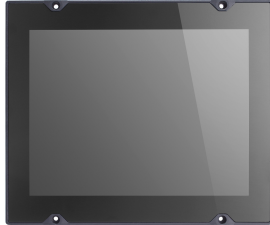


# MPC-2101 Series

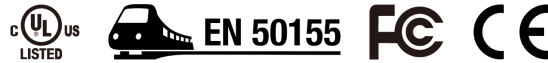
## 10-inch industrial fanless panel computers



### 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

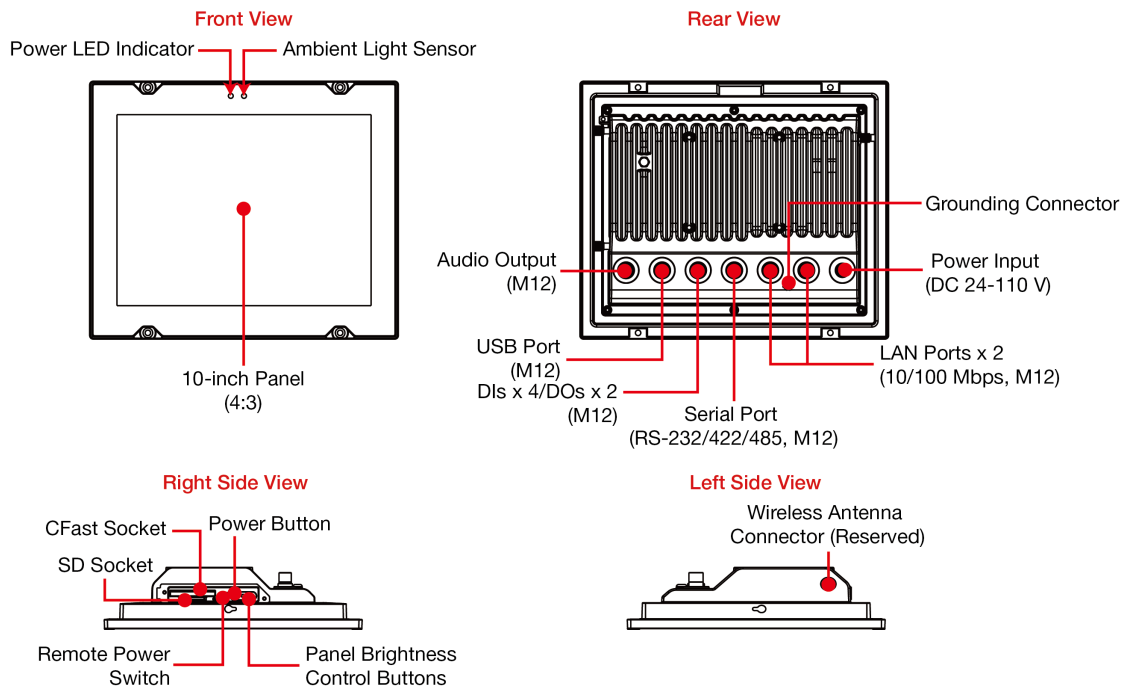


## Introduction

The MPC-2101 10-inch panel computers with E3800 Series Intel® Atom™ processor deliver a reliable and durable platform of wide versatility 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-CT-T-W7E: 32 GB CFast card MPC-2101-E4-LB-CT-T-W7E: 32 GB CFast card MPC-2101-E4-CT-T-LX: 16 GB CFast card MPC-2101-E4-CT-T-LX: 16 GB CFast card 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: 16 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 Moxa Industrial 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

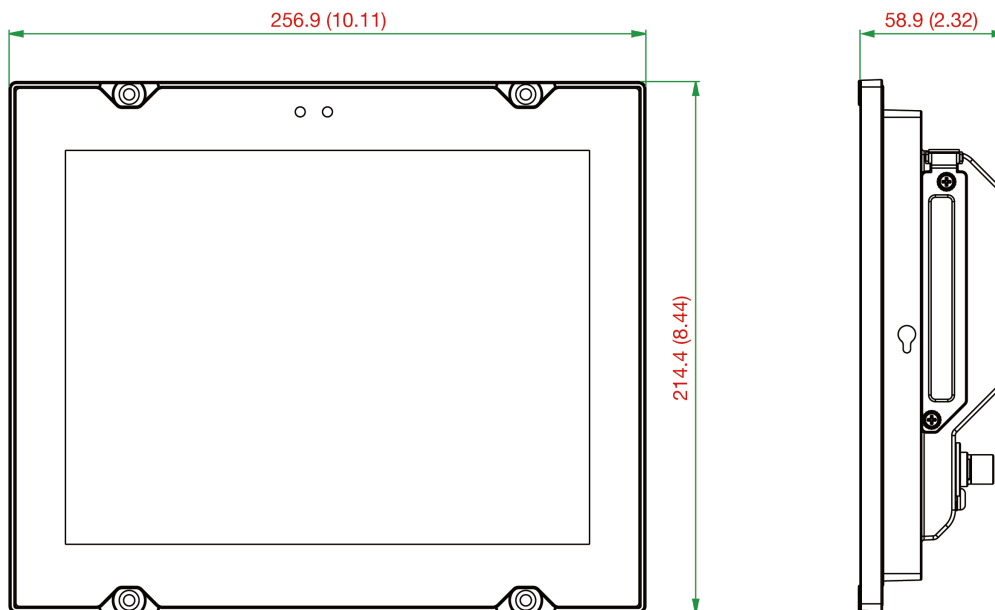
Panel Size	10-inch viewable image
Pixel Pitch (RGB)	0.240 (H) x 0.240 (V) mm
Contrast Ratio	1000:1
Active Display Area	210.4 (H) x 157.8 (V) mm
Aspect Ratio	4:3
Viewing Angles	176°/176°
Max. No. of Colors	16.2M (8-bit/color)
Response Time	5 ms (gray to gray)
Pixels	1024 x 768
Light Intensity (Brightness)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

<b>Touch Function</b>	
Touch Support Points	4 points
Touch Type	Capacitive Touch (PCAP)
Glove Support	Yes
<b>Serial Interface</b>	
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
<b>Serial Signals</b>	
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
<b>Power Parameters</b>	
Input Voltage	24 to 110 VDC
<b>Physical Characteristics</b>	
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)
<b>Environmental Limits</b>	
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)
<b>Standards and Certifications</b>	
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
<b>Declaration</b>	
Green Product	RoHS, CRoHS, WEEE
<b>Warranty</b>	
Details	See <a href="http://www.moxa.com/warranty">www.moxa.com/warranty</a>
Warranty Period	System: 3 years LCD: 1 year
<b>Package Contents</b>	
Device	1 x MPC-2120 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

Model Name	Panel	CPU	RAM	OS Preinstalled	LAN	Serial	USB 2.0 Port	DI/DO	Power Input	IP Rating	Operating Temp.
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

© Moxa Inc. All rights reserved. Updated Jul 04, 2019.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.