

# ED-HMI2002-101C

## Datasheet

by EDA Technology Co., Ltd

built: 2025-12-24

# ED-HMI2002-101C

10.1-inch Industrial HMI Based on Raspberry Pi 4

- 10.1" TFT, resolution 1280x800, multi-point capacitive touch screen
- Broadcom BCM2711, quad-core Arm Cortex-A72 (ARM v8) 64-bit SoC @ 1.8GHz
- Up to 8GB LPDDR4 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
- Embedded installation, compatible with VESA standard bracket installation



## Specifications

| System | |
|---|---|
| CPU | Broadcom BCM2711, quad core Arm Cortex-A72 (ARM v8) 64-bit SoC@1.8GHz |
| VPU | H.265 (HEVC), up to 4Kp60 decode<br>H.264, up to 1080p60 decode, 1080p30 encode |
| GPU | OpenGL ES 3.1 & Vulkan 1.0 |
| Memory | Options for 1GB, 2GB, 4GB, 8GB LPDDR4-3200 SDRAM |
| Storage | 32GB and 64GB SD Storage Card are optional |

| Software | |
|---|---|
| Operating System | Raspberry Pi OS (Desktop) 32-bit<br>Raspberry Pi OS (Lite) 32-bit<br>Raspberry Pi OS (Desktop) 64-bit<br>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. |

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| Side I/O | |
|---|---|
| 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 Micro SD card. It supports booting the OS from Micro SD card. |
| Audio | 1 x Audio port, 3.5mm audio jack connector, 4-pole stereo audio. |
| HDMI | 2 x HDMI ports, Micro HDMI connector, supporting 4K 60Hz. |
| Power | 1 x power in port, USB Type-C connector, supporting 5V/3A DC power input. |

| 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 |
| Luminance | 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 | 10 points |
| Surface Hardness | 6H |

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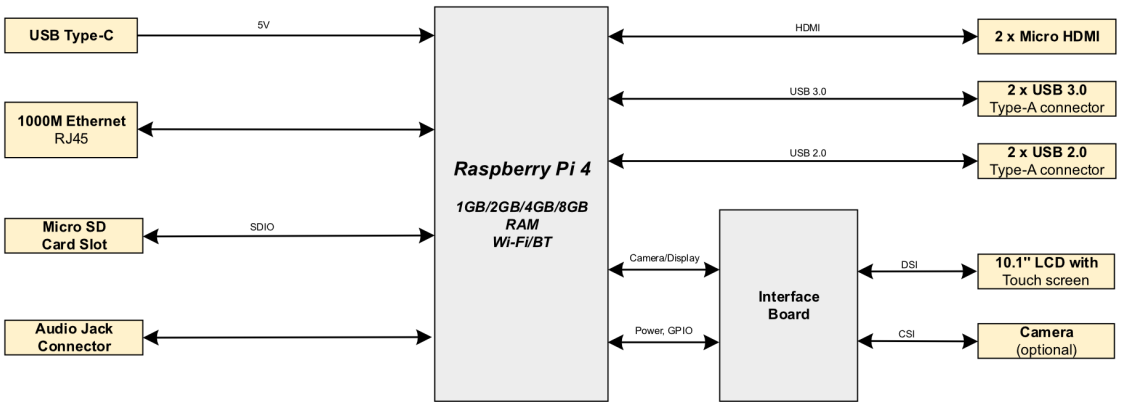
| Electrical Characteristics | |
|---|---|
| Input Voltage | 5V DC |
| Power Consumption | 15W (Max) |

| Mechanical Characteristics | |
|---|---|
| Dimensions | 258mm x 172mm x 38.5mm (WxDxH) |
| Weight | About 900g |
| Installation | Embedded front installation |

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

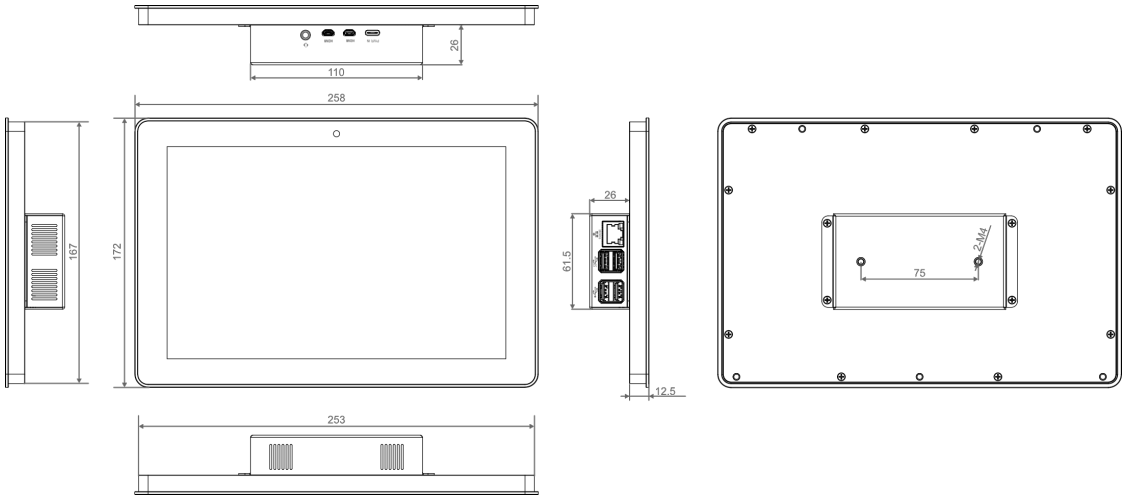
| Environmental & Regulatory | |
|---|---|
| Operating Temperature | -20°C ~ 60°C |
| Storage Temperature | -25°C ~ 60°C |
| Ambient humidity | 5% ~ 95% (non-condensing) |

