

AD Pro3.0 - Intelligent Driving recorder Dashcam



AD Pro3.0 is an intelligent driving recorder that can help drivers reduce traffic accidents and help fleets improve management efficiency. It can proactively identify dangerous driving events and bad driving behaviors through AI technology, and supports both local real-time alerts to drivers to avoid risks, and event uploading to fleet management platforms for driver training. It provides real-time and accurate vehicle location information and vehicle operation data for fleet management platform, and also provides high-quality remote intercom function and video preview playback function to reduce fleet management difficulty and improve fleet management efficiency. In addition, the product is reliable, easy to install, simple to use and cost-effective.

Functional Features

- ✓ Front road ADAS lens, supports up to 1080P HD recording image
- ✓ Rear cockpit DMS lens, supports up to 800P HD recording image
- ✓ Supports up to 2 channels of video recording
- ✓ Support H.264/H.265 encoding
- ✓ Support 1*256GB single Micro SD card storage
- ✓ Built-in Wi-Fi, 4G communication module
- ✓ 1 channel RS232 support external common positioning antenna or inertial guidance positioning antenna
- ✓ Video and audio data support AES256 encryption, data transmission support encryption protocol TLS1.3
- ✓ Support 3 IO inputs, 1 IO output
- ✓ Compact design, large cars and small cars do not affect the driver's line of sight
- ✓ Built-in ADAS functions, supporting lane departure, forward collision and close proximity detection

- ✓ Built-in DMS function to support driver bad driving behavior detection
- ✓ Built-in 6-axis gravity sensor, support for rapid acceleration, rapid deceleration, sharp turns and collision detection

AI function

AD Pro 3.0 uses machine vision based on video analysis technology to automatically identify road risks and poor driver behavior. Detected events trigger audio and visual alerts to warn drivers in real time, and event footage is supported for uploading to the cloud.

 **Warning:** The use of AI functions must be calibrated and configured in strict accordance with the installation and use instruction documents, otherwise the normal use of the functions cannot be guaranteed.

ADAS Features

		
Lane Departure	Too close to the car	Forward Collision

DMS Functionality

			
Camera obscuring	Yawning	Receiving phone calls	Smoking
			
Distraction	No driver	Not wearing seat belt	Fatigued driving

Specification parameters

Product Model:AD Pro3.0	
System	Embedded Linux
Language	Chinese, English, Spanish, Portuguese, French, Russian, Japanese optional, default English *Languages include interface languages and voice alerts, TTS only supports Chinese and English
Video & Audio	
Video and audio recording	Video 2 way (does not support external expansion), audio 1 way
Maximum resources (with 2-way AD)	1080P@25fps(ADAS) +800P@20fps(DMS)
Video Encoding	H.264/H.265 optional, default H.265
Audio compression standards	ADPCM/G.711 optional, default ADPCM
CBR/VBR	VBR/CBR optional, default VBR
Audio	Built-in MIC
Speakers	Built-in 4Ω2W speaker, speaker volume 30cm@85dB, no current interference, radio interference and other noises, size can be adjusted
Front road camera parameters	
Sensor Type	1/2.7" 2.0 megapixel CMOS sensor
Shutter speed	1/30s-1/100000s

Lens	Focal length 4mm HFOV: 89°; VFOV: 61°; DFOV: 119°; error $\pm 5^\circ$
Minimum Illumination	Color: 0.05Lux/F1.2
Lens interface type	Host built-in lens
Wide dynamic range	Digital Wide Dynamic
Backlight compensation	Support
Signal-to-noise ratio S/N	$\geq 48\text{dB}$
Rear cockpit camera parameters	
Sensor Type	1/2.9" 2.0 megapixel CMOS sensor
Shutter speed	Fixed shutter 1/30 sec. to 1/5000 sec. Automatic shutter 1/30 sec. to 1/10000 sec.
Lens	Focal length 4.75mm HFOV: 145°; VFOV: 84°; DFOV: 170°; error $\pm 5^\circ$
Lens interface type	Host built-in lens
Wide dynamic range	Digital Wide Dynamic
Backlight compensation	Support
Signal-to-noise ratio S/N	$\geq 45\text{db}$
Intelligent fill light mode	Support

