AVM Product Specification

catalogue

一、 Product overview

ST-AVM is a 360° panoramic intelligent driver assistance system, combined with the latest image processing technology and real-time splicing technology, can provide a full range of real-time image display around the body, providing users with a safer driving environment. The product captures the real-time image of the car around the vehicle through the four-way HD camera, seamlessly corrects the distortion of the image and stitching the picture, forming a complete bird's eye view of the surrounding environment of the vehicle, and combined with the latest 3D image engine, to reduce the blind area of the user's perspective. At the same time, the intelligent BSD pedestrian identification algorithm is matched to identify the pedestrians around the car and the pedestrians around the car in real time. Warning the driver when pedestrians are detected in the dangerous area, so as to judge the surrounding dangerous area for users in advance, reduce and avoid traffic accidents, and improve driving safety

二、 Product function features

- 4 road large wide Angle lens, maximum support 1080P HD video
- Support the maximum 256GB capacity TF card storage, support dual card slot
- Supports 2D / 3D AVM panoramic splicing
- Support one-key automatic calibration, and the calibration time is 1min
- Support transparent body, transparent car bottom function
- Support electronic rearview mirror and other multi-auxiliary Angle switching function, support vehicle signal linkage switch Angle
- Support BSD four-party pedestrian detection and warning function, the alarm range can be calibrated
- Alarm strategy defines four alarm levels according to the speed and vehicle steering signal, which is more compatible with the actual scene to avoid unnecessary sound and light alarm
- Support the BSD rear incoming vehicle detection and early warning function
- Support the LDW lane departure warning function
- Support 4 IO input 2 IO output, 1 CAN, 3 RS232 and 1485
- Support the pulse speed source, GPS speed source, and CAN speed source
- Support as a host, but also as a slave with MDVR host
- Built-in WiFi module, which supports the display operation and also supports mobile app operation

2.1 AI function

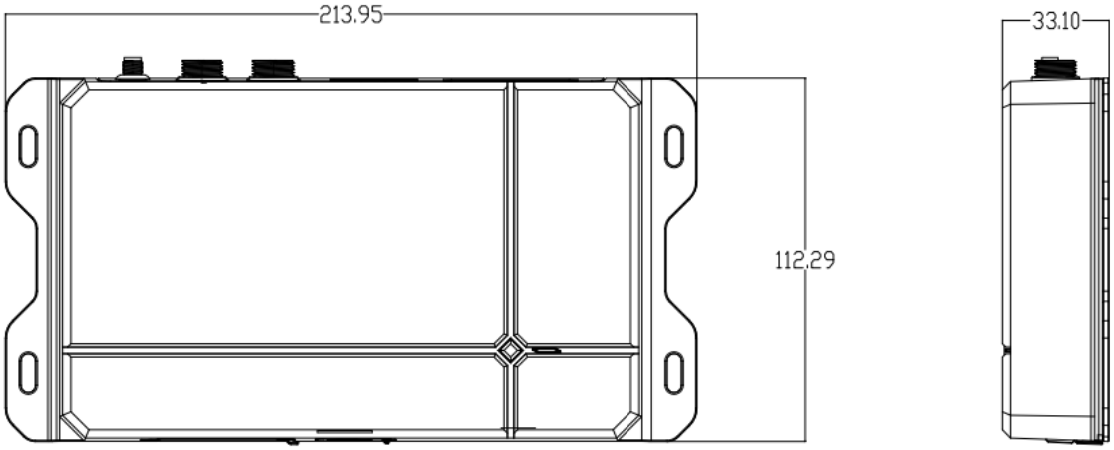
BSD pedestrian detection rear BSD vehicle to detect LDW lane departure

三、 Product Parameter

product model	
AVM	
built-in AI	
built-in AI	Support AVM algorithm, lane departure algorithm, rear to the car algorithm
sensor	
G-Sensor	Built-in 6-axis
RTC	
RTC	24H error is less than ± 2s
source	
import	DC 9-36V
working current	≤3A
Static working current	≤2mA
Climate and environmental adaptability	
working temperature	-30℃~+70℃
Storage temperature	-40℃~+85℃
Working humidity	15%-95%RH
physical characteristics	
Size (length x width x height)	Body of 214x 112x 33mm
video frequency	
import	4 Road AHD
output	CVBS/AHD
video coding	H.264/H.265
Video resolution	4*1080P 15fps
audio frequency	
output	1 Road

