

MDVR-M1N 2.0



Products Introduction

M1N2.0 is a multifunctional in-vehicle intelligent terminal composed of storage module, encoding module, communication and power module, etc., with the integration of in-vehicle video monitoring, platform remote video monitoring, and driver driving behavior analysis.

It has a powerful video access and encoding capabilities, maximum support for 4Ch AHD and 2Ch IPC . Can simultaneously support 6Ch 1080P@30fps full HD real-time full frame encoding and recording capabilities, to ensure that the video quality frame rate is not lost.

The product has built-in rich wireless communication capability, supporting 4G/3G

Product Advantages

- Supports 4Ch AHD and 2Ch IPC;
- Full HD 6Ch 1080P@30fps real-time full-frame encoding in video-only case;
- Supports AHD HD video output;
- Optional support for digital SIM card technology (eSIM), more resistant to temperature and vibration; extended support for 4G main and hierarchical antennas.
- Supports GPS/BDS/GALILEO/GLONASS for

high-speed network, WIFI wireless network, and GPS/BDS/GALILEO/GLONASS multi-band quad-constellation global GNSS positioning system at the same time.

Products built-in powerful NPU processing capabilities, based on AI algorithms, can support 2Ch built-in AI, which can fully cover ADAS, DMS, BSD. effectively improve driver safety driving and reduce pedestrian-vehicle traffic accidents

At the same time, M1N2.0 has a strong anti-interference ability of the vehicle environment, the product meets the ISO16750, ISO7637 vehicle test standards, to meet the use of different vehicle types installed.

more accurate positioning; external waterproof antenna with IP67 rating.

- External interface automotive-grade, high-precision quick-release connectors support quick disengagement for easy installation and maintenance;
- High-speed processor and powerful neural network inference engine with built-in AI;
- Supports 2Ch Micro SD , up to 2*512G; additional support for 1*M.2 SSD storage, up to 1*2TB
- The whole system adopts mechanical vibration reduction, electronic vibration prevention and software vibration prevention, a combination of three comprehensive vibration reduction technology;
- Rich peripheral interfaces;

Product Specifications

Product Model

M1N 2.0 -H0402

Technical item

Technical indicators

Basic Parameters

RAM1GB

ROM	8GB
Operating system	Linux
3G/4G	TDD-LTE/FDD-LTE/EVDO/TD-SCDMA/WCDMA Extended support for main and diversity antennas
WIFI	WIFI5 support, 802.11b/g/n/ac compliant (optional)
Localization	Support GPS/BDS/GALILEO/GLONASS
Storage	Support 2*Micro SD card, Up to 2*512GB Support 1*M.2 SATA SSD, Up to 1*2TB.
Transducers	Supports 6-axis accelerometers

Interface Function

Video input	4Ch AHD + 2Ch IPC (Maximum resolution support 1080P) Full HD real-time full frame encoding with the following encoding capabilities:
Codecs	PAL: 4*1080P@25fps (AHD) + 2*1080P@30fps (IPC) NTSC: 4*1080P@30fps (AHD) + 2*1080P@30fps (IPC)
Video output	1-channel AHD
Audio input	4Ch AHD + 2Ch IPC
Audio output	1Ch
USB	Front Type-A connector USB2.0
Micro SD	2 Micro SD ports
SSD	1*M.2 SATA SSD、 Supports heating
SIM Card	1*SIM physical card slot, optional support for digital SIM card

	eSIM
I/O	8* IN, 2*Out
Serialport	2*RS232, 1*RS485
IR	Support
AI	Supports built-in 2CH (ADAS, DMS, BSD)
CAN	2*CAN_FD
Speed	Support
Driver Inf. Interface	Support 1CH driver information identification interface, can be docked lbutton

Power Supply

Power Input	DC 9~36V
Power Consumption	Host bare metal power consumption <10W, typical operating power consumption <40W

