

MPC-2260 Series

Preliminary

26-inch ECDIS color calibrated, fanless panel computers



- > 26-inch panel computer
- > Color calibrated for ECDIS compliance
- > Fanless design
- > SavvyTouch display controls
- > 3rd Generation Intel® Core™ or Celeron® processor (Default: Celeron® 1047UE, 1.40 GHz with Intel® HD Graphics)
- > Built-in NMEA 0183 and software selectable RS-232/422/485 interfaces
- > Multi-power supplies (AC & DC)



Introduction

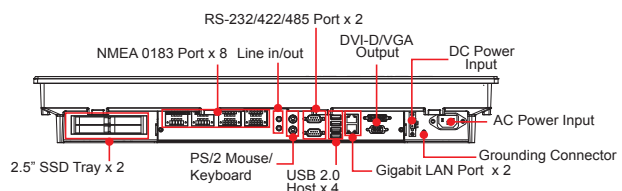
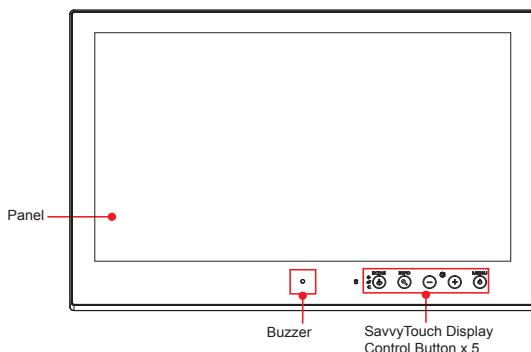
MPC-2260 series panel computers feature an Intel 3rd generation processor and 4 GB of system memory to deliver a reliable, high performance platform of wide versatility for use in industrial marine environments. With its RS-232/422/485 serial, NMEA 0183, and Gigabit Ethernet LAN ports, the MPC-2260 series panel computer supports a wide variety of serial and marine-specific interfaces as well as high speed IT communications, all with native network redundancy.

The MPC-2260 series comes with a range of standard display enhancements useful in industrial environments (including 0 to 100% full range dimming, 178°/178° wide viewing angles, and optional

optical bonding), as well as Moxa's innovative SavvyTouch display controls.

The MPC-2260 series of panel computers are compliant with several industrial marine standards, including IEC 60945 4th, IEC 61174, IEC 61162, DNV2.4, and IACS E10, verifying their resilient durability in marine operations. An optional IP65-rated unibody shell provides strong additional protection against the harsh conditions found in marine environments. The MPC-2260 delivers a rugged, type approved, high performance and user-friendly panel computer perfect for ECDIS navigation systems and other marine IBS applications.

Appearance



Specifications

Computer

CPU: Intel Celeron® Processor 1047UE (2M Cache, 1.40GHz)
OS: Windows 7 Professional, Windows XP Embedded, Windows Embedded Standard 7, Windows XP SP3
System Chipset: Intel HM65
System Memory: 8 GB capacity, 4 GB pre-installed: 1 slot of 4 GB DDR3-1600 204 pin SO-DIMM SDRAM
USB: 4 bootable USB 2.0 hosts, type A connectors
Storage: 2 SATA III interfaces: 6 Gbps, 2.5" removable storage trays
BIOS: 64 Mbit Flash BIOS with SPI, ACPI
Graphics Controller: Intel HM65 Express chipset built in
Video Outputs: DVI-D x 1, VGA x 1 (female)

Other Peripherals

Audio: line in/out, 3.5 mm mini jack
KB/MS: 2 PS/2 interfaces supporting standard PS/2 keyboard and mouse

Display

Panel Size: 26" viewable image size
Panel Type: MVA
Aspect Ratio: 16:10
Pixels: 1920 x 1200 (WUXGA)
Pixel Pitch (RGB): 0.2865 (H) x 0.2865 (V) mm
Response Time: 15 ms (gray to gray)
Contrast Ratio: 1500:1
Light Intensity: 300 cd/m²
Viewing Angles: 176°/176°
Active Display Area: 550.08 (H) x 343.8 (V) mm
Max Colors: 16.7M (8 bit color)
Resolution:

- VGA: 640 x 480
- SVGA: 800 x 600
- XGA: 1024 x 768
- SXGA: 1280 x 1024
- WSXGA+: 1920 x 1080
- WUXGA: 1920 x 1200

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)

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 (supports non-standard baudrates; see user's manual for details)

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

NMEA Interface

Serial Standards: 8 NMEA 0183 ports
Base Serial Standard: RS-422
Optical Isolation Protection: ±6 kV contact discharge, ±8 kV air discharge
Voltage Differential: -15 V to +15 V
Baudrate: 4800 bps
Data Bits: 8
Stop Bits: 1, 1.5, 2

Parity: None
Handshake: None

LEDs

System: Storage, Power
LAN: 100M/Link x 2, 1000M/Link x 2 (on connector)

Front Panel

LEDs: Storage
SavvyTouch Display Control Buttons: ECDIS, INFO, Brightness (+, -), MENU

Physical Characteristics

Housing: Aluminum sheet metal
Weight: 16.6 kg
Dimensions: 621 x 444 x 90 mm (24.45 x 17.48 x 3.57 in)
Mounting: VESA, panel, and desktop mounting

Environmental Limits

Operating Temperature: -15 to 55°C (5 to 131°F)
Storage Temperature: -20 to 60°C (-4 to 140°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)
Note: If you expect the storage temperature to exceed 40°C, please ensure that the ambient relative humidity remains below 60%.

