



Product Features

F1N is a multifunctional vehicle-mounted intelligent terminal product that consists of storage modules, encoding modules, communication modules and power modules. It integrates on-board video surveillance, remote video surveillance on platforms, and driver behavior analysis. And more, the entire device is IP67 waterproof.

The product has powerful video access and encoding capabilities, supporting a maximum of 4 channels coaxial analog AHD high-definition and 1 digital IPC data mixed access. It can simultaneously support 5 channels of 1080P@30fps full HD real-time full-frame encoding recording, ensuring that the video quality and frame rate are not compromised.

The product is equipped with a wealth of wireless communication capabilities, supporting 4G full-network high-speed internet access, as well as GPS/BDS positioning systems.

The product features powerful NPU processing

Advantages

- Supports 4 analog high-definition AHD and 1 digital high-definition IPC access
- Full HD 5-channel 1080P@30fps real-time full-frame encoding
- Support CVBS standard-definition output;
- Supports GPS/BDS for more precise positioning; external IP67 waterproof antenna
- Features a high-speed processor and powerful neural network inference engine with built-in intelligent algorithm applications.
- Supports 1 Micro SD local storage, with a maximum capacity of 512G
- The entire system adopts a comprehensive vibration reduction technology that combines mechanical

capabilities, based on deep learning algorithms. It supports built-in intelligent computing operations, comprehensively covering the driver behavior analysis system.

The product also demonstrates strong anti-interference capabilities in the vehicle environment, meeting ISO16750 and ISO7637 in-vehicle testing standards, suitable for installation and use in various vehicle types.

vibration reduction, electronic vibration reduction, and software vibration reduction

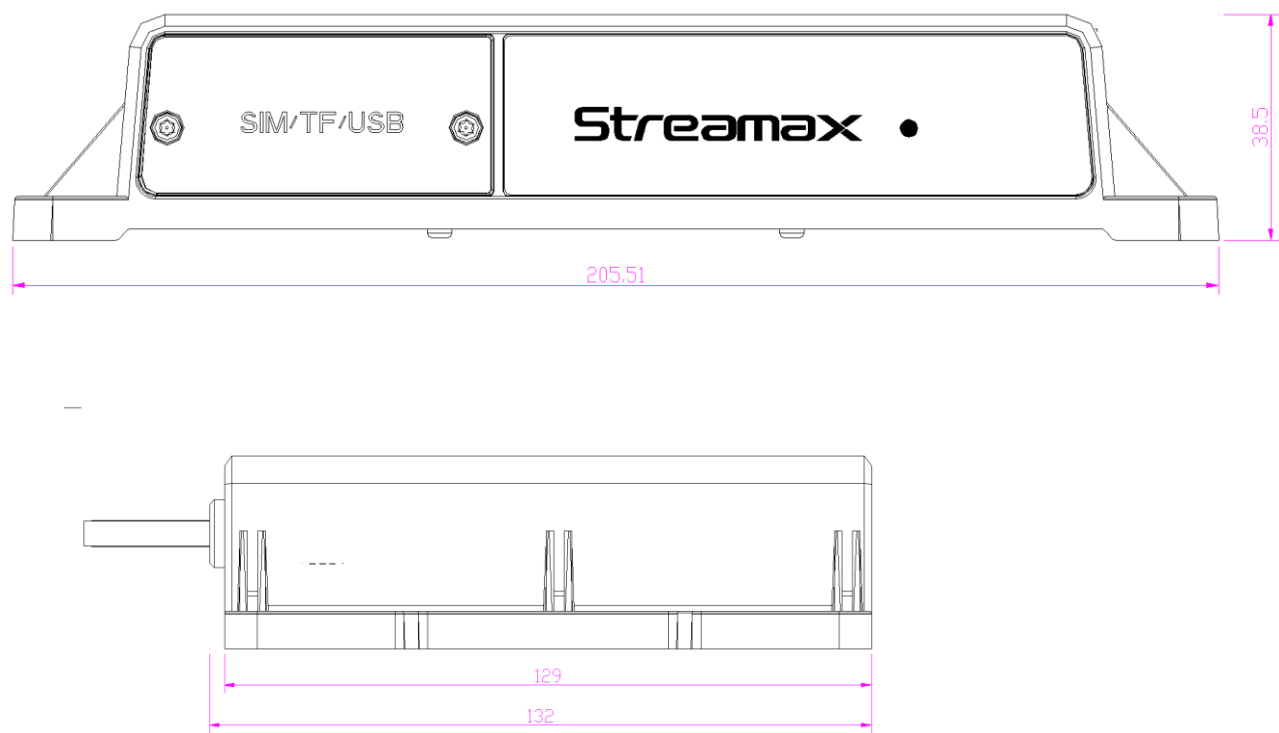
- The entire device and tail cable are IP67 waterproof

