

# 10.1 Monitors Manual



## Catalogue

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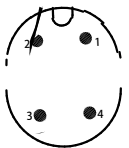
## 1 Technical Parameter

|                              |                                                               |                                                                                 |                                         |  |
|------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------|--|
| core                         | CPU                                                           | 8 64-bit architecture for the core                                              |                                         |  |
|                              | basic frequency                                               | 2.4GHz                                                                          |                                         |  |
|                              | FLASH                                                         | 32GB                                                                            |                                         |  |
|                              | RAM                                                           | 4GB                                                                             |                                         |  |
|                              | GPU                                                           | ARM Mali-G610 MC4 graphics processor                                            |                                         |  |
|                              |                                                               | Supports OpenGL ES 1.1/2.0/3.2, OpenCL 2.2, Vulkan 1.2                          |                                         |  |
|                              | NPU                                                           | Built-in high performance 2D image acceleration module                          |                                         |  |
|                              |                                                               | Up to 6TOPS, computing power, support for int4/int8/int16/FP16 mixed operations |                                         |  |
| show                         | resolution ratio                                              |                                                                                 | 1280*800                                |  |
|                              | Touch mode                                                    |                                                                                 | capacitance                             |  |
|                              | luminance                                                     |                                                                                 | 850cd/m <sup>2</sup>                    |  |
| enviromental parameter       | working temperature                                           |                                                                                 | -30~+70°C                               |  |
|                              | Storage temperature                                           |                                                                                 | -40~+85°C                               |  |
|                              | levels of protection                                          |                                                                                 | Front IP65                              |  |
| Electrical parameters        | working voltage                                               |                                                                                 | 12~32V                                  |  |
|                              | power dissipation                                             |                                                                                 | ≤ 24W                                   |  |
| software                     | operating system                                              |                                                                                 | Android                                 |  |
| Function configuration table | CAN                                                           | CAN 2.0B                                                                        | 3                                       |  |
|                              | USB                                                           |                                                                                 | 1                                       |  |
|                              | GPS                                                           |                                                                                 | 1                                       |  |
|                              | 4G                                                            |                                                                                 | 1                                       |  |
|                              | audio frequency                                               | HP output                                                                       | 1                                       |  |
| Physical parameters          | way to install                                                |                                                                                 | set swinging                            |  |
|                              | Exterior material                                             |                                                                                 | alufer                                  |  |
|                              | Product weight                                                |                                                                                 | 1.3KG                                   |  |
| EMC                          | Electrical transient conduction immunity along the power line |                                                                                 | GB/T 21437.2-2021 (ISO 7637-2:2011)     |  |
|                              | Electrical transient immunity not coupled by power lines      |                                                                                 | GB/T 21437.3-2021 (ISO 7637-3:2016)     |  |
|                              | ESD                                                           |                                                                                 | GB/T 19951-2019 (ISO 10605:2023)        |  |
|                              | EFT                                                           |                                                                                 | GB/T 17626.4-2018 (IEC 61000-4-4:2012)  |  |
| mechanical stress            | random vibration                                              |                                                                                 | GB/T 2423.56-2023 (IEC 60068-2-64:2019) |  |
|                              | mechanical shock                                              |                                                                                 | GB/T 2423.5-2019 (IEC 60068-2-27-2008)  |  |
|                              | sinusoidal vibration                                          |                                                                                 | GB/T 2423.10-2019 (IEC 60068-2-6:2007)  |  |
| environmental stress         | Three comprehensive (vibration, temperature and humidity)     |                                                                                 | GB/T 2423.35-2019(IEC 60068-2-53-2010)  |  |
|                              | Alternating wet heat                                          |                                                                                 |                                         |  |

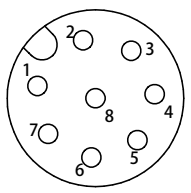
|  |                                                   |                                         |
|--|---------------------------------------------------|-----------------------------------------|
|  |                                                   | GB/T 2423.4-2008 (IEC 60068-2-30:2005)  |
|  | temperature shift                                 | GB/T 2423.22-2012 (IEC 60068-2-14:2023) |
|  | Protection level of the enclosure                 | GB/T 4208-2017 (IEC 60529:2013)         |
|  | Resistant to salt spray corrosion and penetration | GB/T 2423.17-2008 (IEC 60068-2-11:1981) |

## 2 Interface Definition

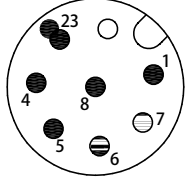
The product end connector interface is M12 four-core male head

| port | function | Product end interface diagram                                                       |
|------|----------|-------------------------------------------------------------------------------------|
| 1    | source + |  |
| 2    | source + |                                                                                     |
| 3    | source - |                                                                                     |
| 4    | source - |                                                                                     |