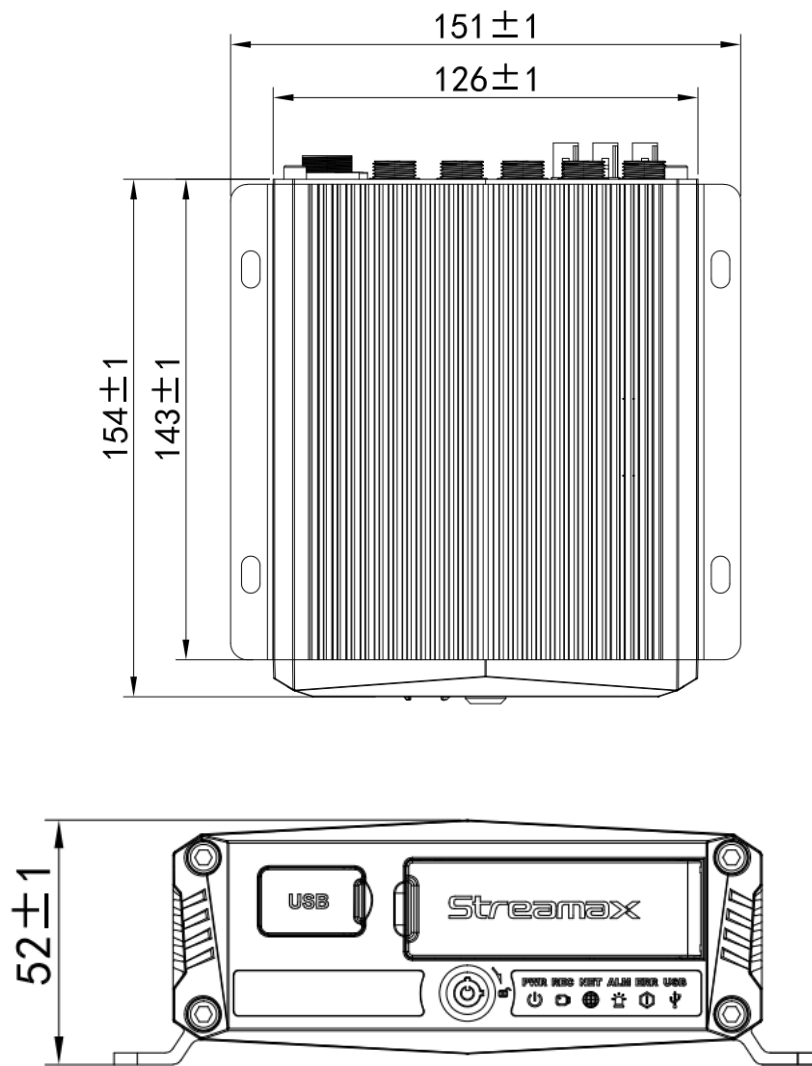
Physical Characteristics

Dimensions	154*151*52mm
Weights	1.7Kg

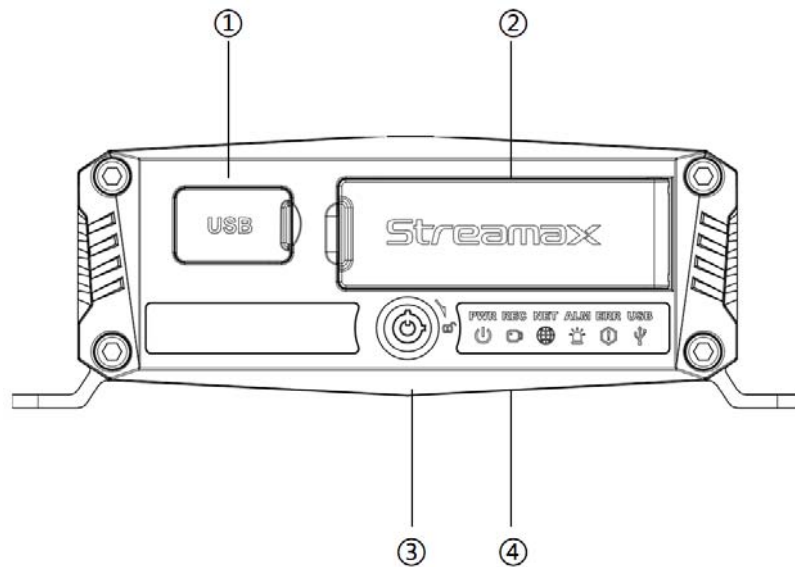
Working Environment

Operating temperature	-30°C ~ +70°C
Storage temperature	-40°C ~ +70°C

Product Dimensions(mm)