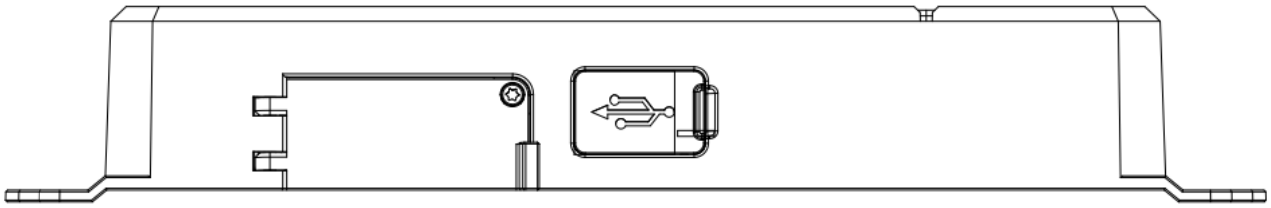
memory	
Micro SD Card	2 ways, single card support 512GB.
network	
WIFI	Support for 2.4G
LAN	Support (6 PIN Head)
IR	
infrared IR	support
fixed position	
GPS	Support for G-MOUSE
joggle	
USB 2.0	1 Road
CAN	1 Road
Speed pulse	1 Road
RS232	3 Road
RS485	1 Road
IO_INPUT	4 Road
IO_OUTPUT	2 Road

四、 dimensional drawing (mm)

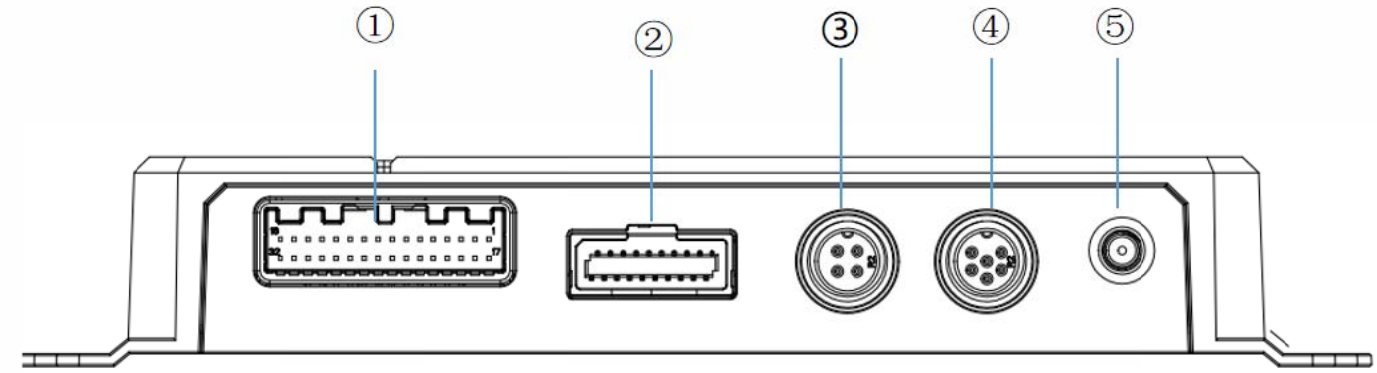


五、 Interface definition

front panel:



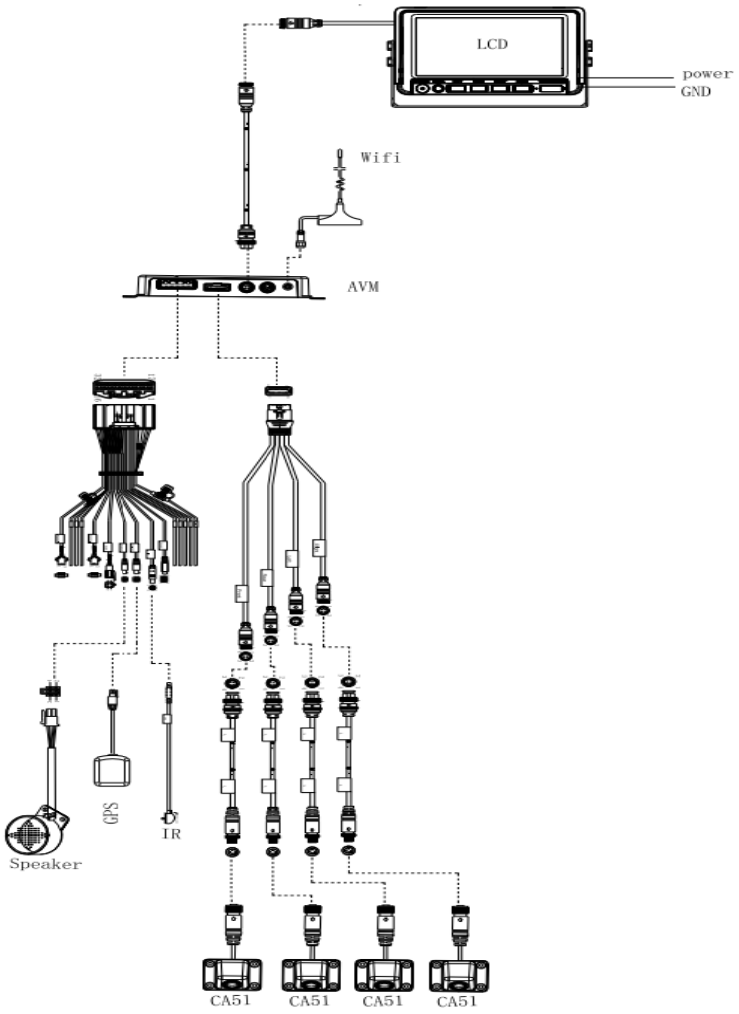
back panel:



