

**SHENZHEN TESWELL TECHNOLOGY CO., LTD.**

**TS-830 Product Specification**

**Version: V1.1**



# 1. Product parameters

| Items                          | Device parameters    | DVR Performance index (Advanced)                                                                                                                                                                                                                                                |                                                                       |
|--------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Name                           | Product Name         | 4CH SD card recorder                                                                                                                                                                                                                                                            |                                                                       |
| System                         | Operation System     | Linux                                                                                                                                                                                                                                                                           |                                                                       |
|                                | Operation Interface  | Graphical Interfaces, Chinese/English/Portuguese/Russian/French/Turkish optional                                                                                                                                                                                                |                                                                       |
|                                | System Privileges    | User Password                                                                                                                                                                                                                                                                   |                                                                       |
| Video                          | Video Input          | 4ch Independent AHD Input:<br>1.0Vp-p, 75Ω.Both B&W and Color Cameras                                                                                                                                                                                                           | 4ch Independent IPC Input:<br>1.0Vp-p, 75Ω.Both B&W and Color Cameras |
|                                | Video Output         | 1 Channel PAL/NTSC Output, 1.0Vp-p, 75Ω, Composite Video Signal                                                                                                                                                                                                                 |                                                                       |
|                                |                      | 1 Channel VGA Support 1024*768 Resolution                                                                                                                                                                                                                                       |                                                                       |
|                                | Video Display        | 1 Or 4 Screen Display                                                                                                                                                                                                                                                           |                                                                       |
|                                | Video Standard       | PAL:25fps/CH;NTSC:30fps/CH                                                                                                                                                                                                                                                      |                                                                       |
|                                | System Resources     | PAL:100 Frames; NTSC:120 Frames                                                                                                                                                                                                                                                 |                                                                       |
| Active Safety Assisted Driving | DSM(Optional)        | Support 1CH DSM(Driver Status Monitor) video input, support safety alarm of yawning, calling, smoking,video blocked,driver identification, Infrared blocking sunglasses failure,device malfunction, etc.                                                                        |                                                                       |
|                                | ADAS(Optional)       | Support 1CH ADAS(Advance Driving Assistance System) video input, support safety alarm of LDW, THW,PCW,FCW, etc.                                                                                                                                                                 |                                                                       |
|                                | BSD(Optional)        | Support 1CH BSD(Blind Spot Detection) video input, support safety alarm of people, non-motorized vehicles(bicycles, motorcycles, electric bicycles, tricycles, and other traffic participants that can be seen the contours of the human body), including front, side and back. |                                                                       |
| Audio                          | Audio Input          | 4 Channels Independent AHD Input 600Ω                                                                                                                                                                                                                                           |                                                                       |
|                                | Audio Output         | 1 Channel(4 Channels Can Be Convert Freely) 600Ω,1.0—2.2V                                                                                                                                                                                                                       |                                                                       |
|                                | Distortion and Noise | ≤-30dB                                                                                                                                                                                                                                                                          |                                                                       |
|                                | Recording Mode       | Sound And Image Synchronization                                                                                                                                                                                                                                                 |                                                                       |
|                                | Audio Compression    | G711A                                                                                                                                                                                                                                                                           |                                                                       |
| Digital Processing & Storage   | Image Compression    | H.264/265 Fixed Code Stream                                                                                                                                                                                                                                                     |                                                                       |
|                                | Image Format         | PAL:4*1080P(1920*1080)<br>NTSC:4*1080P(1920*1080)                                                                                                                                                                                                                               |                                                                       |