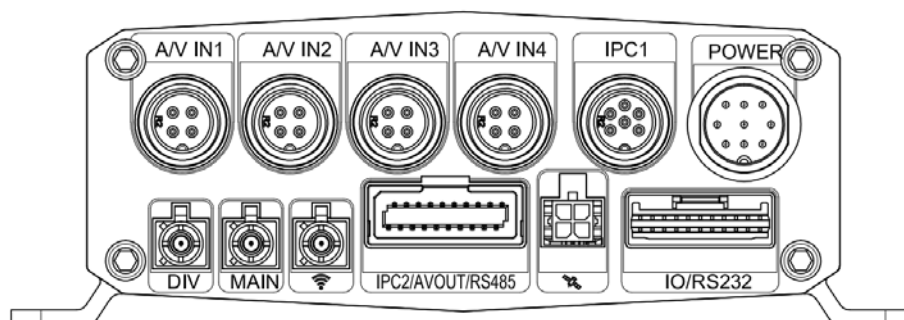


Panel interface



Front Panel Interface



- ① USB2.0 interface
- ② Storage interface: 2*Micro SD+1*M.2 SATA SSD
- ③ Hard disk lock
- ④ LED status indicator



Rear Panel Interface

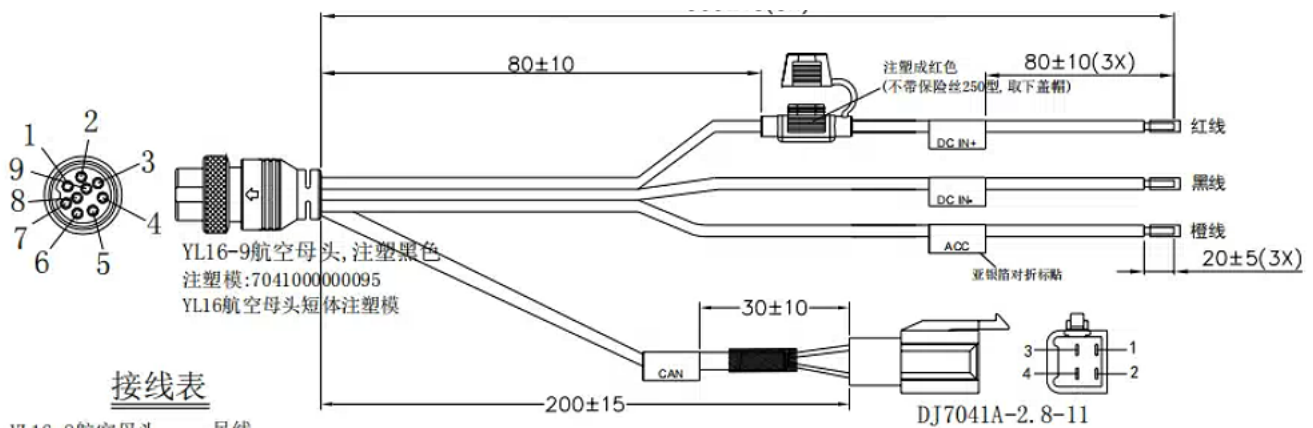
POWER

Power Input Connector(Contains 1*CAN1)

