

MC-7200-MP-T Series

x86 fanless, wide-temperature industrial computers



Features and Benefits

- Intel® Core™ processor: i7 3555LE, i3 3120ME, or Celeron 1047UE
- Fanless design
- Full marine I/O design
- PCI/PCIe slot
- 3 independent displays (DVI-D x 2 + VGA x1)
- 2 USB 3.0 ports, 6 USB 2.0 ports
- 2 SATA drive slots for greater storage capacity
- Dual power: 100 to 240 VAC and 24 VDC
- -40 to 70°C operating temperature range
- Supports Moxa Proactive Monitoring software

Certifications



Introduction

The MC-7200-MP-T marine computer is powered by the Intel® Core™ i7 3555LE processor and delivers a full range of I/O connectivity, including 8 NMEA 0183 ports, 4 serial ports, 4 Gigabit Ethernet ports, as well as 6 USB 2.0 and 3 SuperSpeed USB 3.0 ports. The MC-7200-MP-T is designed to provide outstanding PC performance, bringing a new level of flexibility and control to marine applications.

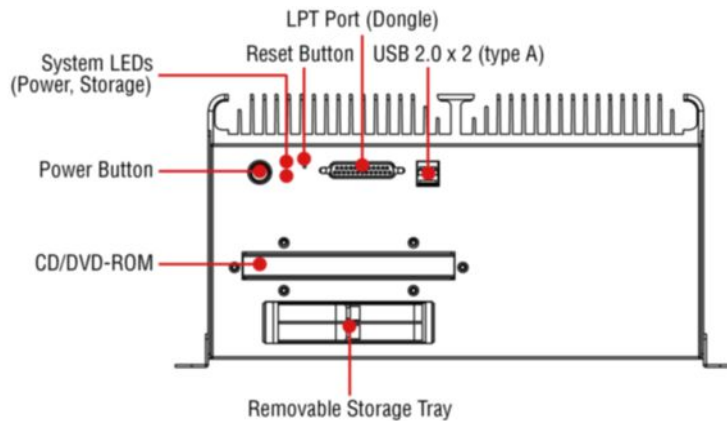
Designed with the highest quality and durability in mind, the marine-grade MC-7200-MP-T computer features a rugged chassis that can withstand vibrations up to 1G to provide the most reliable operation for harsh environments and conditions. In addition, low power consumption delivers an optimal thermal solution and makes installation easy for bridge systems in marine applications. In addition, the PCIe (x16) slot and two universal PCI slots allow users to easily install a variety of adapters, including radar cards, PROFIBUS cards, and VGA graphics cards, to fully satisfy their marine network needs.

Users can easily install Windows XP Embedded, Windows XP Professional, or Windows 7 to provide a flexible and friendly environment for system development and application implementation.

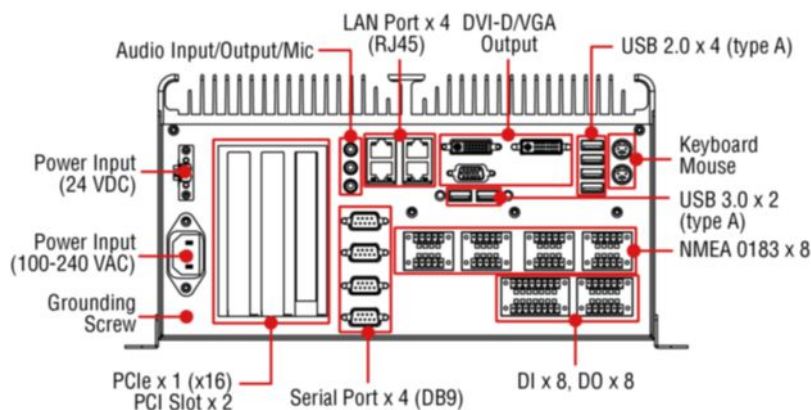
The MC-7200-MP-T supports Moxa Proactive Monitoring software, which is a small-footprint, resource-friendly, easy-to-use utility that allows users to track a number of system parameters. Users can view the current parameter values for these key parts by simply clicking on the icons corresponding to the 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



Rear View



Specifications

Computer

CPU	Intel® Celeron® Processor 1047UE (2M Cache, 1.40 GHz) Intel® Core™ i3-3120ME Processor (3M Cache, 2.40 GHz) Intel® Core™ i7-3555LE Processor (4M Cache, up to 3.20 GHz)
System Chipset	Mobile Intel® QM77 Express Chipset
Graphics Controller	Intel® HD Graphics 4000 (integrated)
System Memory Pre-installed	4 GB DDR3/DDR3L
System Memory Slot	SODIMM DDR3/DDR3L slot x 2
Supported OS	Windows Embedded Standard 7 (WS7P) 64-bit Windows 10 Embedded IOT Ent 2016 LTSP High End EPKEA Windows 10 Embedded IOT Ent 2016 LTSP Value EPKEA
Storage Slot	2.5-inch HDD/SSD slots x 2

Computer Interface

Ethernet Ports	Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 4
Serial Ports	RS-232 ports x 2 (DB9 male) RS-232/422/485 ports x 2, software selectable (DB9 male)
USB 2.0	USB 2.0 hosts x 6, type-A connectors
USB 3.0	USB 3.0 hosts x 2, type-A connectors

Audio Input/Output	Line in x 1, Line out x 1, microphone x 1, 3.5 mm phone jack
Digital Input	DIs x 8
Digital Output	DOs x 8
Expansion Slots	PCIe x16 slot x 1 PCI slots x 2
LPT port	1, 25-pin D-sub
PS/2	Keyboard PS/2 x 1, Mouse PS/2 x 1
Video Output	DVI-D x 2, 29-pin DVI-D connectors (female) VGA x 1, 15-pin D-sub connector (female)
NMEA Port	NMEA 0183 ports x 8 (terminal block)