## System Diagram

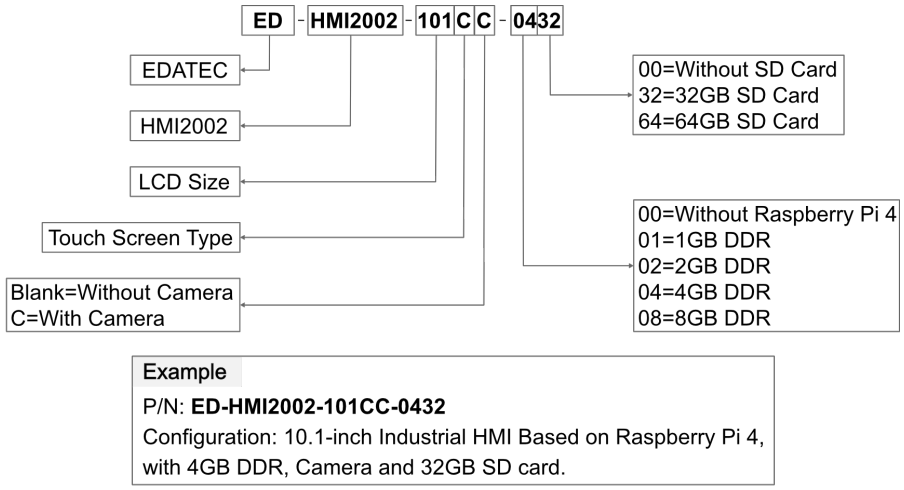



## Dimensions

Unit: mm




## Ordering Code




**Example**

P/N: **ED-HMI2002-101CC-0432**

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

**Special Model Description:**

| Model | Description |
|---|---|
| ED-HMI2002-101C-0000 | 10.1-inch LCD Touch Screen for Raspberry Pi 4, with metal case. |
| ED-HMI2002-101CC-0032 | 10.1-inch LCD Touch Screen for Raspberry Pi 4, with metal case, camera and 32GB SD card. |

## Optional Accessory

You can also choose HMI Mounting Kit for embedded front installation according to actual needs.

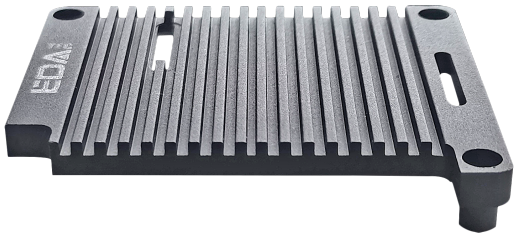
> TIP
>
> Standard Package doesn't include HMI Mounting Kit for embedded front installation. If you need to do an embedded installation, please purchase the HMI Mounting Kit (ED-ACCHMI-Front) separately.

| Model | Description | Picture |
|---|---|---|
| ED-ACCHMI-Front | HMI Mounting Kit for Front Installation, with 4 x buckles,<br>4 x M4*10 screws and 4 x M4*16 screws. | |

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| Model | Description | Picture |
| --- | --- | --- |
| | |  |

You can choose a passive cooler according to actual needs.

| Model | Description | Picture |
| --- | --- | --- |
| ED-Pi4PCOOLER | Passive Cooler for Raspberry Pi 4 |  |

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

| Model | Description | Picture |
| --- | --- | --- |
| SC0219 | Raspberry Pi 15W USB-C Power Supply Black AU |  |
| SC0523 | Raspberry Pi 15W USB-C Power Supply White AU | |
| SC1412 | Raspberry Pi 15W USB-C Power Supply Black EU | |
| SC0753 | Raspberry Pi 15W USB-C Power Supply White EU | |
| SC0479 | Raspberry Pi 15W USB-C Power Supply Black IN | |
| SC0478 | Raspberry Pi 15W USB-C Power Supply White IN | |
| SC0216 | Raspberry Pi 15W USB-C Power Supply Black UK | |
| SC0443 | Raspberry Pi 15W USB-C Power Supply White UK | |
| SC0218 | Raspberry Pi 15W USB-C Power Supply Black US | |
| SC0445 | Raspberry Pi 15W USB-C Power Supply White US | |

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# Packing List

- 1 x ED-HMI2002-101C Unit

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