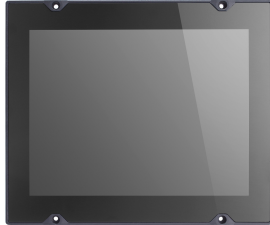


MPC-2101 Series

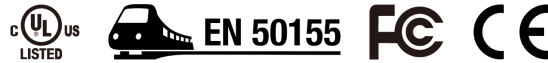
10-inch industrial fanless panel computers



Features and Benefits

- 10-inch panel computer
- Intel Atom® processor E3845 1.91 GHz
- 1000-nit sunlight-readable LCD
- -40 to 70°C wide-temperature design, no fan or heater
- EN 50155:2017 Compliant

Certifications

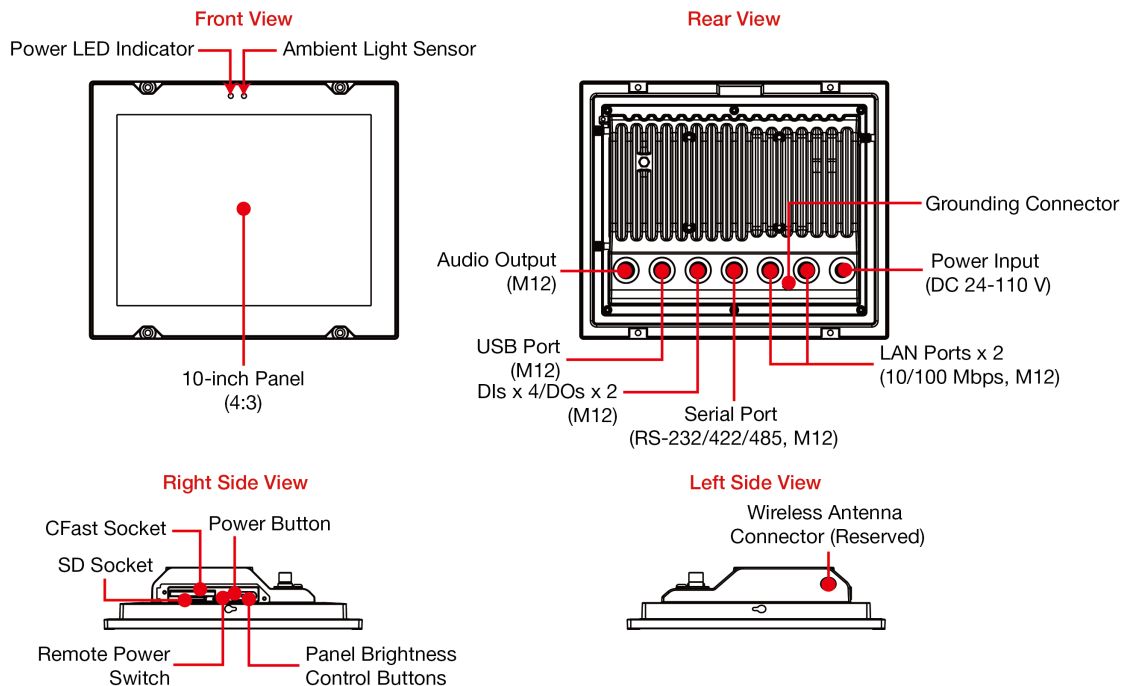


Introduction

The MPC-2101 10-inch panel computers with E3800 Series Intel Atom® processor deliver a reliable, durable, and versatile platform for use in industrial environments. All interfaces come with IP66-rated M12 connectors to provide anti-vibration and waterproof connections. With two software-selectable RS-232/422/485 serial ports and two Ethernet LAN ports, the MPC-2101 panel computers support a wide variety of serial interfaces as well as high-speed IT communications, all with native network redundancy.

The MPC-2101 Series panel computers are designed with a wide, -40 to 70°C temperature range, and come with a fanless, streamlined enclosure designed for highly efficient heat dissipation, making this one of the most reliable industrial platforms available for vibration prone, harsh, hot, outdoor environments. The MPC-2101 also features a 1000-nit LCD panel offering a sunlight readable, projected-capacitive, multi-touch screen, providing an excellent user experience.