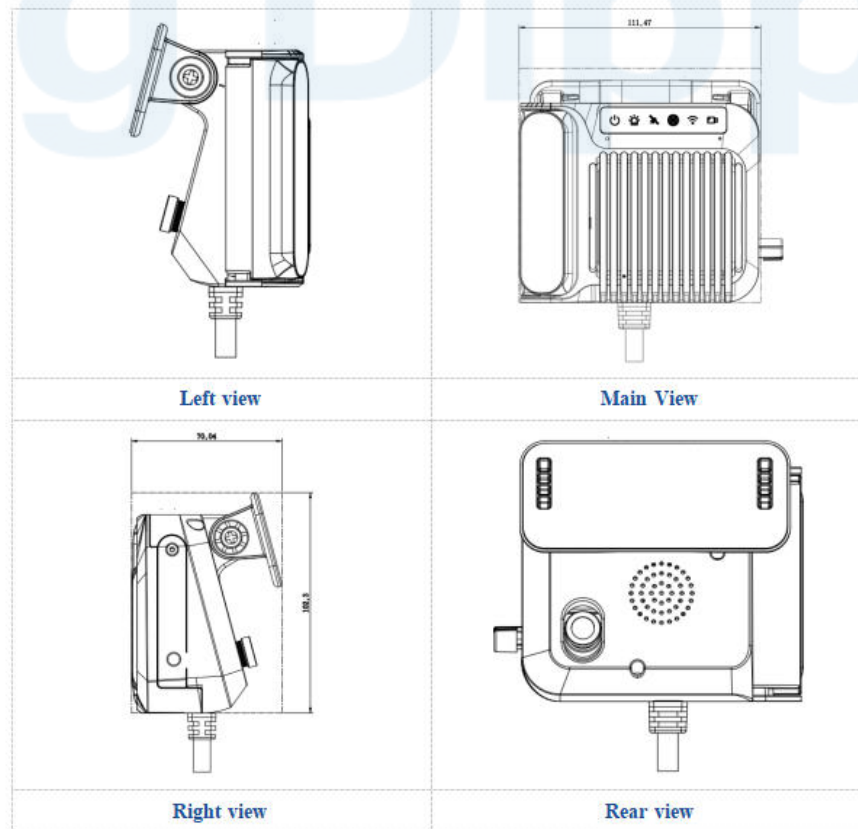
Infrared light	Support
LED light status	
Power status light	 Out/green light Out: indicates that the device is not powered Always green: indicates normal power supply to the device
Alarm indicator	 Out/red light Out: indicates that the device is not generating an alarm Red light flashes three times: indicates that the device generates an alarm
GPS signal light	 Out/red light Out light: indicates normal equipment positioning Red always on: indicates that the device positioning work is abnormal (not positioned or not connected to the module or the module is damaged) Red flashing (once per second): indicates poor device positioning quality
Network Status Light	 Out/red light Out: indicates that the device is connected to the server normally Red light is always on: indicates that the device is connected to the server abnormally Red light blinks (once per second): indicates that the device is in flight mode
WIFI status light	 Out light/red light/green light Out: indicates that the device is in Disable or Client mode Green light is always on: indicates that the device is in AP mode Red light is always on: indicates that the device WIFI abnormal
Video status light	 Out/red light Out light: indicates that the self-contained camera or extended camera recording status is normal Red light is always on: indicates that the self contained camera or extended camera recording stop (including privacy mode) / failure