Product parameters

Model		
F1N		
	Items	Description
Basic parameters		
	RAM	1GB
	ROM	8GB
	Operating System	Linux
	Wi-Fi	Support
	4G	TDD-LTE/FDD-LTE/EVDO/TD-SCDMA/WCDMA
	Positioning	External Antenna, Vehicle-mounted Fakra Antenna Interface Supports GPS/BDS/Galileo/GLONASS quad-mode positioning
	Storage	External Antenna, Vehicle-mounted Fakra Antenna Interface Supports 1 Micro SD card with a maximum capacity of 512GB
	Sensor	Supports 3-axis accelerometer sensor
Interface Function		
	Video Input	4 channels AHD+1 channel IPC (maximum resolution supports 1080P) Full HD real-time full-frame encoding with the following maximum encoding capabilities
	Codec	PAL: 4*1080P@25fps (AHD) +1*1080P@30fps (IPC) NTSC: 4*1080P@30fps (AHD) +1*1080P@30fps (IPC)
	Video Output	1 CVBS standard-definition output
	Audio Input	4 channels analog + 1 channel digital
	Audio Output	1 channel
	USB	Front-facing Type-A USB 2.0 interface
	Micro SD	1 Micro SD interface
	SIM card	1 SIM physical card slot, optional support for digital SIM card eSIM
	IO	2 inputs, 2 outputs
	Serial Port	1 RS232、1 RS485
	AI	Supports 1 channel built-in algorithm, DMS included by default
Power Specification		

	Power Input	DC 9 ~ 36V
	Consumption	Bare Machine Power Consumption < 10W, Typical Operating Power Consumption < 35W
Installation		
	Dimensions	205.51*132*38.5mm
	Weight	About 0.85Kg
Operating Environment		
	Operating Temperature	-30°C ~ +70°C
	Storage Temperature	-40°C ~ +70°C

Dimension (mm)



Panel Interface

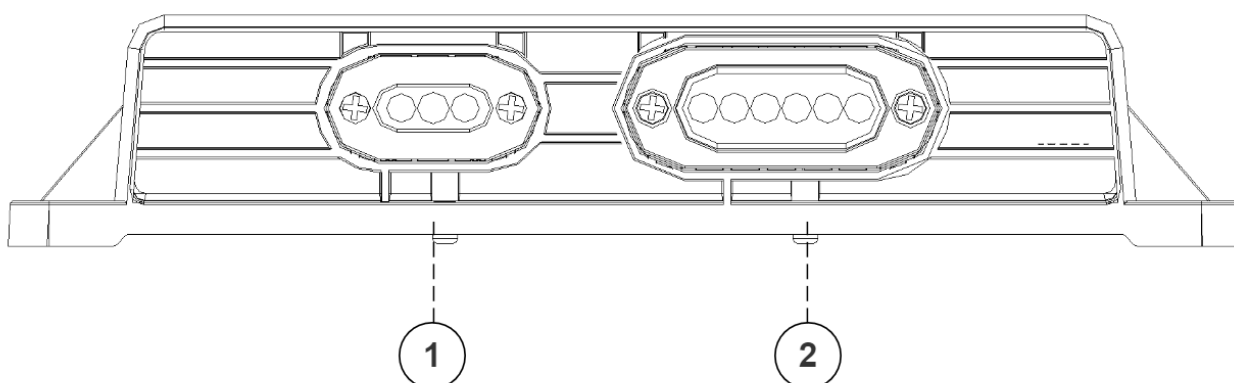
Front panel



Front panel

- ① Storage interface: 1*Micro SD
Communication interface: 1*SIM slot
Transmission interface: 1*USB 2.0
- ② LED indicator (blue: power light red: error light)

RearPanel

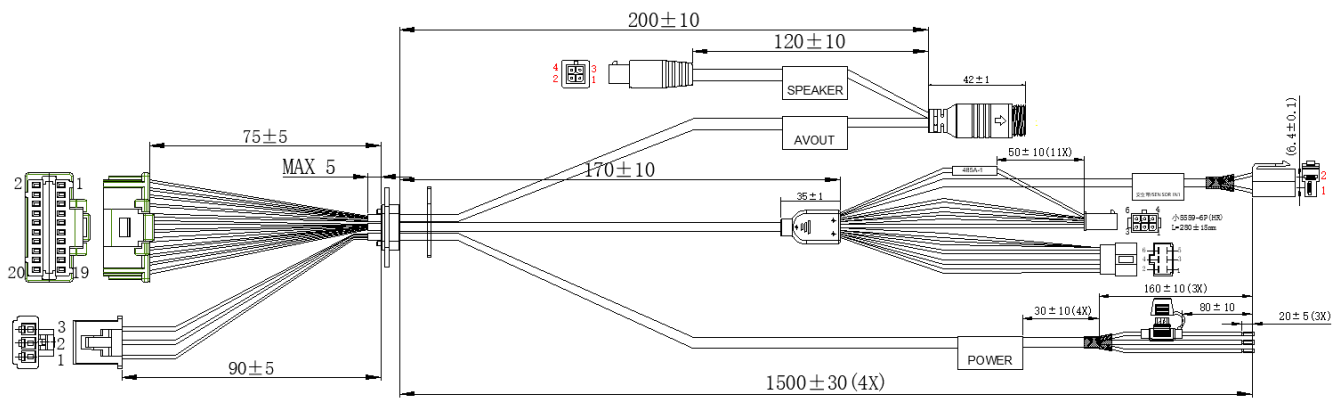


Rear Panel

- ① Cable interface 1 (see cable definition--signal output line 20PIN for details)
- ② Cable interface 2 (see cable definition--signal output line 30PIN for details)