|                          |                              |                                                                 |
|--------------------------|------------------------------|-----------------------------------------------------------------|
|                          | Image quality                | 1-8 levels adjustable                                           |
|                          | Video Stream                 | 192Kbps-8.0Mbit/s(channel)                                      |
|                          | Video Taking Up Of Hard Disk | 1080P:85M-1.8GByte/hour                                         |
|                          | Playback Resolution          | PAL:1-2*1080P(1920*1080)<br>NTSC:1-2*1080P(1920*1080)           |
|                          | Audio Bitrate                | 4Kbps / channel                                                 |
|                          | Audio Taking Up Of Hard Disk | 14MByte / hour / channel                                        |
|                          | SD Storage                   | Double SD card storage, Support up to 512GB each                |
| <b>Alarm</b>             | Alarm input                  | 4 Channels Independent Input. High Voltage Trigger              |
|                          | Alarm output                 | 1 Channels alarm output                                         |
|                          | Motion Detection             | Optional high, medium and low sensitivity levels                |
| <b>Network Interface</b> | Wire line Access(Optional)   | Can expand one 5pin Ethernet Port,can be converted to RJ45 port |
|                          | WiFi(Optional)               | Can expand one WIFI Module(IEEE802.11 B/G) Inside               |
|                          | 3G/4G(Optional)              | Can expand FDD-LTE/TD-LTE/WCDMA/CDMA2000 Module Inside          |
| <b>GPS Interface</b>     | GPS                          | Can expand GPS/BD/GLONASS Module Inside                         |
| <b>Extend Interface</b>  | RS232                        | RS232*1, convenient to connect with other vehicle equipment     |
|                          | RS485                        | RS485*1, convenient to connect with other vehicle equipment     |
|                          | Intercom                     | Can expand 1*MIC for Intercom function                          |
|                          | G-Sensor                     | Build-in G-Sensor Module                                        |
|                          | CANBUS(Optional)             | CAN 2.0B protocol                                               |
| <b>Others</b>            | Power Consumption            | DC9-36V ≤8W                                                     |
|                          | Power Output                 | DC12V 1A                                                        |
|                          | Working Temperature          | -40°C ~ +70°C / ≤80%                                            |
|                          | Clock                        | Built-In Clock, Calendar                                        |
| <b>Packaging</b>         | Product Size                 | 132(L)*137(W)*40(H)mm                                           |
|                          | Product Weight               | 0.6KG(without SD)                                               |

## Optional functions:

Basic Type (Pin Aviation Connector)

+A: GPS Function

+B: 3G/4G Function

+E: LAN Port

+J: Fireproof Box

+L: WiFi / hot-Spot

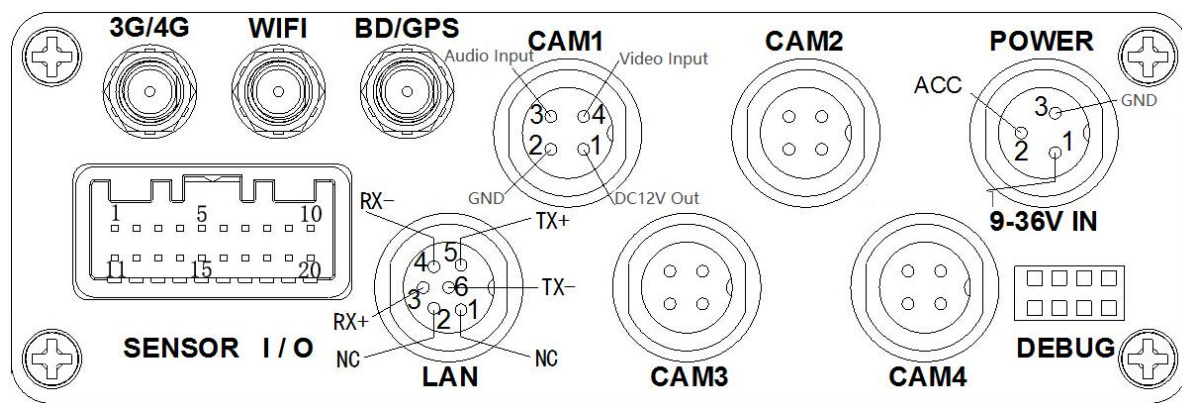
+R: Face recognition

+V: Built-in ADAS & DSM

+W: Wifi Function

## 2. Instruction of Installation

### 2.1. Instruction of External Interface Wiring



SENSOR Interface definition:

