MC-5150-DC-CP

x86 industrial computer with Intel® Core™ i5 520E, 4 serial ports, 2 Gigabit Ethernet ports, 6 USB hosts, storage, VGA/DVI

- High performance Intel® Core™ i5 520E processor, 3 MB L2 cache
- Built-in 2 GB DDR3 memory, supports up to 4 GB
- Dual independent displays (DVI-I + VGA)
- 2 Gigabit Ethernet ports for network redundancy
- 2 RS-232/422/485 serial ports
- 2 RS-232 ports
- 6 USB 2.0 hosts
- 1 internal SATA solid state drive storage slot
- 1 removable drive tray with pre-installed 64 GB SSD
- 1G anti-vibration design for system reliability
- Compact, fanless design
- Supports Windows XP Embedded, XP Professional, Windows 7

Overview

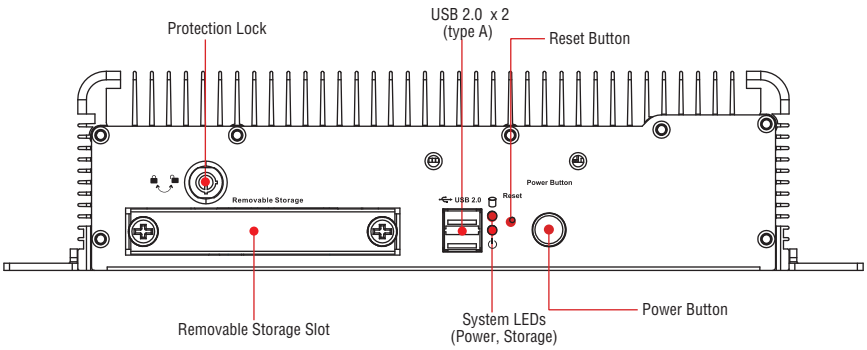
The MC-5150-DC-CP computer features the Intel® Core™ i5 520E processor and come with 4 serial ports, 2 Gigabit Ethernet ports, and 6 USB hosts. The computer offers high performance and versatile peripherals for marine applications.

Designed with highest quality and durability in mind, the marine-grade MC-5150-DC-CP computer features a rugged chassis proven against 1G anti-vibration, providing a most 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.

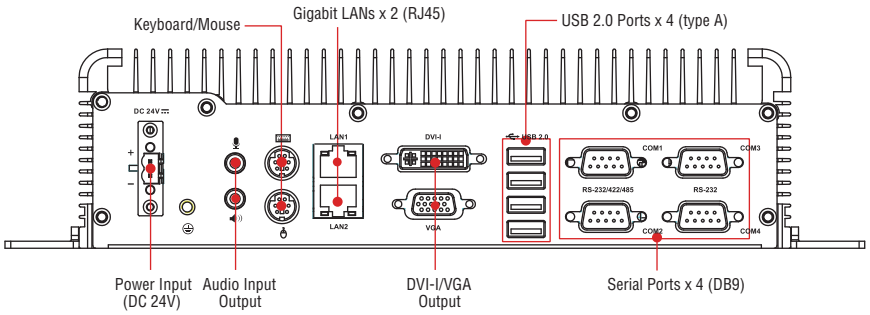
Users can easily install Windows XP Embedded, XP Professional, or Windows 7, to provide a flexible and friendly environment for system development and application implementation.

Appearance

Front View

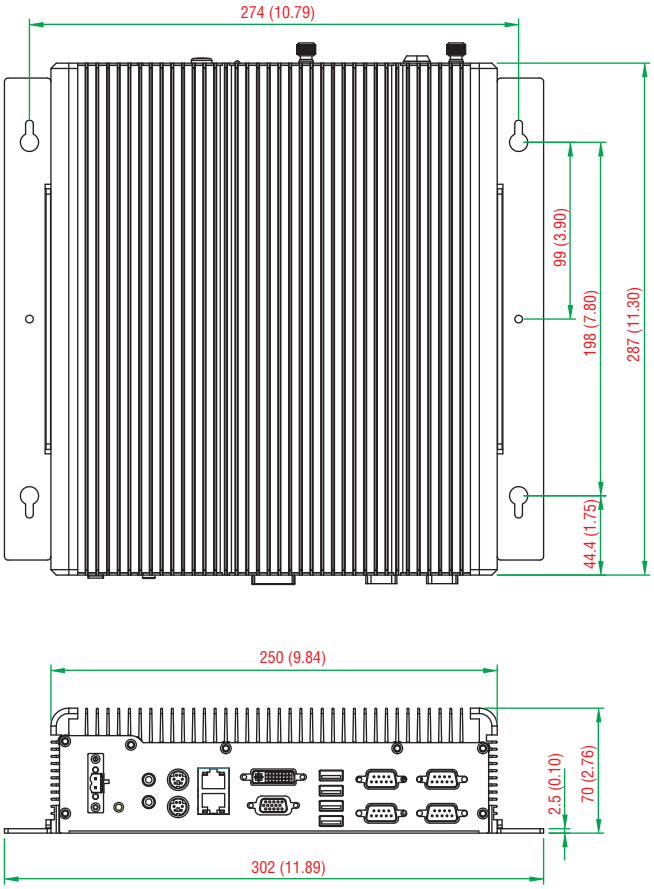


Rear View



Dimensions

Unit: mm (inch)



Specifications

Computer
CPU: Intel® Core™ i5-520E (BGA CPU package), dual core threaded 64 bit 2.4 GHz processor
OS: Windows 7, Windows XP SP3, Windows XP Embedded (must be installed by the user)
System Chipset: Intel® QM57 Express Chipset
FSB: 1066
System Memory: 2 GB capacity, 2 GB pre-installed: 2 slots of 2 GB DDR3-1066 204 pin SO-DIMM SDRAM
USB: USB 2.0 hosts x 6, Type A connectors
Storage:
• 1 internal SATA storage tray
• 1 removable SATA storage tray with 64 GB SSD

Other Peripherals
Audio: line-in/out interface
KB/MS: 2 PS/2 interfaces supporting standard PS/2 keyboard and mouse

Display
Display Interface:
• VGA Interface: 15-pin D-Sub connector (female), with resolution up to 1920 x 1080
• DVI-I Interface: 29-pin DVI-I connector (female)
Graphics Controller: Onboard Intel® HD graphics

Ethernet Interface
LAN: 2 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)

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 230.4 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 2, 1000M/Link x 2 (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: -15 to 55°C (5 to 131°F)
Storage Temperature: -20 to 60°C (-4 to 131°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 Grms @ 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, DNV 2.4 (Pending), IEC 60945 (4th) (Pending), IACS E10 (Pending), CCC (GB4943, GB9254, GB17625.1)
EMC: EN 55032 Class B, EN 55024, FCC Part 15 Subpart B Class B
Marine: IEC 60945 4th. (Pending), IACS-E10 (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

Ordering Information

Available Models
MC-5150-DC-CP: x86-based industrial computer with Intel® Core™ i5 CPU processor, 4 serial ports, 2 Gigabit Ethernet ports, 6 USB hosts, storage, VGA/DVI, and DC power input

Package Checklist
- MC-5150 computer
- 2 removable storage protection keys
- 4 screws for internal drive tray
- Terminal block for power input
- Hard disk installation kit
- Documentation and driver CD
- Quick installation guide (printed)
- Warranty card

© Moxa Inc. All Rights Reserved. Updated Feb. 7, 2017. Specifications subject to change without notice. Please visit our website for the most up-to-date product information.