ED-HMI3010-101C

Datasheet

by EDA Technology Co., Ltd

built: 2026-08-18

ED-HMI3010-101C

10.1-inch Industrial HMI Based on Raspberry Pi 5

- 10.1" TFT, resolution 1280x800, multi-point capacitive touch screen
- Broadcom BCM2712 2.4GHz quad-core 64-bit Arm Cortex-A76 CPU
- Up to 16GB LPDDR4X RAM, 32GB or 64GB SD Card storage
- 1 x Gigabit ethernet port, 2 x USB 3.0, 2 x USB 2.0
- Dual 4Kp60 HDMI display output
- 5V DC power input via USB-C
- 8-megapixel front camera is optional
- Aluminum CNC + sheet metal case, fanless design, providing excellent cooling performance

Specifications

System	
CPU	Broadcom BCM2712 2.4GHz quad-core 64-bit Arm Cortex-A76
VPU	4Kp60 HEVC decoder
GPU	OpenGL ES 3.1 & Vulkan 1.0
Memory	4GB, 8GB and 16GB LPDDR4X-4267 SDRAM are optional
Storage	32GB and 64GB SD Storage Card are optional

Software	
Operating System	Raspberry Pi OS (Desktop) 64-bit Raspberry Pi OS (Lite) 64-bit

Front I/O	
Camera	Built-in 8-megapixel front camera (optional)

Side I/O	
USB 2.0	2 x USB 2.0 ports, dual layer type A connector, each channel supports up to 480Mbps.
USB 3.0	2 x USB 3.0 ports, dual layer type A connector, each channel supports up to 5Gbps.
1000M Ethernet	1 x adaptive 10/100/1000M ethernet port, RJ45 connector. It can be used to access the network.
SD Card Slot	1 x Micro SD card slot, which is used to install SD card. It supports booting the OS from SD card.
HDMI	2 x HDMI ports, Micro HDMI connector, supporting 4K 60Hz
Power	1 x power in port, USB Type-C connector, supporting 5V/5A DC power input.

Internal I/O	
PCIe	1 x PCIe 2.0 port, reserving to connect peripherals.
PoE	1 x PoE port, reserving to connect PoE module.

LCD	
LCD Size	10.1" TFT
Resolution	1280 x 800
Colors	16.7MB
Active Area	216.576mm (H) x 135.36mm (V)
Backlight	LED
MTBF	>30000h
Pixel Pitch	250cd/m^2
Contrast Ratio	1000:1
Response Time	30ms
Viewing Angle (CR≥10)	80° (L) / 80° (R) / 80° (U) / 80° (D)

Touch Screen	
Type	Multi-point Capacitive Touch Screen
Transmittance	≥85%
Connection Method	COF
Controller Interface	I2C
Driver Support	Linux
Multi-touch	5 points
Surface Hardness	6H

Electrical Characteristics	
Input Voltage	5V DC
Power Consumption	25W (Max)

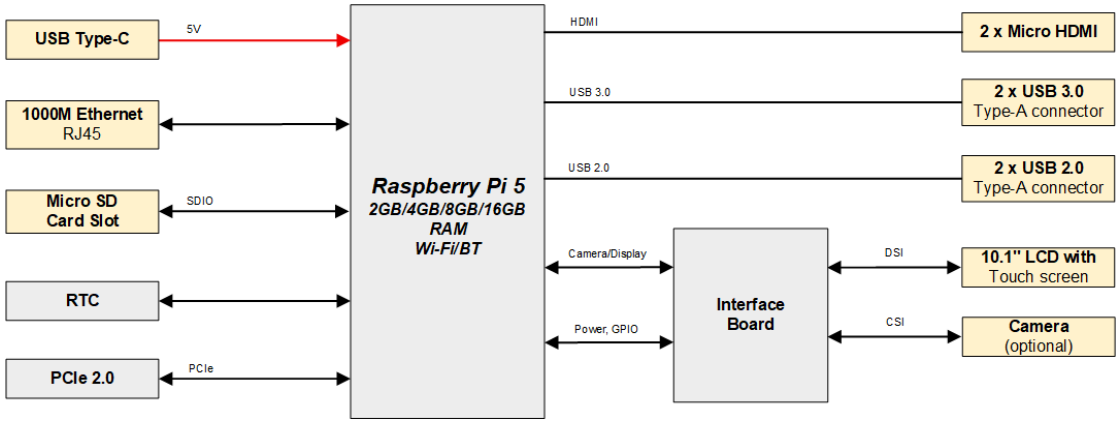
Mechanical Characteristics	
Dimensions	258mm x 172mm x 38mm (WxDxH)

