dcl.
Camatics

VT3600
Installation Guide

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Abbreviations Explanation	
VBR	Variable Bit Rate
CBR	Constant Bit Rate

1. Product Introduction

The **VT3600** is a connected dashcam that helps to maximise fleet efficiency. It transmits real-time, accurate vehicle positional information and operational data to our fleet management platform. It also provides high-quality remote intercom and live view video playback to make fleet management even easier and highly efficient.

2. Functions and Features

- Ultra-wide 143° DFOV forward-facing lens, supporting up to 1080P full-HD video recording
- Supports up to 2-channel video recording
- H.264/H.265 encoding
- 2 x 256GB dual-Micro SD card storage, supporting the simultaneous storage of main streams and sub streams
- Built-in Wi-Fi, 4G communication module and positioning module
- AES256 encryption for video/audio data, encryption protocol TLS1.3 for data transmission
- 4-channel IO input, 1-channel CAN and 1-channel RS232
- Compact design that won't affect the driver's view of the road regardless of the vehicle size
- OBD power supply, easy plug-and-play installation
- Supports an echo and noise-cancelling algorithm to improve the quality of the two-way audio communication
- Sleep mode, remote wakeup
- Built-in 6-axis G-shock sensor, supporting rapid acceleration, rapid deceleration, harsh cornering, and incident detection

3. Specifications

Product model: VT3600	
System	Embedded Linux
Language	Options: Chinese, English, Spanish (Latin American), Portuguese (Latin American), French, Russian and Japanese. Default: English. * The language includes interface language and voice reminder. TTS supports Chinese and English only.

Video/Audio	
Video/Audio Recording	2-channel video (default: 1 channel; extension: 1 channel) + 1-channel audio
Maximum Capability	1080@25fps (Road-facing) +1080P@25fps (AHD)
Image Setup	Adjustable brightness, chroma, contrast, colour saturation and sharpness
Video Coding	Options: H.264 and H.265. Default: H.265
Audio Compression Standard	Options: ADPCM, G.711, and G.726. Default: ADPCM
CBR/VBR	Options: VBR and CBR. Default: VBR
Audio	Built-in MIC
Loudspeaker	Built-in speaker, power: 3W, with adjustable volume, not less than 70dB at 1m distance
Parameters of road-facing lens	
Sensor Type	1/2.8" 5-megapixel CMOS sensor
Shutter Speed	CMOS sensor shutter speed
Lens	Focal length: 2.6 mm HFOV: 114°; VFOV: 77°; DFOV: 143°; Deviation: ±5°
Minimum Illuminance	Colour: 0.05 Lux/F1.2
Lens Mount	Built-in lens
Wide Dynamic Range (WDR)	Digital WDR
Backlight Compensation	Supported
Signal-to-Noise Ratio (S/N)	≥48dB

LED Indicator Status

Power Status Lights	**Off/Green** • Off: The device is not powered on • Steady green: The device is powered normally
Alarm Indicator	**Off/Red** • Off: The device does not generate any alarm • Red flashes three times: The device generates an alarm
GPS Signal Indicator	**Off/Red** • Off: The device positioning runs normally • Steady red: The device positioning runs abnormally (not positioned, or module not connected or damaged) • Red flash (once per second): The device positioning is poor
Network Status Indicator	**Off/Red** • Off: The device is connected to the server normally • Steady red: The device is connected to the server abnormally • Red flash (once per second): The device is in airplane mode • * Airplane mode: Turn off the network signal of the dashcam to ensure safety when the vehicle enters a petrol station.
Wi-Fi Status Indicator	**Off/Red/Green** • Off: The device is in Disable or Client mode • Steady green: The device is in AP mode • Steady red: The device Wi-Fi runs abnormally
Recording Status Indicator	**Off/Red** • Off: The built-in or extended camera runs normally • Steady red: The built-in or extended camera stops (including privacy mode)/fails • * When the video recording function is enabled (main stream and sub stream), the prompt will be given if no recording is detected. If the video recording function is disabled (main stream and sub stream), it will be regarded as normal recording status.