Digital Inputs

Connector	Screw-fastened Euroblock terminal
Dry Contact	On: short to GND Off: open
I/O Mode	DI

Relays

Connector	Screw-fastened Euroblock terminal
Contact Current Rating	Resistive load: 2 A @ 30 VDC
Contact Resistance	50 milli-ohms (max.)
Initial Insulation Resistance	1,000 mega-ohms (min.) @ 500 VDC
Mechanical Endurance	100,000,000 operations
Minimum Permitted Load	20 A @ 30 VDC

LED Indicators

System	Power x 1 Storage x 1
LAN	2 per port (10/100/1000 Mbps)

Serial Interface

Baudrate	50 bps to 115.2 kbps
Connector	DB9 male
Data Bits	5, 6, 7, 8
Flow Control	ADDC® (automatic data direction control) for RS-485, RTS/CTS, XON/XOFF
Isolation	N/A

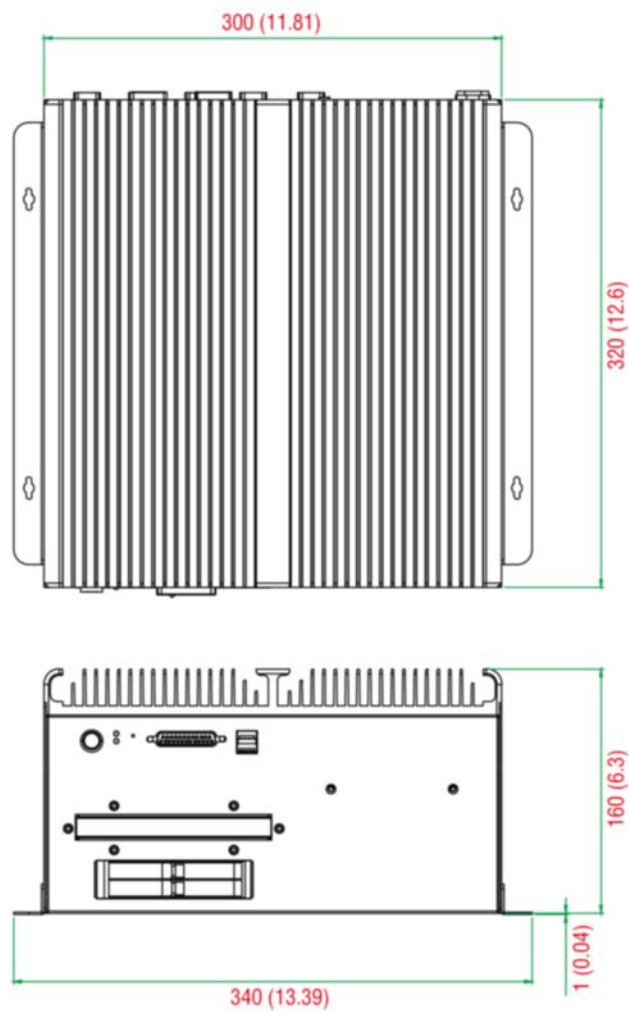
Parity	None, Even, Odd, Space, Mark
NMEA Interface	Serial Standards: NMEA 0183: RS-422 Baudrate: 4800 bps Data Bits: 8 Handshake: None Optical Isolation Protection: 3 kV Parity: None Serial Standards: NMEA 0183v2 Stop Bits: 1, 1.5, 2
Serial Signals	
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
Power Parameters	
Input Voltage	100 to 240 VAC, 24 VDC
Power Connector	Terminal block (for DC power input)
Power Consumption (Max.)	120 W
Reliability	
Automatic Reboot Trigger	Built-in WDT
Physical Characteristics	
Housing	Metal
Dimensions (with ears)	320 x 340 x 160 mm (12.6 x 13.39 x 6.3 in)
Weight	9,215 g (20.32 lb)
Installation	Wall mounting
Environmental Limits	
Operating Temperature	-40 to 70°C (-40 to 158°F)
Storage Temperature (package included)	-50 to 80°C (-58 to 176°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
Maritime	CCS, DNV-GL, IEC 60945
Radio Frequency	FCC
Safety	UL 60950-1
Warranty	
Warranty Period	3 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x MC-7200-MP-T Series computer
Cable	1 x terminal block to power jack converter
Installation Kit	1 x terminal block, 2-pin (for DC power input) 1 x terminal block, 2-pin (for power ON/OFF) 2 x terminal block, 6-pin 2 x terminal block, 8-pin
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	CPU	RAM	Storage	LAN	Serial	USB 2.0/3.0	DI/DO	NMEA 0183	Video Outputs
MC-7210-MP-T	Celeron 1047UE	4 GB	2 x SSD tray	4	4	6/2	8/8	8	1 x VGA, 2 x DVI-D
MC-7230-MP-T	i3-3120ME	4 GB	2 x SSD tray	4	4	6/2	8/8	8	1 x VGA, 2 x DVI-D
MC-7270-MP-T	i7-3555LE	4 GB	2 x SSD tray	4	4	6/2	8/8	8	1 x VGA, 2 x DVI-D

Accessories (sold separately)

Cables

PWC-C13AU-3B-183	Power cord with Australian (AU) plug, 1.83 m
PWC-C13CN-3B-183	Power cord with three-prong China (CN) plug, 1.83 m
PWC-C13EU-3B-183	Power cord with Continental Europe (EU) plug, 1.83 m
PWC-C13UK-3B-183	Power cord with United Kingdom (UK) plug, 1.83 m
PWC-C13US-3B-183	Power cord with United States (US) plug, 1.83 m

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