IP Rating:

- Front: IP54
- Rear: IP22

Anti-Vibration:

- 0.7 g @ DNV2.4 (Class A), sine wave, 2-100 Hz, 1 Oct./min., 1.5 hr per axis
- 1 g @ DNV2.4, random wave, 3-100 Hz, 2.5 hr per axis
- 2.1 g @ DNV2.4 (Class C), sine wave, 2-50 Hz, 1 Oct./min., 1.5 hr per axis

Power Requirements

Input Voltage:

- 24 VDC, 6 A or (18 to 34 VDC, 8 A max.), screw-type terminal block
- 100 to 240 VAC, 50 to 60 Hz, 2 A, AC power inlet

Standards and Certifications

Safety: UL 60950-1, EN 60950-1, IEC 60950-1
EMC: EN 55022/24, CISPR 22, FCC Part 15B Class A
Marine: IEC 60945 4th, IEC 61174, IEC 61162, DNV2.4, IACS E10
Green Product: RoHS, cRoHS, WEEE

Reliability

Automatic Reboot Trigger: Built-in WDT (watchdog timer) supporting 1-255 levels for time interval system reset, software programmable

Warranty

Warranty Period:
 3 years for computer systems,
 1 year for LCD panels
Details: See www.moxa.com/warranty

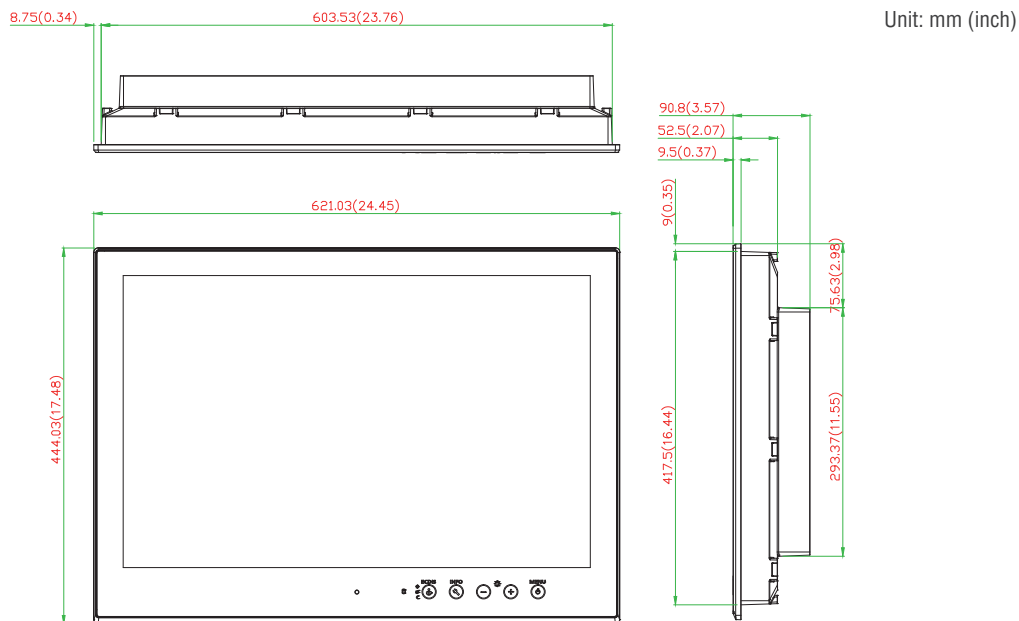
We recommend taking the following precautions to minimize heat build-up within the display:

- Position the display within $\pm 40^\circ$ of the vertical.
- Install an external fan to increase airflow upwards through the display if (a) the display is not positioned within $\pm 40^\circ$ of the vertical, (b) the ambient temperature exceeds 25°C , or (c) the display is used in a location with minimal ventilation.

Important Safety Precaution:

Even though the display is rated to operate within the IEC 60945 standard of -15 to 55°C for bridge applications, it is best to ensure that the ambient temperature does not exceed 25°C . Doing so will increase the life of your display and minimize service costs.

Dimensions



Ordering Information

Available Models

MPC-2260X: 26-inch fanless panel computer with Intel Celeron 1047UE 1.4 GHz processor, NMEA 0183, RS-232/422/485 serial ports, Gigabit LAN ports, USB 2.0 ports, SSD trays, dual AC/DC power inputs, tape bonding

MPC-2267X: 26-inch fanless panel computer with Intel Core i7 3517UE 1.7 GHz, NMEA 0183, RS-232/422/485 serial ports, Gigabit LAN ports, USB 2.0 ports, SSD trays, dual AC/DC power inputs, tape bonding

Optional Accessories (can be purchased separately, for AC power input)

PWC-C13US-3B-183: Power cord with 3-pin connector, USA plug

PWC-C13EU-3B-183: Power cord with 3-pin connector, Euro plug

PWC-C13UK-3B-183: Power cord with 3-pin connector, British plug

PWC-C13AU-3B-183: Power cord with 3-pin connector, Australian plug

PWC-C13CN-3B-183: Power cord with 3-pin connector, Chinese plug

Optional Mounting/Bracket Kits (can be purchased separately)

MPC-MD-2-24-26-DMTK w/o hinge: Desktop mounting kit without hinge

MPC-MD-2-24-26-DMTK w/ hinge: Desktop mounting kit with hinge

Package Checklist

- MPC-2260 panel computer
- 2 keys for the locking removable storage trays
- 1 2-pin terminal block for DC power input
- 4 5-pin terminal blocks for NMEA 0183 v2 interfaces
- Documentation and driver DVD
- Quick installation guide (printed)
- Warranty card