3onedata
Make network communication more reliable

MC201-F Interface Converter

Quick Installation Guide

Industrial Ethernet Switch · Device Networking Product · Embedded Module · Industrial Wireless Product
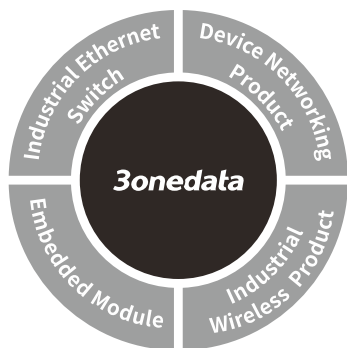
3onedata

3onedata Co., Ltd.

Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road, Nanshan District, Shenzhen, 518108, China

Website: www.3onedata.com

Tel: +86 0755-26702688

Fax: +86 0755-26703485

【Package Checklist】

Please check the integrity of package and accessories while first using the interface converter.

1. Interface converter X 1
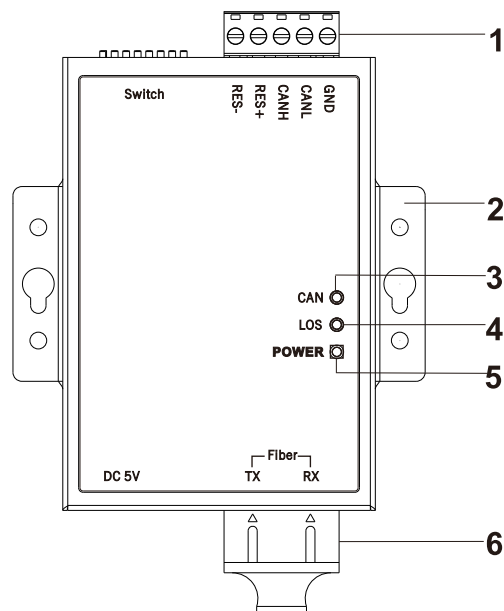2. Power Adapter
3. Warranty card
4. Certification

If any of these items are damaged or lost, please contact our company or dealers, we will solve it ASAP.

【Product Overview】

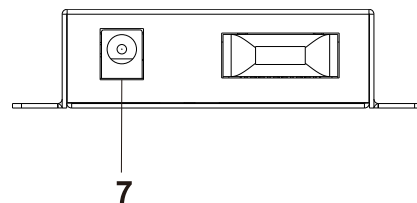The product is a CAN-bus signal to optical signal interface converter. The model is MC201-F(1 fiber port + 1 CAN port).
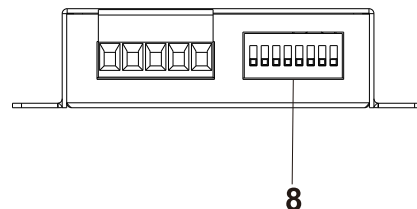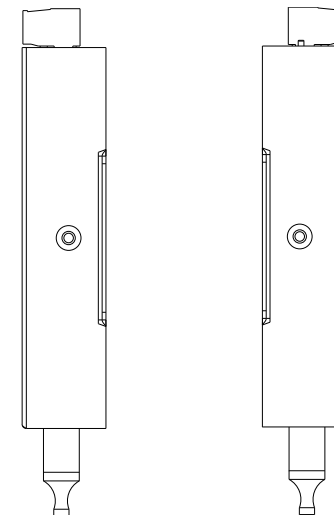
【Panel Design】

➢ **Front view**

➢ **Bottom view**
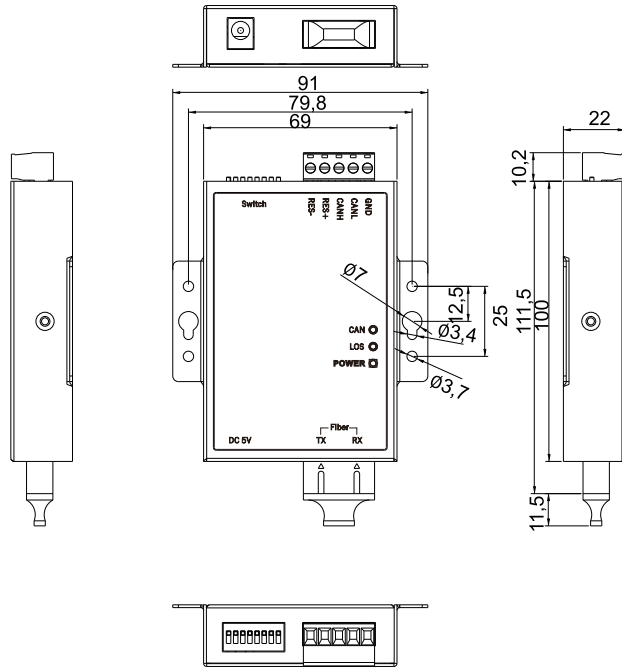

➢ **Top view**

➢ **Left view and right view**

1. CAN port (5-pin terminal blocks)
2. Lugs
3. CAN port running status indicator
4. Network error status indicator
5. Power supply (POWER) indicator
6. Fiber interface
7. DC 5V power supply input
8. DIP switch

【Mounting Dimension】

Unit: mm

⚠️ Note before mounting:

- Don't place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before power on, first confirm the supported power supply specification to avoid over-voltage damaging the device.
- The device surface temperature is high after running; please don't directly contact to avoid scalding.

