MC-7200-DC-CP-T

x86 fanless, wide temperature industrial computer with 3rd generation Intel® Core™ processor

> High performance Intel® Core™ processor: i7 3555LE, i3 3120ME, or Celeron 1047UE
> Compact size with fanless design
> 3 independent displays (DVI-D x 2 + VGA x1)
> 4 Gigabit Ethernet ports for network redundancy
> 2 SATA drive slots for greater storage capacity
> -40 to 70°C operating temperature range
> Supports Moxa Proactive Monitoring software

Overview

The MC-7200-DC-CP-T computer features the Intel® Core™ i7 3555LE processor and comes with 4 serial ports, 4 Gigabit Ethernet ports, and 6 USB hosts. The computer offers high performance and versatile peripherals for marine applications.

Designed with high quality and durability in mind, the marine-grade MC-7200-DC-CP-T computer features a rugged chassis proven against 1G vibrations, providing a reliable platform even in harsh environments. In addition, the compact size, fanless design, and low power consumption deliver an optimal thermal solution and make installation easy for bridge systems in marine applications.
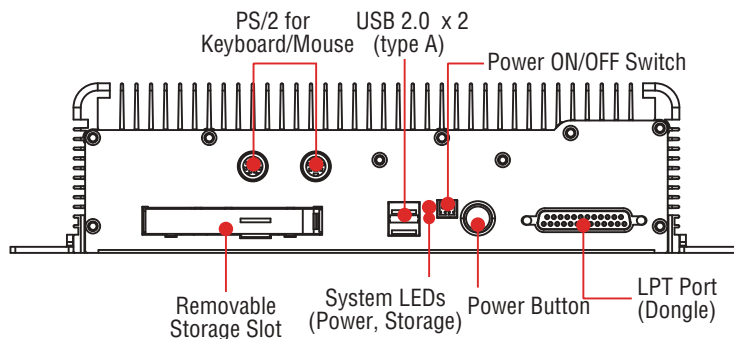
Users can easily install Windows XP Embedded, XP Professional, or Windows 7, to provide a flexible and friendly environment for system development and application implementation.

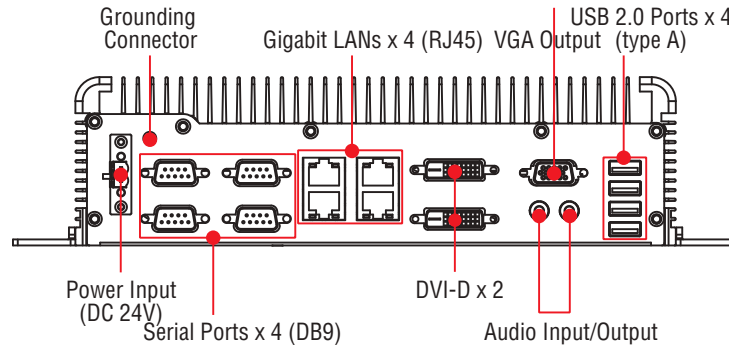### Proactive Monitoring Function

Moxa Proactive Monitoring is a small-footprint, resource-friendly, easy-to-use utility that allows users to track a number of system parameters. Users can view the current parameter values for these key parts by simply clicking on the icons corresponding to the parameters in the user interface. User-defined key part indicators (KPIs) are used to monitor the computer's key parts. Visible and/or audio alerts are triggered automatically via relay and SNMP traps when these KPIs exceed their preset threshold values, making it extremely convenient for operators to avoid system downtime by setting up predictive maintenance tasks well in advance.
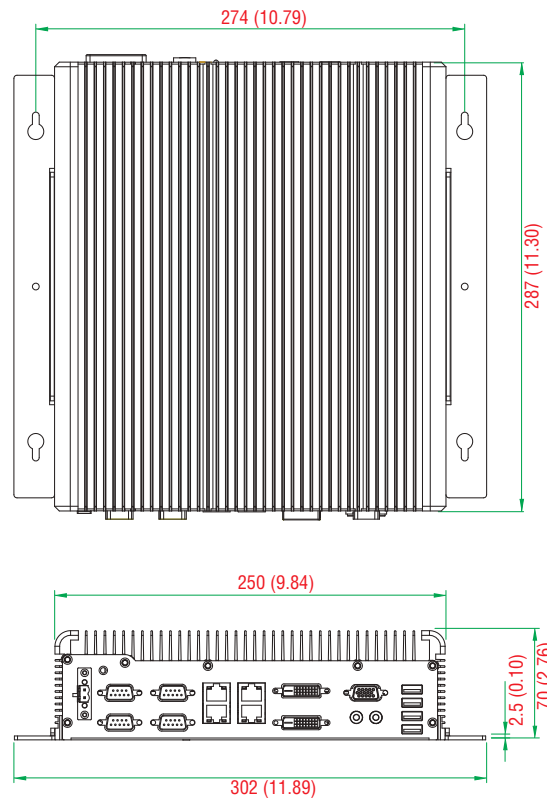
Appearance

Front View

PS/2 for Keyboard/Mouse
USB 2.0 x 2 (type A)
Power ON/OFF Switch
Removable Storage Slot
System LEDs (Power, Storage)
Power Button
LPT Port (Dongle)

MOXA®

Rear View

Grounding Connector

Gigabit LANs x 4 (RJ45) VGA Output

USB 2.0 Ports x 4 (type A)

Power Input (DC 24V)

Serial Ports x 4 (DB9)

