
SHENZHEN TESWELL TECHNOLOGY CO., LTD.

Mini Car HD SD Card Recorder

TS-820 Product Specification



1. Product parameters

Items	Device parameters	DVR/NVR Performance index
Name	Product Name	4CHAHD SD card.
System	Operation System	Linux
	Operation Interface	Graphical Interfaces, Chinese/English/Portuguese/Russian/French/Turkish optional
	File System	Proprietary Format
	System Privileges	User Password
Video	Video Input	4ch Independent Input: 1.0Vp-p, 75Ω.
	Video Output	1 Channel PAL/NTSC Output, 1.0Vp-p, 75Ω, Composite Video Signal
		1 Channel VGA Support 1280*720 , 1024*768 Resolution
	Video Display	1 Or 4 Screen Display
	Video Standard	PAL: 25frames/Sec; NTSC: 30frames/Sec
	System Resources	PAL: 100 Frames; NTSC: 120 Frames
Audio	Audio Input	4 Channels Independent Input 600Ω
	Audio Output	1 Channel (4 Channels Can Be Convert Freely)
	Basic Output Level	1.0—2.2V
	Distortion Plus Noise	≤-30dB
	Recording Mode	Sound And Image Synchronization
	Audio Compression	G711A
Digital Processing & Storage	Image Compression	H.264 Fixed Code Stream
	Image Format	PAL:4*720P (1280*720) NTSC:4*720P (1280*720)
	Video Stream	192Kbps-4.0Mbit/s (channel)
	Video Taking Up Of Hard Disk	720P:85M-1.8GByte/hour
	Playback Resolution	PAL:1-4*720P (1280*720) NTSC:1-4*720P (1280*720)
	Audio Bitrate	4KByte / s / channel
	SD Storage	SD card storage, Support Max 128GB

Alarm	Alarm in	4 Channels Independent Input. High Voltage Trigger
	Alarm out	1 Channels Independent output
	Move Detect	available
Network Interface	Wire line Access	Can Expand One 6pin Ethernet Port
	Wifi	Can Expand One Wifi Module Outside, IEEE 802.11 B/G/N
	3G/4G	Can Expand One FDD-LTE/TD-LTE/WCDMA/CDMA2000 Module Inside
GPS Interface	GPS	Can Expand GPS Module Inside
Extend Interface	RS232	RS232*1, extensible it is convenient to connect with other vehicle equipment
	RS485	RS485*1, Extensible it is convenient to connect with other vehicle equipment
	Intercom	Can Expand Intercom Module Inside
	G-Sensor	Can Expand G-Sensor Module Inside
Others	Power Consumption	DC9-36V 8W (without SD)
	Working Temperature	-40°C ~ +70°C
	Clock	Built-In Clock, Calendar
Packaging	Product Size	L117*W137*H30 mm(Include Standard bracket)
	Product Weight	0.8KG(without SD)

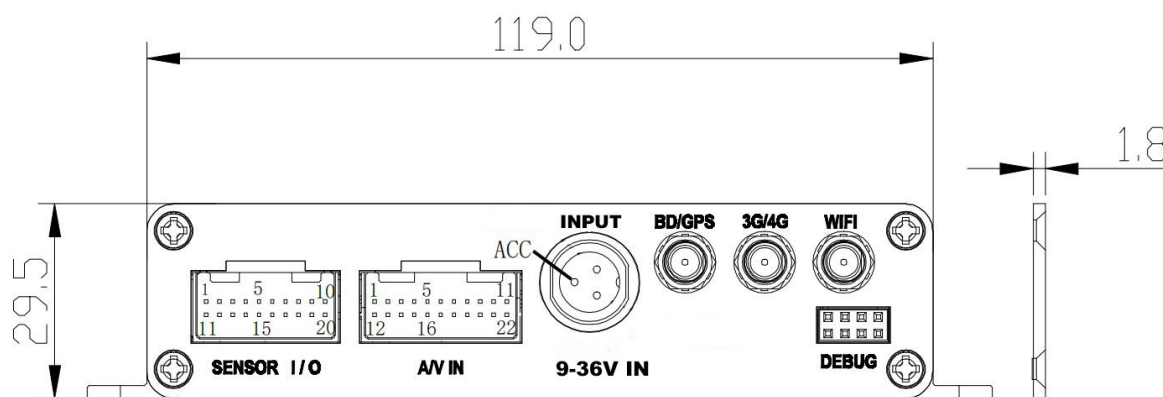
Optional functions:

Basic Type (Pin Aviation Connector)

- +A: GPS Function
- +B: 3G/4G Function
- +E: LAN Port
- +W: Wifi Function

2. Instruction of Installation

2.1. Instruction of External Interface Wiring



SENSOR I/O Interface Definition (20PIN)			
Pin	Standard	Optional VGA	Optional RJ45
1	NC	GND	GND
2	Alarm out 1	Alarm out1	Alarm out 1
3	NC	VGA_R_OUT	RJ45_TX+
4	Alarm out 2	Alarm out 2	Alarm out 2
5	NC	VGA_G_OUT	RJ45_TX-
6	AL1	AL1	AL1
7	NC	VGA_B_OUT	RJ45_RX+
8	AL2	AL2	AL2
9	NC	VGA_VS1	RJ45_RX-
10	AL3	AL3	AL3
11	NC	VGA_HS1	NC
12	AL4	AL4	AL4
13	TTL_TXD1	TTL_TXD1	TTL_TXD1
14	TTL_TXD2	TTL_TXD2	TTL_TXD2
15	TTL_RXD1	TTL_RXD1	TTL_RXD1
16	TTL_RXD2	TTL_RXD2	TTL_RXD2
17	V_OUT	V_OUT	V_OUT
18	A_OUT	A_OUT	A_OUT
19	12V	12V	12V
20	GND	GND	GND

A/V IN interface Definition (22PIN)		
Pin	Standard	Optional Intercom
1	GND	GND
2	NC	MIC_IN
3	GND	GND
4	V_OUT	V_OUT
5	12V	12V
6	A_OUT	A_OUT
7	GND	GND
8	VIN1	VIN1
9	12V	12V
10	AIN1	AIN1
11	GND	GND
12	VIN2	VIN2
13	12V	12V
14	AIN2	AIN2
15	GND	GND
16	VIN3	VIN3
17	12V	12V
18	AIN3	AIN3
19	GND	GND
20	VIN4	VIN4
21	12V	12V
22	AIN4	AIN4

3. Product Size