Mechanical Characteristics	
Weight	About 900g
Installation	Embedded front installation

Wireless	
Wi-Fi	Dual-band 802.11ac Wi-Fi
Bluetooth	Bluetooth 5.0 / Bluetooth Low Energy (BLE)

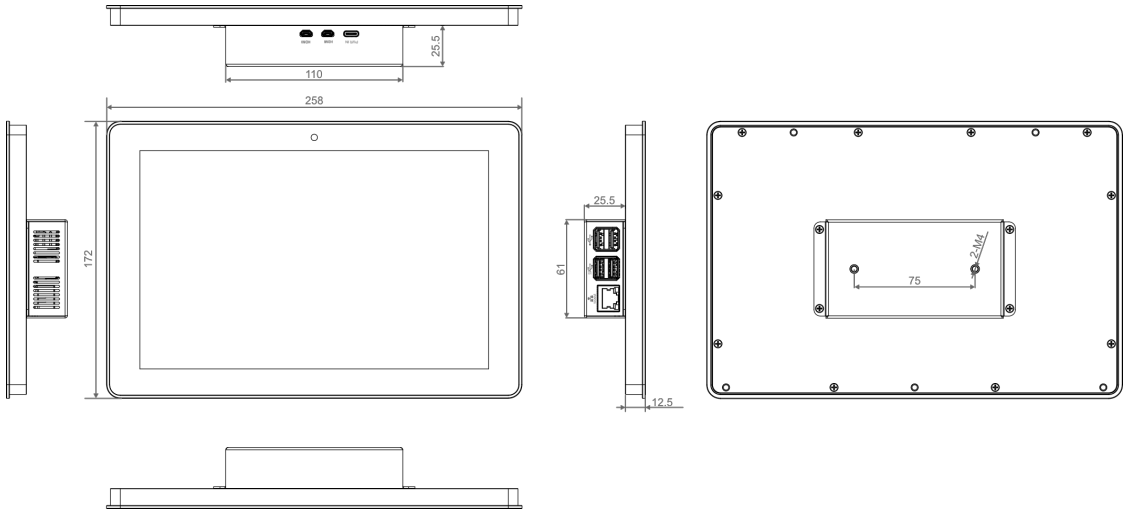
Environmental & Regulatory	
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-25°C ~ 60°C
Ambient humidity	5% ~ 95% (non-condensing)
Certifications	• FCC ◦ FCC 47 CFR Part 15 Subpart B • CE ◦ EN IEC 62368-1:2020+A11:2020 ◦ EN IEC 62311:2020 ◦ ETSI EN 301 489-1 V2.2.3 (2019-11)/ETSI EN 301 489-3 V2.3.2 (2023-01) Draft ETSI EN 301 489-17 V3.2.6 (2023-06)/EN 55032:2015 + A1:2020 + A11:2020 EN 55035:2017 + A11:2020/EN IEC 61000-3-2:2019 + A1:2021 EN 61000-3-3:2013 + A1:2019 + A2:2021 ◦ ETSI EN 300 328 V2.2.2 (2019-07)/ETSI EN 301 893 V2.1.1 (2017-05) ETSI EN 300 440 V2.2.1 (2018-07)