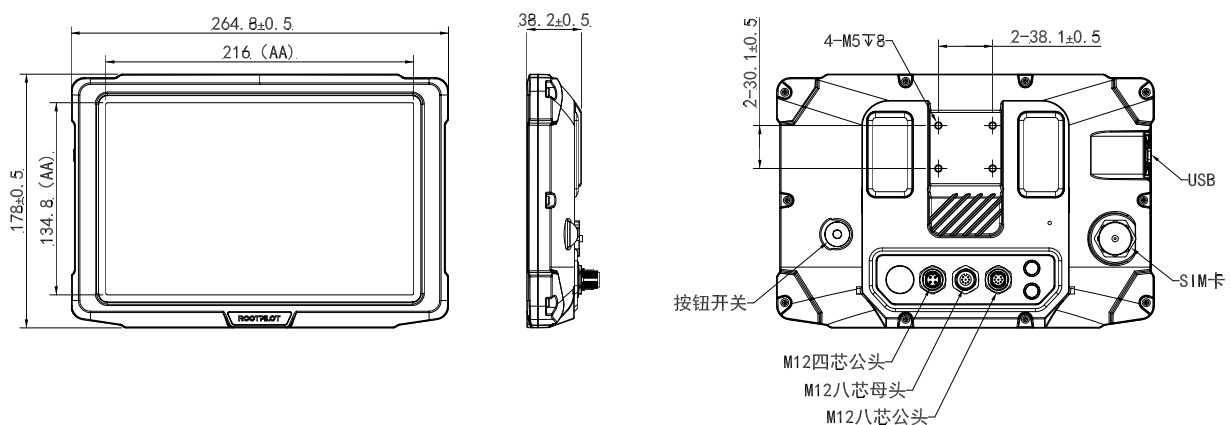
The connector interface at the product end is an M12 eight-core female head

| port | function | Product end interface diagram                                                       |
|------|----------|-------------------------------------------------------------------------------------|
| 1    | CAN1_H   |  |
| 2    | CAN1_L   |                                                                                     |
| 3    | CAN2_H   |                                                                                     |
| 4    | CAN2_L   |                                                                                     |
| 5    | CAN3_H   |                                                                                     |
| 6    | CAN3_L   |                                                                                     |
| 7    | /        |                                                                                     |
| 8    | /        |                                                                                     |

The product end connector interface is M12 eight-core male head

| port | function         | Product end interface diagram                                                         |
|------|------------------|---------------------------------------------------------------------------------------|
| 1    | Audio output _L  |  |
| 2    | Audio output _R  |                                                                                       |
| 3    | Audio output_GND |                                                                                       |
| 4    | /                |                                                                                       |
| 5    | 5V               |                                                                                       |
| 6    | D-               |                                                                                       |
| 7    | D+               |                                                                                       |
| 8    | GND              |                                                                                       |

## 3 Installation Size



## 4 Installation Method and Precautions

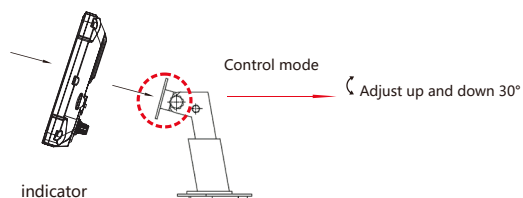
- 1) When the environment in which the display is located requires welding, all display connection cables must be physically disconnected prior to such work, otherwise the display will burn out.
- 2) The monitor can only be operated by trained and qualified staff. If the product is damaged due to poor operation by non-professionals, we will not be able to guarantee the validity of our commitment.
- 3) The touch screen of the display terminal is easily scratched or seriously damaged if it comes into contact with a sharp or hard object. To ensure the service life of the display screen, this situation should be avoided.
- 4) The display screen of the monitor is easily damaged at high temperatures, so please do not cover it with other items such as jackets or other clothes.
- 5) The display should preferably be installed under the cover to avoid contact with liquid after exposure. For safety reasons, the display should preferably be stably mounted on an object and should not move, otherwise it is easy to cause traffic accidents that damage equipment or injure operators.

· When the display is installed on a bracket:

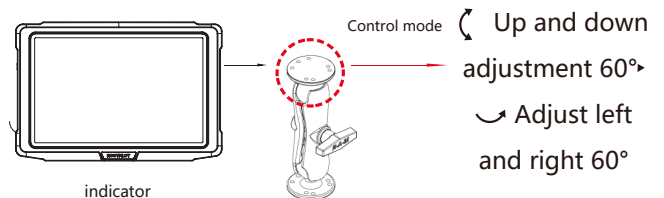
- 1) 4 M5 screws to fix the display;
- 2) A washer can be installed on the screw (tighten with a screwdriver, and tighten the torque to 3.5 Nm);
- 3) The cable wiring of the display should ensure that water or other liquids do not flow along the wire into the connector.

1. Installation method: bracket installation

2. Bracket selection:



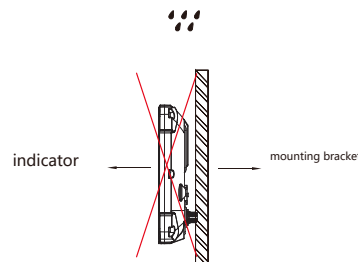
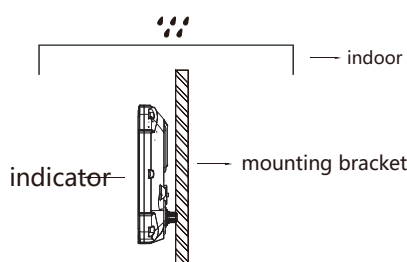
Bracket 1: A8 bracket



RAM support

Bracket 2: RAM bracket

3. Installation environment:



Recommended installation environment: indoor

Do not recommend installation in a humid or water prone environment

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.