

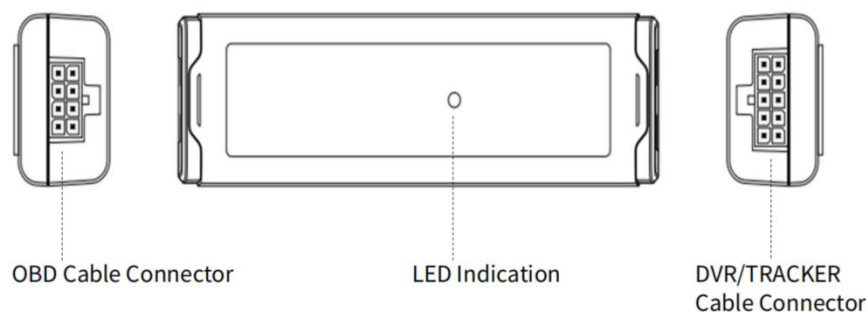
MCAN-301

CAN Data Box

1. Product description

The MCAN-301 has a compact design and is plug-and-play. It supports CAN data reading with the SAE J1939 protocol and can provide B+.GND and ACC for peripherals (such as MDVR and 4GDashcam) while also providing CAN data through a serial port. An additional serial port is reserved for connecting MDVR and 4GDashcam.

2. Product pictures



3. Product features

- **CAN Diagnostics**

Reads CAN data for commercial vehicles supporting both J1939, ISO15765 and OBDII protocols

- **Power Supply and ACC**

Provides power and accurate ACC signals to peripherals (such as MDVR and 4GDashcam) simplifying peripheral installation.

- **USART**

One serial ports (TTL) are reserved to provide CAN data to peripherals via the serial port.

- **Vehicle Data**

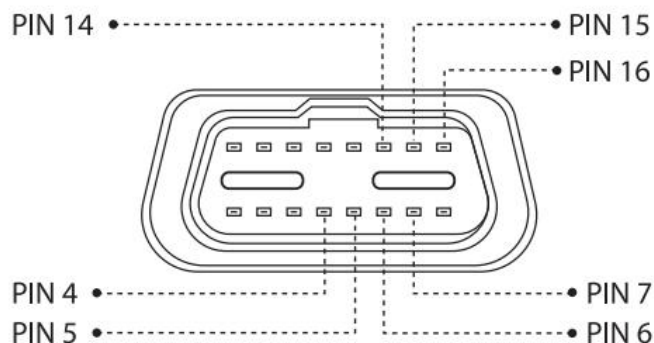
Obtain real-time vehicle data (accurate mileage, fault code, ACC status, fuel consumption statistics, battery voltage, engine speed, engine hours, etc.).

4. Product Parameter

Input voltage	9-33VDC	Output port	10-Pin(PH3.0.2*5-Pin)
Working modes	Working Mode (Ignition On) Sleep Mode (Ignition Off)	Connection	OBDII or J1939 9-pin port to 8-pin connector (PH3.0.2'4-Pin)
LED indication	Blue (Status)	Bluetooth	BLE 5.1
Operating temperature	-20 °C to +70 °C	Operating humidity	5%~95%(Non-condensing)
Dimensions (L*W*H)	100x27x19mm	Weight	40g

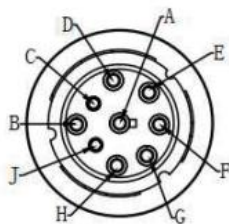
5. Pinout

OBDII



Pin Number	Pin Name	Description
4	GND(-)	Ground
5	GND(-)	Ground
6	CAN_H	CAN high
7	K-Line	
14	CAN_L	CAN low
15	L-Line	
16	B+	Power supply (9-33VDC)

J1939F 9PIN



Pin Number	Pin Name	Description
A	GND(-)	Ground
C	CAN_H	CAN high
D	CAN_L	CAN low
B	B+	Power supply (9-33VDC)

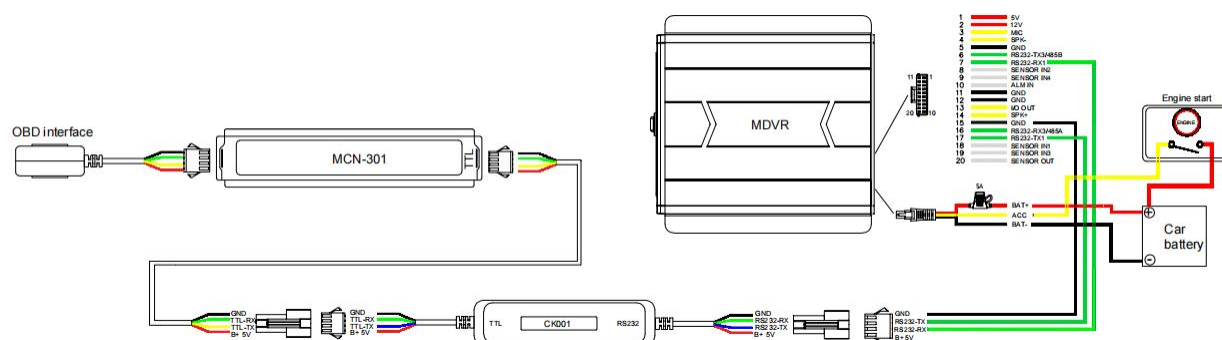
6. Wiring Instructions

1) MCAN-301 and CK001 Wiring

Connect the TTL-TX pin of the MCAN-301 to the TTL-TX pin of the CK001. Connect the TTL-RX pin of the MCAN-301 to the TTL-RX pin of the CK001. Connect the GND pin of the MCAN-301 to the GND pin of the CK001. Connect the 5V pin of the MCAN-301 to the 5V pin of the CK001.