Storage	
Micro SD card	Micro SD card×2, (SDXC 32GB/64GB/128GB/256GB) Read/write rate: Class10 or above is recommended
Sensor	
Six-axis Sensor	Harsh acceleration, Harsh deceleration, Harsh cornering, and incident detection
Port	
RS232	1-channel
I/O Port	4-channel input
CAN	1-channel (standard J1939 protocol) **Warning:** As some data fields may be customised by vehicle manufacturers, the final measured data will prevail. In the event that any required data is not supported, the integrated development is acceptable based on a specific protocol.
USB	1 × mini USB port
Button	1 To switch Wi-Fi to AP mode, press the button twice within 2s.
Network	
Wi-Fi	Supports 2.4G (IEEE Std.802.11a/IEEE Std.802.11b/ IEEE Std.802.11g//IEEE Std.802.11n)
4G	Plug-in SIM card (Nano SIM card) **For North America:** LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5 **For Europe and Asia:** LTE FDD: B1/B3/B7/B8/B20/B28A WCDMA: B1/B8 GSM: B3/B8

Network

4G	**For Latin America:** LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40 WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8 **Warning:** Industrial SIM cards (MP2) are required We are not responsible for any problems caused as a result of using ordinary SIM cards.

Positioning

GNSS	Supported GPS L1 1575.42MHz SBAS: WAAS, EGNOS, MSAS, GAGAN

Power Related

Power supply	12V and 24V vehicles (self-adaptive)
Power consumption	• In standby mode: 13.5V@5.67mA, 27V@3.4mA • In sleep mode (4G and MCU powered): 13.5V@59~118mA, 27V@29~53mA • Typical power consumption (with dual SD cards installed and SIM card for dialling): about 4.79W • Full-load power consumption (with dual SD cards installed, SIM card for dialling, Wi-Fi turned on, IPC and AHD connected, and infrared lights turned on): about 6.78W * The above data is test data obtained in a specific environment in a laboratory, and may vary with individual products, service environments, and testing methods.

Environment	
Operating Temperature	-40°C ~ +70°C (-40°F ~ +158°F)
Storage Temperature	-40°C ~ +85°C (-40°F ~ +185°F)
Operating Humidity	15~95% non-condensing
Storage Humidity	15~95% non-condensing
IP Rating	IP30 (The Dashcam is non-waterproof)

Dimensions and Weight	
Dimensions **L x W x H**	• Dashcam: 113 mm x 67.3 mm x 57 mm (excluding bracket); Deviation: ±2 mm • Package: 176 mm x 150 mm x 14 mm; Deviation: ±3 mm
Weight	• Net weight (device only): 265g • Gross weight (including accessories and package): 715g • Deviation: ±10g * The actual dimensions and weight may vary with the individual product differences, manufacturing processes, and testing methods.

Package Contents

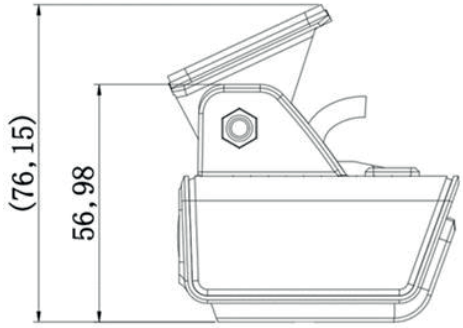
- **VT3600** x1
- **Power supply** x1
- **Standard power cable** x1
- **Allen key** x1
- **Mounting bracket** x1
- **Bracket bolt** x1
- **Lever** x1
- **Desiccant** x1
- **Alcohol cotton** x1

* The configuration may vary in different regions.