DVI-D x 2

Audio Input/Output

Dimensions

Unit: mm (inch)

274 (10.79)

287 (11.30)

250 (9.84)

2.5 (0.10) 70 (2.76)

302 (11.89)

Specifications

Computer
CPU: Intel® Core™ i7-3555LE, dual core 64-bit 2.5 GHz processor
Supported OS: Windows 7, Windows XP SP3, Windows XP Embedded, Linux OS (must be installed by the user)
System Chipset: Intel® QM77 Express Chipset
System Memory: 16 GB capacity, with 4 GB pre-installed (2 slots total, with a 4 GB DDR3/DDR3L-1600 204 pin SO-DIMM SDRAM pre-installed in 1 slot)
USB: USB 2.0 hosts x 6, Type A connectors
Storage:
2 SATA III 6 Gbps ports for removeable storage trays, one in the front and one on the bottom

Other Peripherals
Audio: Line in x 1, Line out x 1
KB/MS: 2 PS/2 interfaces supporting standard PS/2 keyboard and mouse
LPT Ports: 1

Display
Display Interface:
• VGA Interface x 1: 15-pin D-Sub connector (female), with resolution up to 2048x1536 pixels with 32-bit color at 75 Hz
• DVI-D Interface x 2: 29-pin DVI-D connectors (female), with resolution up to 1920 x1200 pixels with 32-bit color at 60 Hz
Graphics Controller: Onboard Intel® HD 4000 graphics

Ethernet Interface
LAN: 4 auto-sensing 10/100/1000 Mbps ports (RJ45)
Magnetic Isolation Protection: 1.5 kV built in

Serial Interface
Serial Standards:
• 2 RS-232/422/485 ports, software-selectable (DB9 male)
• 2 RS-232 ports (DB9 male)

Serial Communication Parameters

Data Bits: 5, 6, 7, 8
Stop Bits: 1, 1.5, 2
Parity: None, Even, Odd, Space, Mark
Flow Control: RTS/CTS, XON/XOFF, ADDC® (automatic data direction control) for RS-485
Baudrate: 50 bps to 115.2 kbps

Serial Signals

RS-232: TxD, RxD, DTR, DSR, RTS, CTS, DCD, GND
RS-422: TxD+, TxD-, RxD+, RxD-, GND
RS-485-4w: TxD+, TxD-, RxD+, RxD-, GND
RS-485-2w: Data+, Data-, GND

LEDs

System: Storage, Power
LAN: 100M/Link x 4, 1000M/Link x 4 (on connector)

Physical Characteristics

Housing: Aluminum, sheet metal
Weight: 3.85 kg
Dimensions: 287 x 250 x 70 mm (11.30 x 9.84 x 2.76 in)
Mounting: Wall

Environmental Limits

Operating Temperature: -40 to 70°C (-40 to 158°F)
Storage Temperature: -50 to 80°C (-58 to 176°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)
Anti-Vibration:
• 0.7 g @ DNV 2.4 (Class A), sine wave, 2-100 Hz, 1 Oct./min., 1.5 hr per axis
• 1 g @ DNV 2.4, random wave, 3-100 Hz, 2.5 hr per axis
• 2.1 g @ DNV 2.4 (Class C), sine wave, 2-50 Hz, 1 Oct./min., 1.5 hr per axis

Power Requirements

Input Voltage: 24 VDC (with tolerance from 18 to 30 VDC, 2-pin terminal block)
Power Consumption: Less than 100 W, 2.5 A @ 24 VDC

Standards and Certifications

Safety: UL 60950-1
EMC: EN 55032 Class B, EN 55024, FCC Part 15 Subpart B Class A
Marine Standards: IEC-60945 4th
Marine Type Approval: DNV 2.4 and EU MR
Green Product: RoHS, cRoHS, WEEE

Reliability

MTBF (mean time between failures): 220,490 hrs

Warranty

Warranty Period: 3 years
Details: See www.moxa.com/warranty

: Ordering Information

Model Name	CPU	RAM	Storage (pre-installed)	OS (pre-installed)	SSD slot	LAN	Serial	USB 2.0	Video Outputs	Audio	PS/2	LPT	Power Input	Operating Temp.
MC-7270-DC-CP-T-W7E	i7-3555LE	4 GB	32 GB SSD	W7E 64-bit	1 (external)	4	4	6	1 VGA + 2 DVI-D	✓	✓	1	24 VDC (18-30 V)	-40 to 70°C
MC-7270-DC-CP-T	i7-3555LE	4 GB	N/A	N/A	1 (external)	4	4	6	1 VGA + 2 DVI-D	✓	✓	1	24 VDC (18-30 V)	-40 to 70°C
MC-7230-DC-CP-T	i3-3120ME	4 GB	N/A	N/A	1 (external)	4	4	6	1 VGA + 2 DVI-D	✓	✓	1	24 VDC (18-30 V)	-40 to 70°C
MC-7210-DC-CP-T	Celeron 1047UE	4 GB	N/A	N/A	1 (external)	4	4	6	1 VGA + 2 DVI-D	✓	✓	1	24 VDC (18-30 V)	-40 to 70°C

Note: Use the Moxa CTOS process to select RAM, storage, and OS options. Please contact your Moxa sales representative for details.

Package Checklist

• MC-7200-DC-CP-T computer
• 1 2-pin terminal block for DC power input
• 1 2-pin terminal block for power ON/OFF switch
• Hard disk installation kit
• Documentation and driver CD
• Quick installation guide (printed)
• Warranty card