	* Video enable (main stream, sub-stream) is turned on, and will alert when it detects no video, and video enable (main stream, sub-stream) is turned off as the normal processing of video status.
Storage	
Micro SD card	Support Micro SD-Card×1, (SDXC 32GB/64GB/128GB/256GB) Read and write rate minimum requirement Class10, recommended to use Class10 and above
Sensors	
Six-axis sensors	Supports rapid acceleration, deceleration, turning and collision detection
Interface	
RS232	1 channel
RS485	Not supported
I/O input	3 channels
I/O Outputs	1 channels
Pulse speed input	1 channel
Extended Interface	Does not support external expansion
CAN	Not supported
USB	1 channel, mini USB interface
Network	
WIFI	4G &5G (IEEE Std.802.11a/IEEE Std.802.11b/ IEEE Std.802.11g /IEEE Std.802.11n/IEEE Std.802.11ac)
4G	Support card tray type SIM card (Nano SIM card) Latin American version: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40 WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8

	<p>European version:</p> <p>LTE FDD: B1/B3/B7/B8/B20/B28A</p> <p>WCDMA: B1/B8</p> <p>GSM: B3/B8</p> <p> Warning: Industrial-grade SIM card (MP2) is required, and ordinary-grade SIM card (MP1) is forbidden, and we are not responsible for any problems caused by using ordinary-grade SIM card.</p>
Positioning	
GNSS	<p>Support</p> <p>GPS L1 1575.42MHz</p> <p>GALILEO E1B/C1</p> <p>GLONASS L1OF 1602MHz</p> <p>SBAS: WAAS, EGNOS, MSAS, GAGAN</p>
Power Related	
Power supply	Support 12V, 24V vehicles (no configuration required)
Power consumption	<p>Device standby:</p> <p>Typical power consumption (SD card installed, SIM card dial-up installed): 12V/450mA, 24V/230mA</p> <p>Full load power consumption (SD card installed, SIM card dialing installed, WIFI on, IR light on): 12V/550mA, 24V/280mA</p> <p>*The above data are laboratory specific environmental test data, due to individual product differences, use of different environments and testing methods may vary</p>
Environment	
Operating temperature	-40°C~+70°C (-40°F~+158°F)
Storage	-40°C~+85°C (-40°F~+185°F)

temperature	
Working humidity	15% - 95% non-condensing
Storage humidity	15% - 95% non-condensing
Protection level	IP30 *The main body is not waterproof
Size	
Dimension L×W×H	Main machine: 102mm×1110mm×170mm (without bracket); error ±2mm
*Actual size and weight may vary depending on configuration, manufacturing process, and measurement method	
Packing list	
AD Pro3.0×1, power box×1, standard power cord×1, hexagonal screwdriver×1, mounting bracket×1, bracket bolt×2, card pin×1, desiccant×1, alcohol wool×1	
* Because the configuration varies from region to region, the final results of the unboxing shall prevail	

