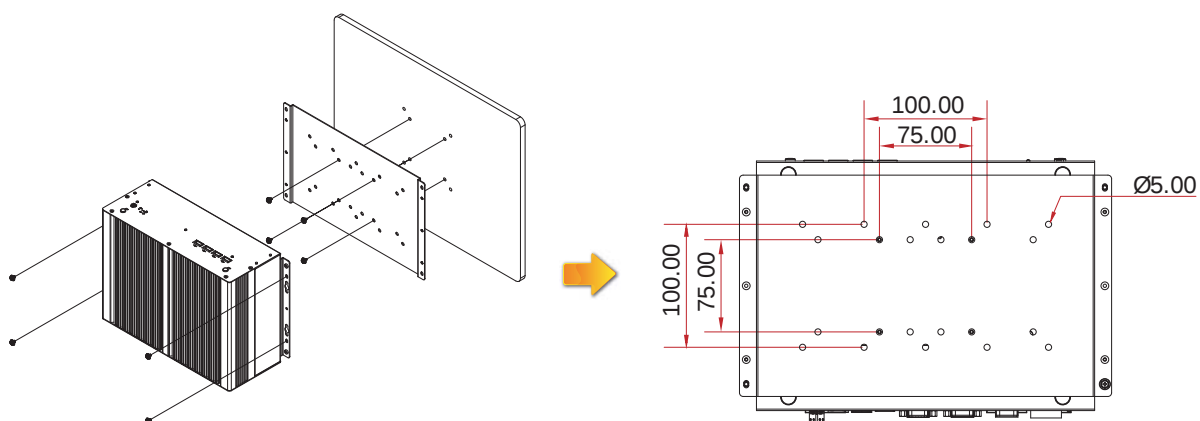


Mounting

Wall Mounting



VESA Mounting



EC220/ 221 Series Embedded Systems



Packing List

- 1 EC220/221 system unit
- 1 HDD drive bay kit
 - 2 Brackets
 - 1 SATA data/power cable
 - 4 Bracket screws
 - 4 HDD screws
- Terminal blocks
- 1 60W power adapter
- 1 CD disk includes:
 - Drivers / Manual
- 1 Quick Installation Guide

Ordering Information

Model Name	Part Number	Description
EC220-LR6G60	750-EC2200-220G	Fanless, D525, 2 LAN, 1 VGA, 6 COM, 16-bit GPIO, 6 USB, 2 PCI, RoHS
EC220-LRA060	750-EC2200-420G	Fanless, D525, 2 LAN, 1 VGA, 10 COM, 6 USB, 2PCI, RoHS
EC220-LR6881	750-EC2200-103G	Fanless, D525, 2 LAN, 1 VGA, 1 DVI-I, 6 COM, 8-bit GPIO, 8 USB, 2 PCI, RoHS
EC220-LR4G65	750-EC2200-A00G	Fanless, D525, 5 LAN, 1 VGA, 4 COM, 6 USB, 16-bit GPIO, RoHS
EC221-LR6G60	750-EC2210-201G	Fanless, D525, 2 LAN, 1 VGA, 6 COM, 16-bit GPIO, 6 USB, 1 PCI, 1 PCIe, RoHS
EC221-LRA060	750-EC2210-B00G	Fanless, D525, 2 LAN, 1 VGA, 10 COM, 6 USB, 1 PCI, 1 PCIe, RoHS
EC221-LR6881	750-EC2210-800G	Fanless, D525, 2 LAN, 1 VGA, 1 DVI-I, 6 COM, 8-bit GPIO, 8 USB, 1 PCI, 1 PCIe, RoHS
EC220-LRT6G60	750-EC2200-B00G	With wide temperature, Fanless, D525, 2 LAN, 1 VGA, 6 COM, 16-bit GPIO, 6 USB, 2 PCI, RoHS
EC220-LRTA060	750-EC2200-800G	With wide temperature, Fanless, D525, 2 LAN, 1 VGA, 10 COM, 6 USB, 2 PCI F/G RoHS
EC220-LRT6881	750-EC2200-605G	With wide temperature, Fanless, D525, 2 LAN, 1 VGA, 1 DVI-I, 6 COM, 8-bit GPIO, 8 USB, 2 PCI, RoHS
EC221-LRT6G60	750-EC2210-A00G	With wide temperature, Fanless, D525, 2 LAN, 1 VGA, 6 COM, 16-bit GPIO, 6 USB, 1 PCI, 1 PCIe, RoHS
EC221-LRTA060	750-EC2210-C00G	With wide temperature, Fanless, D525, 2 LAN, 1 VGA, 10 COM, 6 USB, 1 PCI, 1 PCIe, RoHS
EC221-LRT6881	750-EC2210-606G	With wide temperature, Fanless, D525, 2 LAN, 1 VGA, 1 DVI-I, 6 COM, 8-bit GPIO, 8 USB, 1 PCI, 1 PCIe, RoHS

Optional Items

Optional Items	Part Number	Description
Memory	785-RSOD31G	SODIMM, DDR3, 1GB, RoHS
	785-RSOD32G	SODIMM, DDR3, 2GB, RoHS
	785-RSOD34G	SODIMM, DDR3, 4GB, RoHS
HDD	785-H25250G	2.5" SATA HDD, 250GB, RoHS
	785-H25320G	2.5" SATA HDD, 300GB, RoHS
	785-S25128G	2.5" SATA SSD, 128GB MLC, RoHS
CF	785-CF01G	CF CARD, 1G Industrial Grade SLC
	785-CF02G	CF Card, 2G, Industrial Grade SLC
	785-CF04G	CF Card, 4G, Industrial Grade SLC
	785-CF08G	CF Card, 8G, Industrial Grade SLC
Power Cord	785-PWRD	Power cord, Standards (USA/EUR/CH), 1.8m, RoHS
Wall Mount	785-EC3WMK	EC300 Series Wall Mount Kit
VESA Mount	785-EC2VAK	EC200 Series VESA Mount Kit
3G	785-EC3G	For EC300/310/320/321 Series and EC200/210/220/221 Series 3G Module