System Diagram

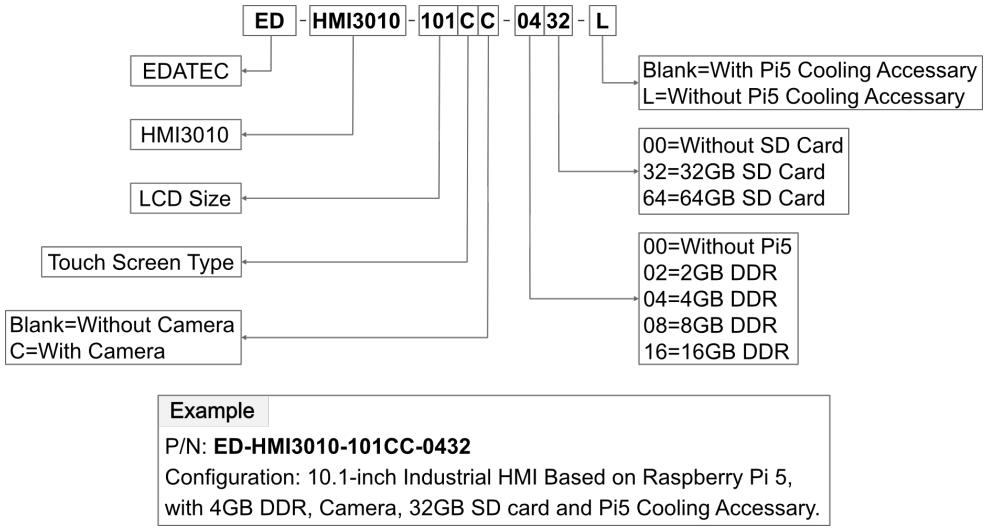


Dimensions

Unit: mm



Ordering Code



Example

P/N: **ED-HMI3010-101CC-0432**

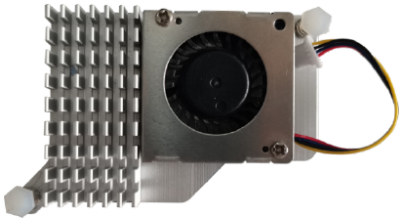
Configuration: 10.1-inch Industrial HMI Based on Raspberry Pi 5, with 4GB DDR, Camera, 32GB SD card and Pi5 Cooling Accessary.

Special Model Description

Model	Description
ED-HMI3010-101C-0000-L	10.1-inch LCD Touch Screen for Raspberry Pi 5, with metal case.
ED-HMI3010-101CC-0000	10.1-inch LCD Touch Screen for Raspberry Pi 5, with metal case, camera and Pi5 Cooling Accessary.
ED-HMI3010-101C-0032	10.1-inch LCD Touch Screen for Raspberry Pi 5, with metal case, 32GB SD card and Pi5 Cooling Accessary.
ED-HMI3010-101CC-0064-L	10.1-inch LCD Touch Screen for Raspberry Pi 5, with metal case, camera and 64GB SD card.
NOTE: If you purchase a product model with Raspberry Pi 5, you need select the Pi5 Cooling Accessary.	

Optional Accessory

You can also choose Raspberry Pi Active Cooler for Raspberry Pi 5 according to actual needs.

Model	Description	Picture
SC1148	Raspberry Pi Active Cooler	

You can choose a Raspberry Pi Power Adapter according to actual needs.

Model	Description	Picture
SC1149	Raspberry Pi 27W USB-C Power Supply White UK	
SC1150	Raspberry Pi 27W USB-C Power Supply White AU	
SC1151	Raspberry Pi 27W USB-C Power Supply White IN	
SC1152	Raspberry Pi 27W USB-C Power Supply White EU	
SC1153	Raspberry Pi 27W USB-C Power Supply White US	
SC1154	Raspberry Pi 27W USB-C Power Supply Black UK	
SC1155	Raspberry Pi 27W USB-C Power Supply Black AU	
SC1156	Raspberry Pi 27W USB-C Power Supply Black IN	
SC1157	Raspberry Pi 27W USB-C Power Supply Black EU	
SC1158	Raspberry Pi 27W USB-C Power Supply Black US	

VESA adapter plate and VESA mounting brackets are available as optional accessories depending on your specific requirements.

Model	Description	Picture
ED-VESA-2T4	VESA Adapter Plate	

Model	Description	Picture
ED-VESA-A	VESA wall mount bracket for ED-MONITOR and ED-HMI series	
ED-VESA-B	Swivel VESA wall mount bracket for ED-MONITOR and ED-HMI series	
ED-VESA-C	VESA desk mount stand for ED-MONITOR and ED-HMI series	

Packing List

- 1 x ED-HMI3010-101C Unit
- 1 x Mounting Kit (including 4 x buckles, 4 x M4*10 screws and 4 x M4*16 screws)