Appearance



Specifications

Computer

| | |
|-----------------------------|--|
| CPU | Intel Atom® Processor E3845 (2M Cache, 1.91 GHz) |
| Graphics Controller | Intel® HD Graphics |
| System Memory Pre-installed | 4 (8GB Max.) GB DDR3L |
| System Memory Slot | SODIMM DDR3/DDR3L slot x 1 |
| Pre-installed OS | MPC-2101-E4-LB-CT-T-W7E/MPC-2101-E4-CT-T-W7E: Windows Embedded Standard 7 (WS7P) 64-bit pre-installed MPC-2101-E4-LB-CT-T-LX/MPC-2101-E4-CT-T-LX: Linux 9 pre-installed |
| Storage Slot | CFast slot x 1 SD slots x 1, SD 3.0 (SDHC/SDXC) socket |
| Storage Pre-installed | MPC-2101-E4-LB-CT-T-W7E/MPC-2101-E4-CT-T-W7E: 32 GB CFast Card MPC-2101-E4-LB-CT-T-LX/MPC-2101-E4-CT-T-LX: 32 GB CFast Card |
| Expansion Slots | Mini PCIe |
| Supported OS | Windows Embedded Standard 7 (WS7P) 64-bit Windows 7 Pro for Embedded Systems Windows 10 Embedded IoT Ent 2016 LTSB Entry 64-bit Windows 10 Pro 64-bit Linux Debian 9 |

Computer Interface

| | |
|----------------|---|
| Digital Output | DOs x 2 (M12 A-code) |
| Digital Input | DIs x 4 (M12 A-code) |
| Serial Ports | RS-232/422/485 ports x 1 (M12 A-code 12P) |
| USB 2.0 | USB 2.0 hosts x 1 (M12 A-code 5P) |
| Ethernet Ports | Auto-sensing 10/100 Mbps ports (M12 D-coded 4P) x 2 |

LED Indicators

| | |
|--------|-----------|
| System | Power x 1 |
|--------|-----------|

Display

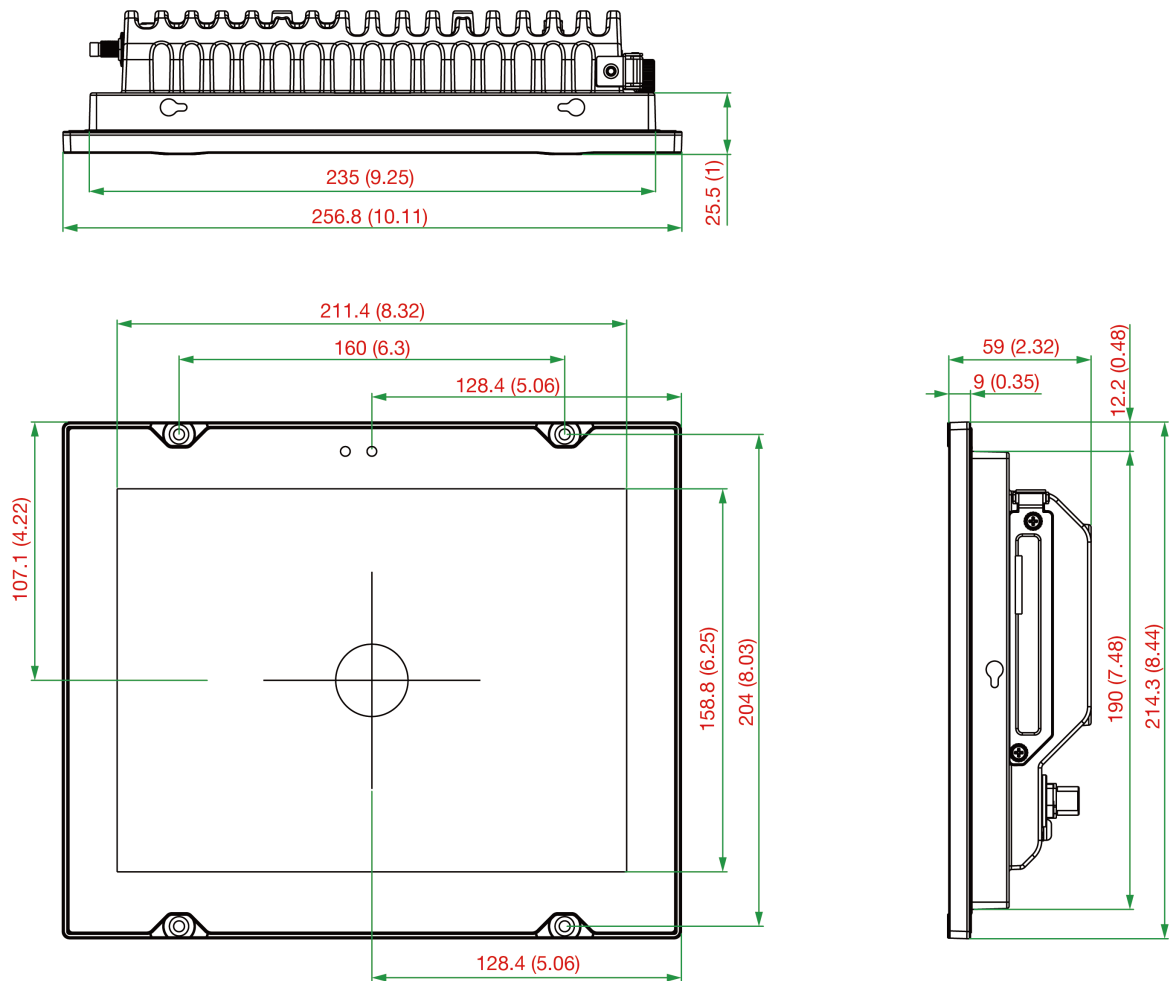
| | |
|------------------------------|----------------------------|
| Panel Size | 10-inch viewable image |
| Pixel Pitch (RGB) | 0.240 (H) x 0.240 (V) mm |
| Contrast Ratio | 1000:1 |
| Active Display Area | 210.4 (H) x 157.8 (V) mm |
| Aspect Ratio | 4:3 |
| Viewing Angles | 176°/176° |
| Max. No. of Colors | 16.2M (8-bit/color) |
| Response Time | 5 ms (gray to gray) |
| Pixels | 1024 x 768 |
| Light Intensity (Brightness) | 500/1000 cd/m ² |