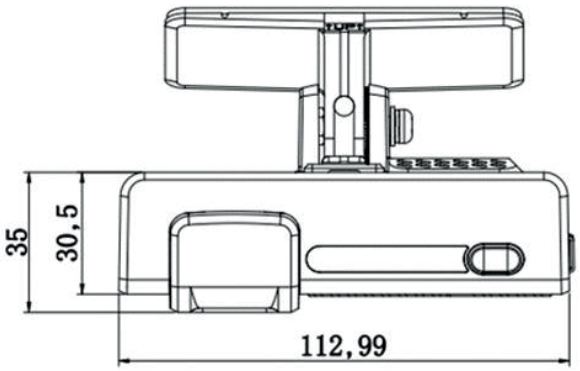
4. Dimensional Drawings (Unit: mm)

Take out the Dashcam (power-off), and use the Allen key in the kit to open the card slot panel on the right of the Dashcam by turning counterclockwise.

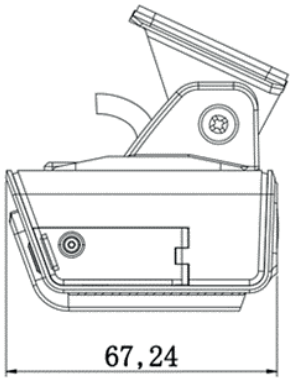
Left view



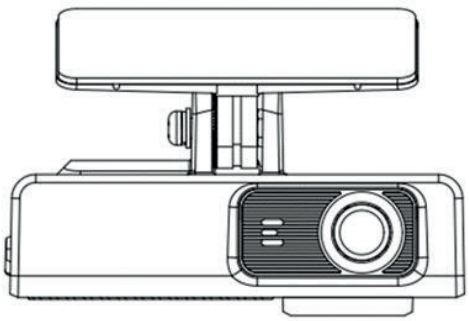
Front view



Right view



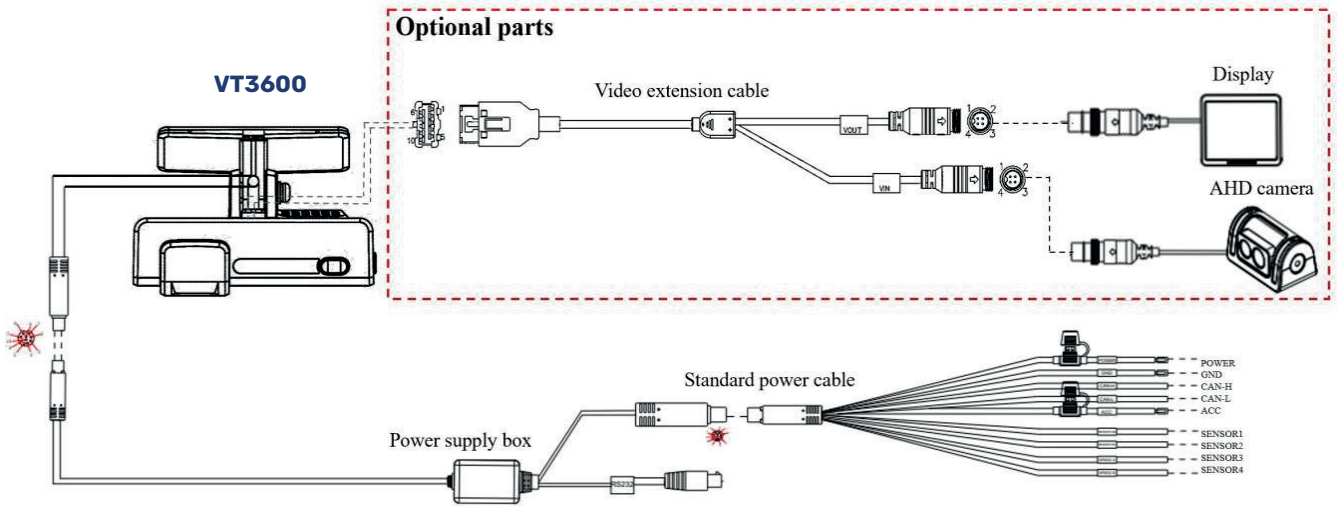
Rear view



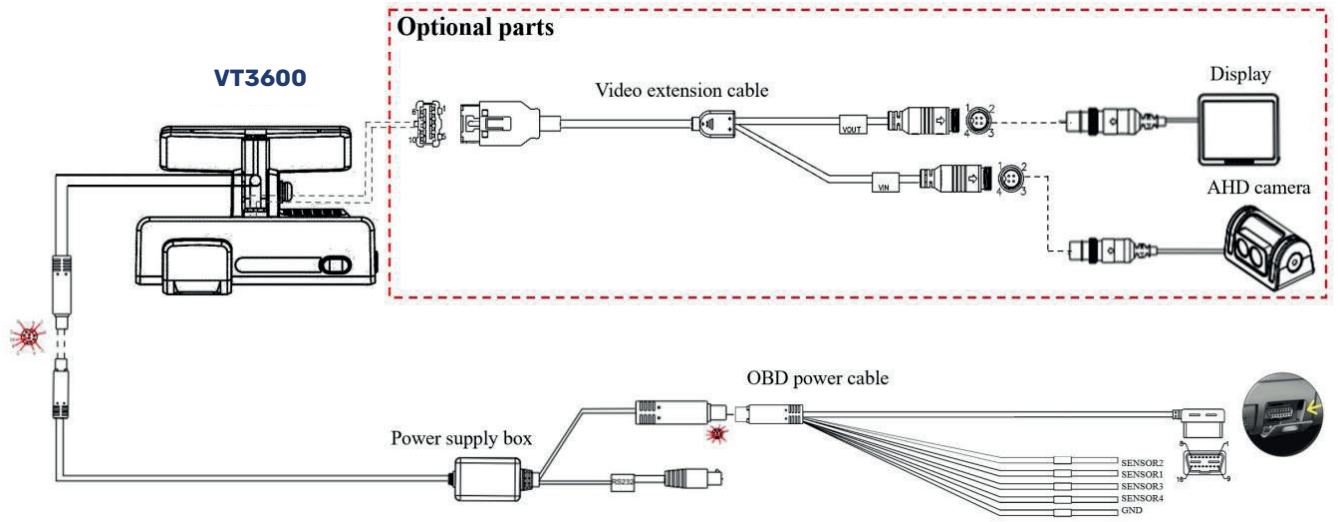
5. System Connection Diagram

The standard packing list contains a standard power cable that supports ACC power supply and vehicle