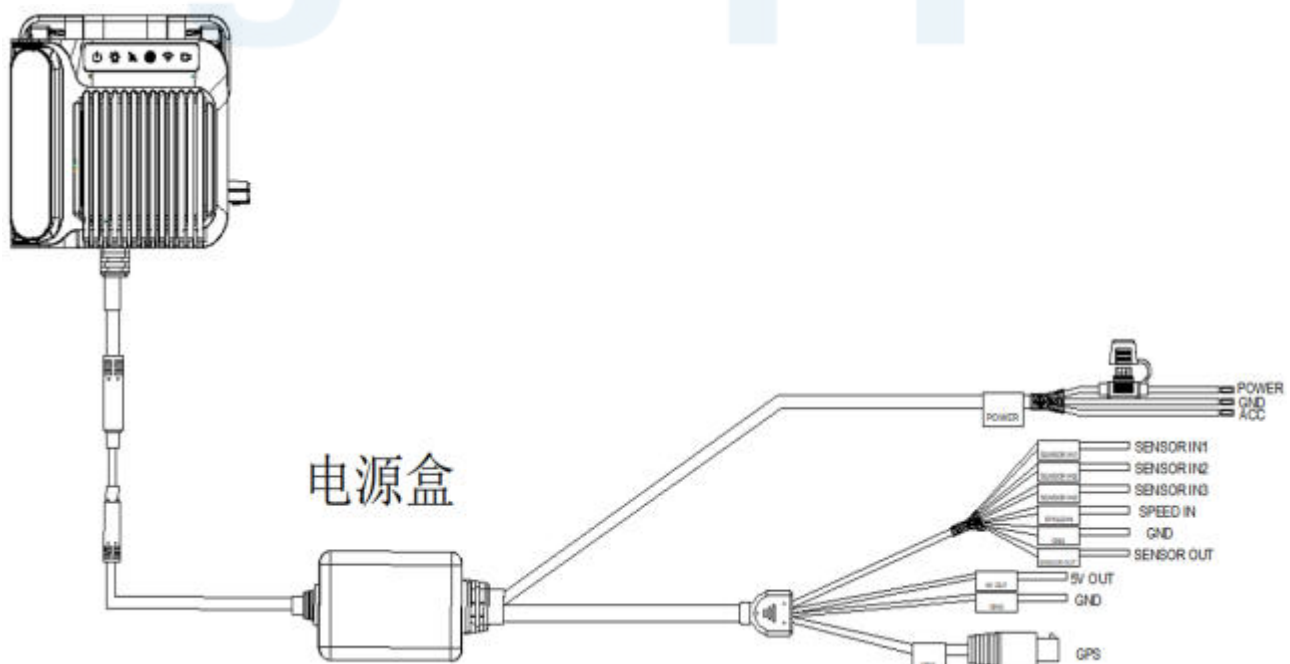
Dimensional drawing (unit mm)



System connection diagram

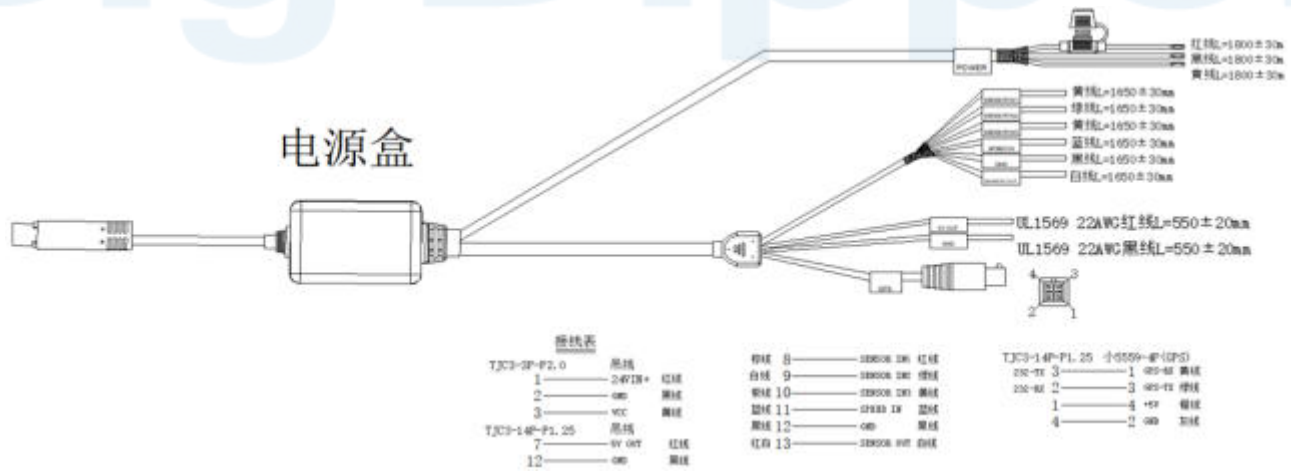
The standard shipping list includes a standard power cable to support ACC power pickup method and vehicle connection.

System connection diagram



Wire interface definition

Power output line interface definition



Special Notes

- 1) This product needs to be installed by professionals, otherwise there is a risk of electric shock, damage to the vehicle wiring, affecting the AI experience and the risk of equipment falling off
- 2) This product is used by the direct sunlight surface temperature will exceed 60 degrees, please do not touch the direct sunlight surface to prevent burns