| | |
|--|--|
| Touch Function | |
| Touch Support Points | 4 points |
| Touch Type | Capacitive Touch (PCAP) |
| Glove Support | Yes |
| Serial Interface | |
| Baudrate | 50 bps to 115.2 kbps |
| Data Bits | 5, 6, 7, 8 |
| Flow Control | RTS/CTS, XON/XOFF |
| Parity | None, Even, Odd, Space, Mark |
| 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 | 24 to 110 VDC |
| Physical Characteristics | |
| Dimensions | 256.9 x 214.4 x 58.9 mm (10.11 x 8.44 x 2.32 in) |
| Housing | Metal |
| IP Rating | IP66 |
| Weight | 2,080 g (4.59 lb) |
| Environmental Limits | |
| Ambient Relative Humidity | 5 to 95% (non-condensing) |
| Operating Temperature | -40 to 70°C (-40 to 158°F) |
| Storage Temperature (package included) | -40 to 70°C (-40 to 158°F) |
| Standards and Certifications | |
| EMI | CISPR 32, FCC Part 15B Class A |
| EMS | IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF |
| Mechanical Protection Rating | IEC 60529, IP code |
| Safety | IEC 62368-1, IEC 60950-1, UL 62368-1 |
| Shock | EN 50155 standard |

| | |
|-------------------------|---|
| EMC | EN55032/35 |
| Vibration | EN 50155 standard |
| Declaration | |
| Green Product | RoHS, CRoHS, WEEE |
| Warranty | |
| Details | See www.moxa.com/warranty |
| Warranty Period | System: 3 years LCD: 1 year |
| Package Contents | |
| Device | 1 x MPC-2101 Series computer |
| Documentation | 1 x quick installation guide 1 x warranty card |
| Installation Kit | 1 x M12-Phone jack power cable 1 x M12-Type A USB cable 1 x terminal block, 2-pin (for remote power input) 6 x screw, for panel-mounting |

Dimensions

Unit: mm (inch)



Ordering Information

| Model Name | Panel | CPU | RAM | OS Preinstalled | LAN | Serial | USB 2.0 Port | DI/DO | Power Input | IP Rating | Operating Temp. |
|-------------------------|-------------------------|--------------------|------|-----------------|---------|---------|--------------|-----------|---------------|-----------|-----------------|
| MPC-2101-E4-LB-CT-T-W7E | 10" (4:3) 500 nits | E3845 Quad core | 4 GB | W7E (64-bit) | 2 (M12) | 1 (M12) | 1 (M12) | 4/2 (M12) | 24 to 110 VDC | IP66 | -40 to 70°C |
| MPC-2101-E4-CT-T-W7E | 10" (4:3) 1,000 nits | E3845 Quad core | 4 GB | W7E (64-bit) | 2 (M12) | 1 (M12) | 1 (M12) | 4/2 (M12) | 24 to 110 VDC | IP66 | -40 to 70°C |
| MPC-2101-E4-LB-CT-T-LX | 10" (4:3) 500 nits | E3845 Quad core | 4 GB | Debian 9 | 2 (M12) | 1 (M12) | 1 (M12) | 4/2 (M12) | 24 to 110 VDC | IP66 | -40 to 70°C |
| MPC-2101-E4-CT-T-LX | 10" (4:3) 1,000 nits | E3845 Quad core | 4 GB | Debian 9 | 2 (M12) | 1 (M12) | 1 (M12) | 4/2 (M12) | 24 to 110 VDC | IP66 | -40 to 70°C |
| MPC-2101-E4-LB-CT-T | 10" (4:3) 500 nits | E3845 Quad core | 4 GB | - | 2 (M12) | 1 (M12) | 1 (M12) | 4/2 (M12) | 24 to 110 VDC | IP66 | -40 to 70°C |
| MPC-2101-E4-CT-T | 10" (4:3) 1,000 nits | E3845 Quad core | 4 GB | - | 2 (M12) | 1 (M12) | 1 (M12) | 4/2 (M12) | 24 to 110 VDC | IP66 | -40 to 70°C |

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