

# MC-7270-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 x 1)
- > 4 Gigabit Ethernet ports for network redundancy
- > 2 SATA drive slots for greater storage capacity
- > -40 to 70°C operating temperature range



## Overview

The MC-7270-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.

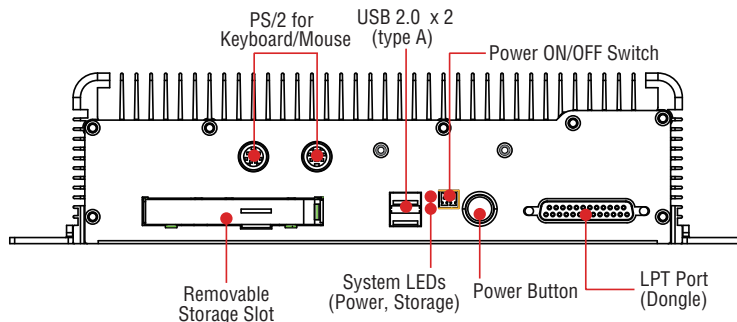
Designed with high quality and durability in mind, the marine-grade MC-7270-DC-CP-T computer features a rugged chassis proven against 1G vibrations, providing a reliable platform even in harsh

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.

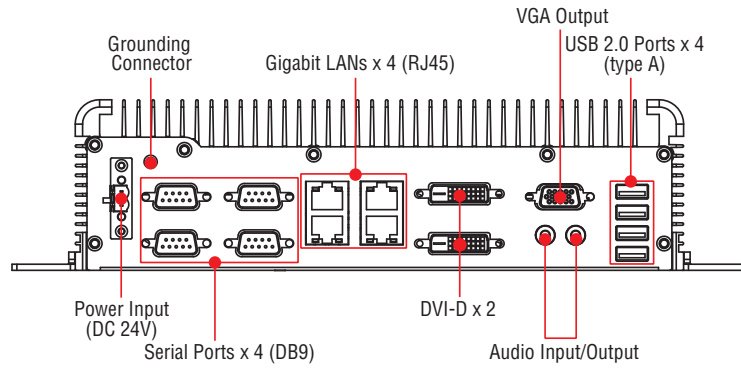
Users can easily install Windows XP Embedded, XP Professional, or Windows 7, to provide a flexible and friendly environment for system development and application implementation.

## Appearance

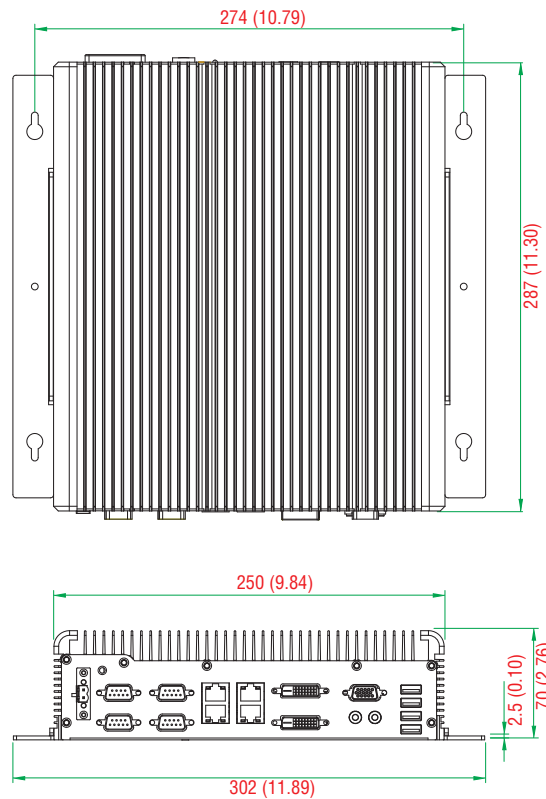
### Front View



## Rear View



## Dimensions



Unit: mm (inch)

## 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 (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 tray
  - 2 SATA II 3 Gbps ports (internal, for installing optional hard disks)

### 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, CCC

**EMC:** EN 55022 Class B, EN 55024-4-2, EN 55024-4-3, EN 55024-4-4, FCC Part 15 Subpart B Class A

**Marine Standards:** IEC-60945 4th, IEC-61162, IEC-61174 (Pending)

**Marine Type Approval:** DNV 2.4 (Pending)

**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](http://www.moxa.com/warranty)

## Ordering Information

### Available Models

**MC-7270-DC-CP-T:** x86-based industrial computer with Intel® Core™ i7 3555LE processor, fanless, wide temperature, 4 serial ports, 4 Gigabit Ethernet ports, 6 USB hosts, VGA/DVI, and DC power input

**MC-7230-DC-CP-T:** x86-based industrial computer with Intel® Core™ i3 3120ME processor, fanless, wide temperature, 4 serial ports, 4 Gigabit Ethernet ports, 6 USB hosts, VGA/DVI, and DC power input

**MC-7210-DC-CP-T:** x86-based industrial computer with Intel® Celeron 1047UE processor, fanless, wide temperature, 4 serial ports, 4 Gigabit Ethernet ports, 6 USB hosts, VGA/DVI, and DC power input

### Package Checklist

- MC-7270-DC-CP-T computer
- 2 removable storage protection keys
- 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