2) MDVR & 4G Dashcam and CK001 Wiring

Connect the RS232-TX port of the MDVR&4G Dashcam to the RS232-RX port of the CK001. Connect the RS232-RX port of the MDVR&4G Dashcam to the RS232-TX port of the CK001. Connect the GND terminal of the MDVR&4G Dashcam to the GND terminal of the CK001.



7. Dashcam & MDVR Host Configuration

After completing the wiring, power on the main unit and accessories, connect your mobile phone to the main unit's Wi-Fi, and use the configuration app (MCTool) to configure the parameters. The specific configuration is as follows:

① MCTool > Setting > Peripheral > COM1 or COM2

Function selected as 808-UT

Type selection is 232

Baud rate selected as 19200

Others remain as default values.



The screenshot shows the MCTool app interface for configuring COM2. At the top, there is a blue header bar with a back arrow and the text "COM2". Below the header, the word "peripheral" is displayed in a light gray font. A table lists the configuration parameters with their current values and right-pointing arrows for editing:

Function	808-UT	>
Type	232	>
Baud Rate	19200	>
Data Bit	8	>
Stop Bit	1	>
Parity	None	>

At the bottom of the screen, there is a large blue button labeled "Save".

② MCTool > Setting > Serial Information

Check whether the status of COM2 is normal.

Serial Information	
Name	COM2
Function	808-UT
Status	normal
Remarks	

8.MettaXIOT Platform configuration

1) Monitor

Please first ensure that the device has been deployed on the MettaXIOT platform and possesses valid positioning information.

2) Devices > IMEI > Search > Edit

Locate the device requiring configuration within the platform and proceed to edit it.

MettaX IoT

DashboardCustomersUsersDevicesMonitorVideoReports

17:00:49(UTC+08:00)

liawer

Devices

IMEI5679

ModelSelect

Device NameEnter device name

LabelSelect

Activation Time

Start dateEnd date

Device statusSelect

PhonePlease enter your phone num

☐ Include sub-customer data

Search

Reset

Sell Devices

Export

Batch Commands

Batch Update

Add

Add Devices in Bulk

License Binding

Tag Management

No.	Device Name	IMEI	Model	Activation Time	Expiration Time	ICCID	Assigned customer	Operation
1	MC202-75679	940077775679	MC202	2024-11-26 19:35:08	2035-01-25	-	DevTest	EditCommand

3) Sensor Configuration > Add Sensors

Add a new sensor

MC202-75679(940077775679)

Basic Information

Calculation Rules

Sensor Configuration

License

Data

Daylight Saving Time

Add Sensors

Enter the interface number used in the Sensor No field. For example, if using COM2, enter 2

Sensor Name may be customised as required

Sensor Type may be selected as required (CANBUS is used as an example in this document), with CANBUS selected.

Sensor Model selected as MCAN-301

Sensor Configuration ×

Basic Information

* Sensor No.

2

Send

* Sensor Name

CANBUS

* Sensor Type

CANBUS

* Sensor Model

MCAN-301

9. MettaXIOT Platform Information Display

Dashboard

Devices

Monitor

Video

Reports

20:45:48(UTC-06:00)

My Report

Alerts Details_20251203094229

Report Type: Alerts Details

Time Range: This week

Track Details_20251119095526

Report Type: Track Details

Time Range: This week

Alerts Summary Report_202511...

Report Type: Alerts Summary Report

Time Range: Today

Alerts Details_20251105184810

Report Type: Alerts Details

Time Range: Today

告警详情_20251105114452

Report Type: Alerts Details

Time Range: Today

My Report

* Report Type

CAN Bus Data

* Report Name

CAN Bus Data_20251204204515

* Time Type

Time Range

Customize

* Time Range

Today

Device

Customer

* Device

MC202N-84

My Report

ADD

CAN Bus Data_20251204204519

Report Type: CAN Bus Data

Time Range: Today

Alerts Details_20251203094229

Report Type: Alerts Details

Time Range: This week

Track Details_20251119095526

Report Type: Track Details

Time Range: This week

Alerts Summary Report_202511...

Report Type: Alerts Summary Report

Time Range: Today

Alerts Details_20251105184810

Report Type: Alerts Details

Time Range: Today

CANBus Data

Date

2025-11-01 00:00:00 - 2025-11-30 23:59:59

Device

Customer

Device

MC202N...

Search

Reset

Export

No.	Device Name	IMEI	Report Time	Instant Speed	Engine RPM	OBD Battery Voltage	Engine Load	Coolant Temp
1	MC202N-84929	240079684929	2025-11-19 03:13:39	0 km/h	0 rpm	27.9 V	-	-
2	MC202N-84929	240079684929	2025-11-19 03:13:37	0 km/h	0 rpm	27.9 V	-	-
3	MC202N-84929	240079684929	2025-11-19 03:13:36	0 km/h	0 rpm	27.9 V	-	-
4	MC202N-84929	240079684929	2025-11-19 03:13:35	0 km/h	600 rpm	27.9 V	-	-
5	MC202N-84929	240079684929	2025-11-19 03:13:34	0 km/h	600 rpm	27.9 V	-	-
6	MC202N-84929	240079684929	2025-11-19 03:13:32	0 km/h	600 rpm	27.9 V	-	-
7	MC202N-84929	240079684929	2025-11-19 03:13:31	0 km/h	600 rpm	27.9 V	-	-