【Wall-mounting】

Step 1　Place the device on the wall of device mounting as reference or refer to the installation dimension to mark the position of the two screws.

Step 2　Fix the M4 screw in the wall and reserve 2mm interspace

Step 3　Hang the device on the two screws and slide downward, and then tighten the screws, mounting ends.
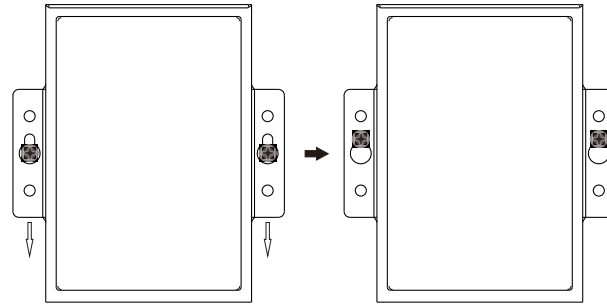

【Disassembling Wall-mounting Device】

Step 1　Power off the device.

Step 2　Unscrew the screws in the wall about 2mm.

Step 3　Lift upward the device lightly to remove the device, disassembling ends.

## ⚠️ Note before powering on:

- Power ON operation: First insert the power supply terminal block into the device power supply interface, and then plug the power supply socket and power on.
- Power OFF operation: First, unpin the power supply plug. And then remove the connector of the terminal block. Please notice the operation order above.

【Power Supply Connection】
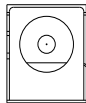
 The interface converter provides 5VDC power supply input. Recommend to use power adapter with 2.5mm inside diameter and 5.5mm outside diameter DC head.
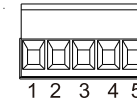
【DIP Switch Settings】
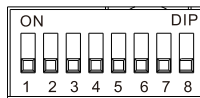
The panel provides 8-pin DIP switch for baud rate match

 method settings. When I/O1 is set to ON, it means user settings of baud rate is valid, otherwise it's matched by automatic settings. The 2~6th pins are effective values in manual setting status of baud rate (as the following table), the 7th and 8th pins are reserved.

If the setting value is not in the range of the table below, the

baud rate would be set to 1Mbps by default. User need to power on the device again when changing the status of DIP switch.

Valid values of IO2~IO6 status (DIP switch that set to ON means 1, otherwise it represents 0)	Recognizable baud rate (Unit: bps)
000 00	1M
100 00	500K
010 00	250K
001 00	125K
000 10	100K
000 01	50K
110 00	25K
011 00	20K
001 10	10K
000 11	5K
111 00	2K5

【CAN Port】

 CAN port adopts 5-pin 5.08mm pitch terminal blocks.

Pin NO.	Pin Name	Pin Definition
1	GND	Ground wire
2	CANL	Connecting end of CANL signal line
3	CANH	Connecting end of CANH signal line
4	RES+	CAN network matching resistor end 1
5	RES-	CAN network matching resistor end 2

Pin 4 is marked with "Res+" and pin 5 is marked with "Res-", which are connected to the terminal resistance of CAN network. When the device serves as CAN-bus network terminal, two pins are connected by 120 ohms resistor; otherwise it's useless to install 120 ohms resistor.

【Checking LED Indicator】

The interface converter provides LED indicators to monitor the device working status with a comprehensive simplified troubleshooting; the function of each LED is described in the table as below:

LED	Status	Description
POWER	ON	Power supply is connected or running normally
	OFF	Power supply is disconnected or running abnormally
LOS	ON	The corresponding port sends data too fast/fiber interface connection has abnormality
	OFF	The corresponding port sends data normally/fiber interface connection is normal
CAN	ON	CAN port is connected normally
	Blinking	CAN port is connected normally and is receiving/sending data
	OFF	CAN port is receiving/sending data abnormally or the device isn't powered on

【Specification】

Panel	
Fiber port	1 fiber interface, single fiber port or double fiber ports, optional SC/ST/FC
CAN port	1 CAN port, it adopts 5-pin 5.08mm pitch terminal blocks
Indicator	Network error status indicator, power supply indicator, CAN indicator
Power supply	
Input power supply	5VDC
Access terminal block	DC round head
Power consumption	
No-load consumption	1.39W@5VDC
Full-load consumption	1.31W@5VDC
Working environment	
Working temperature	-40℃～75℃
Storage temperature	-40℃～85℃
Working humidity	5%～95% (no condensation)
Protection grade	IP40 (metal shell)