Cable definition

signal output line 20PIN



接线表

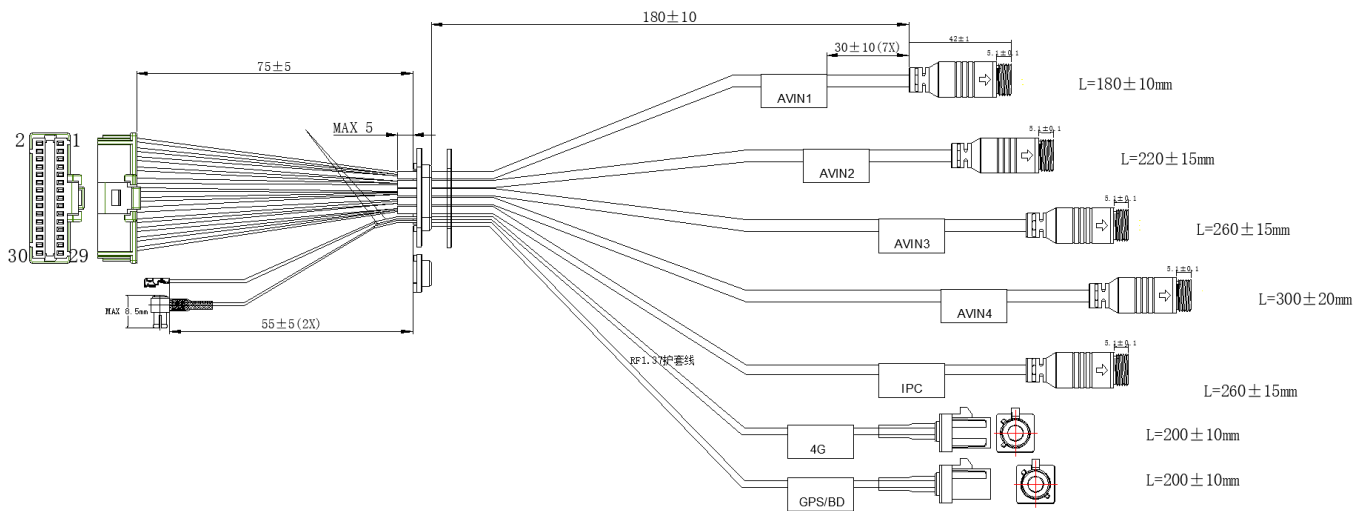
DJ7021-6.2-21	小5559-6P	5011892010	DJ7061-6.3-11
粉线 1	红白	1	1 SENSOR IN2 黄线
蓝线 11	2	2	2 SENSOR OUT1 蓝线
棕线 13	3	3	3 SENSOR OUT2 白线
黄线 5	232RX-1	5	5 232TX-1
灰线 6	4	6	4 GND 黑线
绿线 2	232TX-1	7	7 232TX-1
黑线 3	8	8	8 GND
黑线 9	9	9	9 GND
12V OUT 红线 2	15	5	5 12V OUT 红线
4	17	485B-1	
5	19	485A-1	
6			

接线表

5011892010	RS765-4公头	小5559-4P
16	4	VOUT 本色线
18	2	GND 黑线
20	1	+12V 红线
12	3	AOUT 白线
10		外壳 GND 本色屏蔽

TJC3-3P-P2.5带锁	吊线
1	DC IN- 20AWG黑线
2	ACC 20AWG黄线
3	5A保险 DC IN+ 20AWG红线

Signal output line 30PIN



接线表

5011893010	RS765-4公头 (VIN1)
3	4 VIN1 本色
1	2 GND 本色屏蔽
2	1 +12V 红线
4	3 AIN1 白线

5011893010	RS765-4公头 (VIN2)
7	4 VIN2 本色
5	2 GND 本色屏蔽
6	1 +12V 红线
8	3 AIN1 白线

接线表

5011893010	RS765-4公头 (VIN3)
11	4 VIN3 本色
9	2 GND 本色屏蔽
10	1 +12V 红线
12	3 AIN3 白线

5011893010	RS765-4公头 (VIN4)
15	4 VIN4 本色
13	2 GND 本色屏蔽
14	1 +12V 红线
16	3 AIN4 白线

接线表

5011893010	RS765-6公头 (IPC)
30	4 RX- 绿线
28	5 RX+ 黄线
27	1 TX- 橙线
29	2 TX+ 白线
26	3 +12V 红线
25	6 GND 黑线

FCC Caution.

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.

Any 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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

IC Warning

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

*RF warning for Mobile device:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.