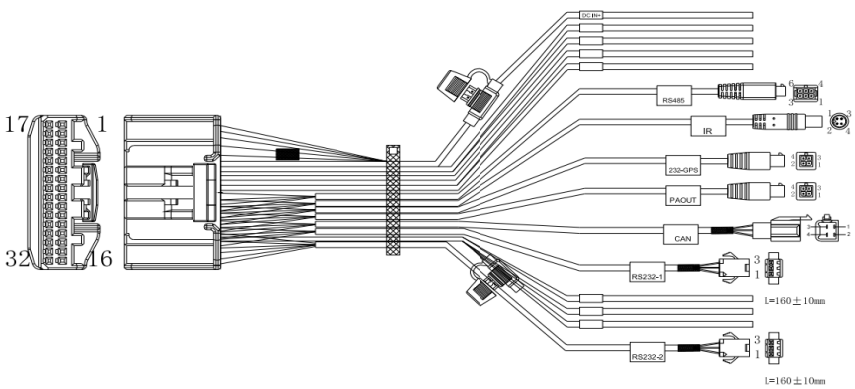
order number	silk-screen	explain
1	Power/RS232/IO	Mainly is the power supply, IO, RS232
2	VIN1-4	Video input to channel 1-4
3	AVOUT	Audio and video output
4	LAN	For docking to the MDVR network ports
5		The WIFI antenna interface

六、 Product installation

.16. System connection diagram



.26 External cable interface definition



Small 5559-6P

2321525-1
2 Red 6 +12V
3 Black 3 GND
1 Yellow 4 485A-R
17 White 5 485B-R

2321525-1 4P IR
3 Black 3 GND
4 Brown 1 +5V
18 White 2 IR

2321525-1 232-GPS
3 Black 2 GND
4 Red 4 5V OUT
232-TX 6 White 1 GPS-RX
232-RX 5 Yellow 3 GPS-TX

2321525-1 DJ7041A-2.8-11
7 White 3 CANL
8 Brown 1 CANH
9 Black 2 GND

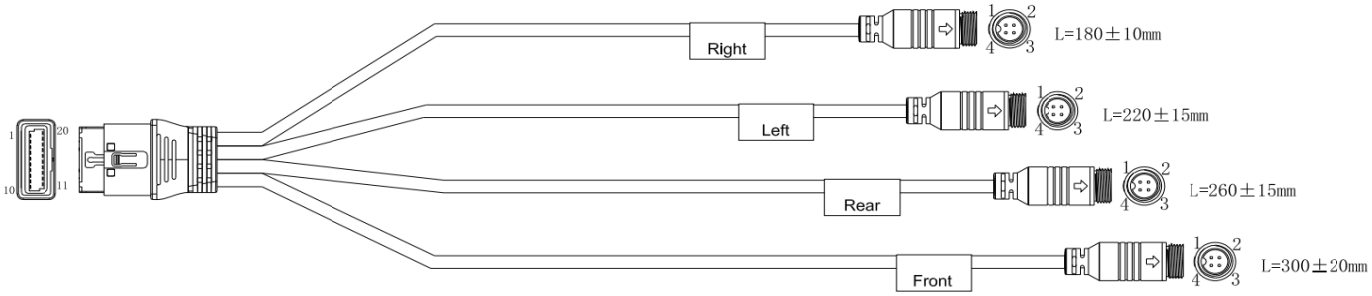
2321525-1 Line
15 Red 7.5A Fuse DC IN+
16 Red
31 Black DC IN-
32 Black
14 Orange-3A Fuse ACC

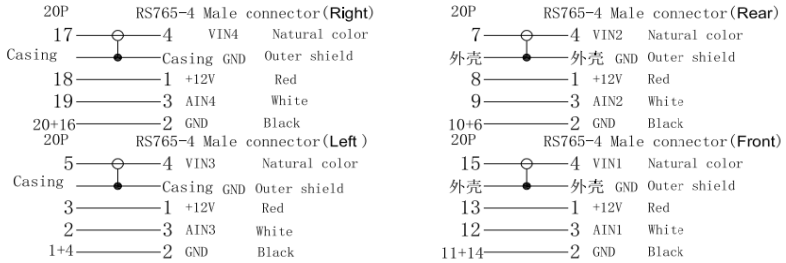
2321525-1 PAOUT
19 Red 1 5V-PA
20 White 2 PA-EN
22 Black 4 GND
21 Yellow 3 A-OUT

2321525-1 RS232-1
9 Black 1 GND
10 Brown 2 RX-1
11 White 3 TX-1

2321525-1 RS232-2
26 Black 1 GND
27 Brown 2 RX-2
28 White 3 TX-2

2321525-1 Line
25 Gray-blue S OUT1
24 Gray-green S OUT2
23 Blue SPEED
13 Brown S IN1
12 Brown-blue S IN2
30 White-black S IN3
29 White-yellow S IN4
26 black GND





FCC Statement:

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

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.

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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC 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.