**Pin 1.** VGA\_R\_OUT

**Pin 11.** VGA-VS

**Pin 2.** VGA\_G\_OUT

**Pin 12.** VGA-HS

**Pin 3.** VGA\_B\_OUT

**Pin 13.** GND

**Pin 4.** RS485+

**Pin 14.** Alarm input 1 ( SOS )

**Pin 5.** RS485-

**Pin 15.** Alarm input 2 ( Turn left )

**Pin 6.** RS232(TX) 1

**Pin 16.** Alarm input 3 ( Turn right )

**Pin 7.** RS232(RX) 1

**Pin 17.** Alarm input 4 ( Reversing ) or CAN-H

**Pin 8.** A-OUT

**Pin 18.** CAN-L

**Pin 9.** V-OUT

**Pin 19.** Alarm OUT

**Pin 10.** DC12V OUT+

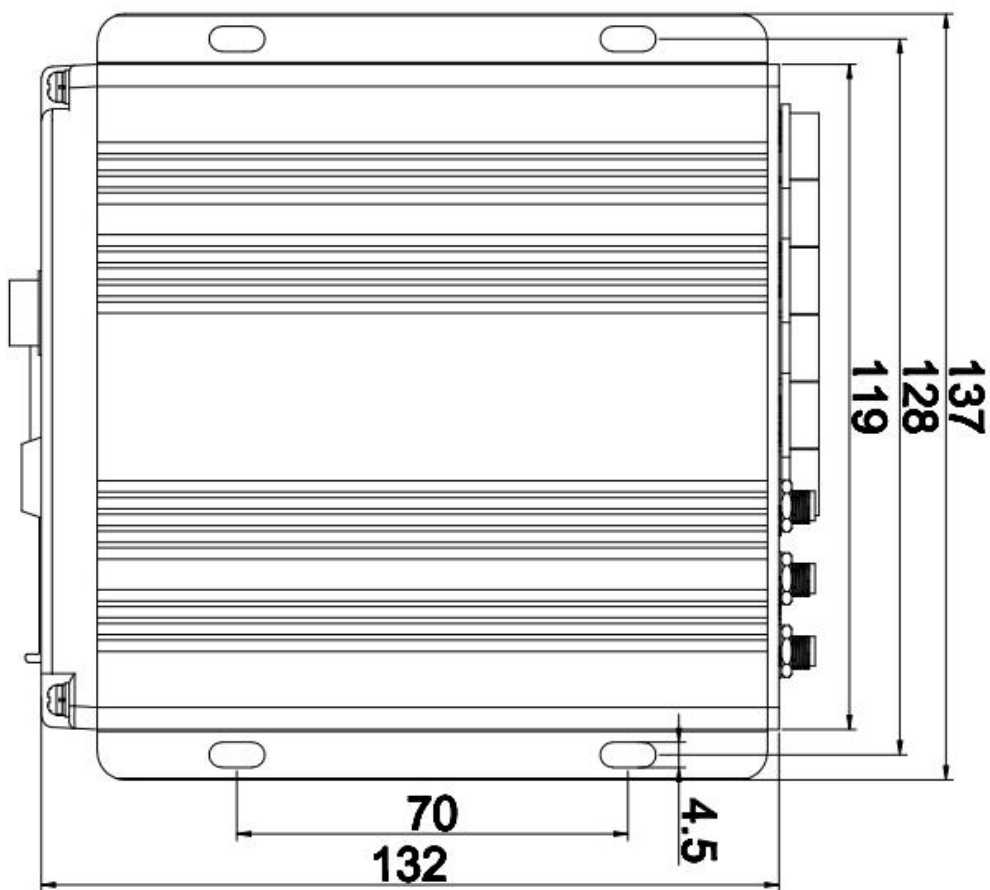
**Pin 20.** GND

Notes:

Interface Description:

- **DEBUG:** Testing port
- **SENSOR I/O:** Alarm port
- **LAN:** Network port

### 3. Product Size



830 Series Installation Dimensions