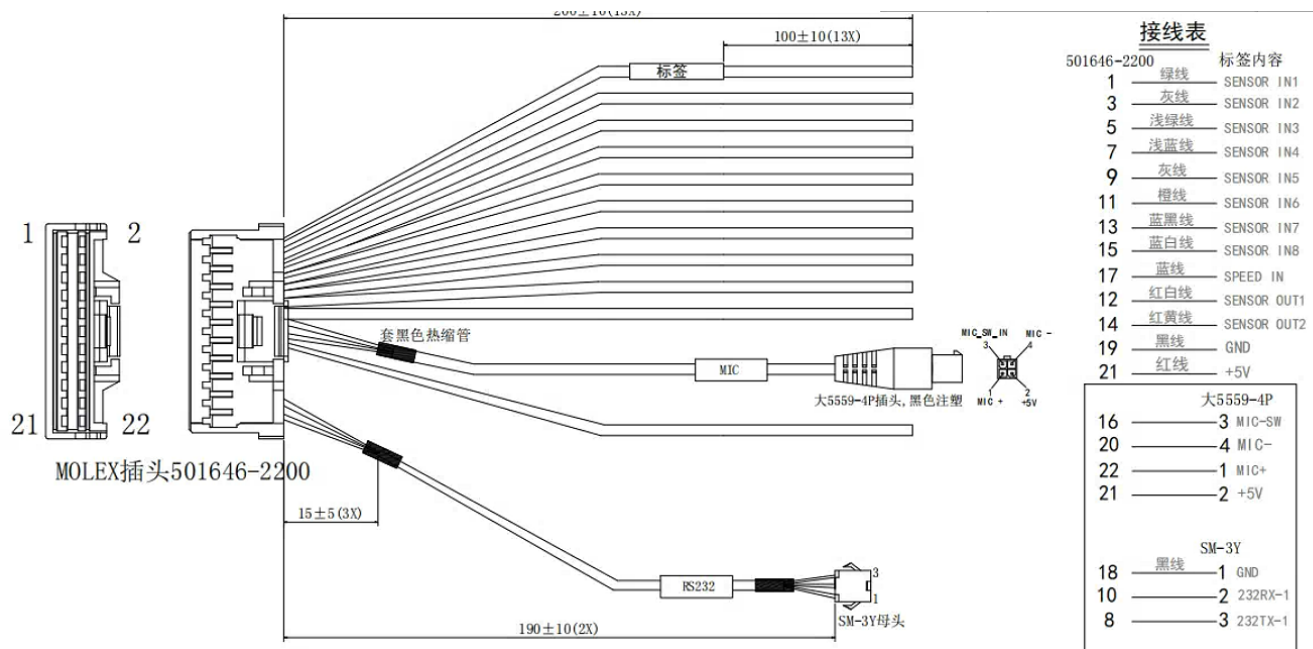
IPC1	IPC1
AV IN1-4	AHD1~AHD4
IO/RS232	External IO/RS232 interface
	GNSS positioning interface
IPC2/AVOUT/RS485	External IPC2/HD video output, RS485 interface
	WIFI communication interface
MAIN	4G/3G Main Antenna
DIV	4G/3G Diversity antenna(Optional)

Cable Definition

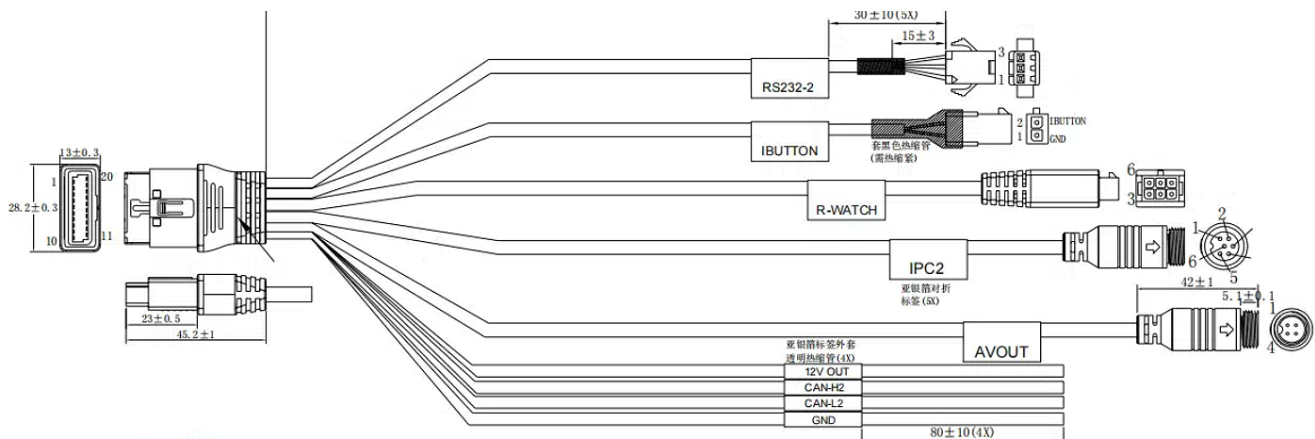
POWER Interface Cable(standard)



IO/RS232 interface cable (standard)



IPC2/AVOUT/RS485 interface cable(optional)



FCC Warning Statement

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

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)

This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

Note:5G band (W52) indoor use only.