connection. You can select the OBD power cable which supports OBD power supply and vehicle connection.

5.1 Connection Diagram for ACC Power Supply System

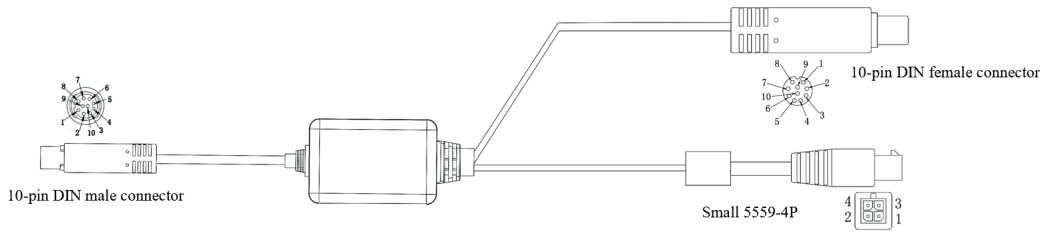


5.2 Connection Diagram for OBD Power Supply System



5.3 Cable Connector Pinouts

5.3.1 Power Supply Box Connector Pinout



Pinout

TJC3-12PIN-P1.25		10-pin DIN male connector		
1+2	10	DC+	Red+Red-White	
3+4	9	DC-	Black+Black-White	
5	8	TX	White	
6	7	RX	Brown	
7	6	SIN1	Purple	
8	5	SIN2	Blue	
9	4	3.3V	Grey	
10	3	CAN-H	Green	
11	2	CAN-L	Yellow	
12	1	ACC	Orange	

Pinout

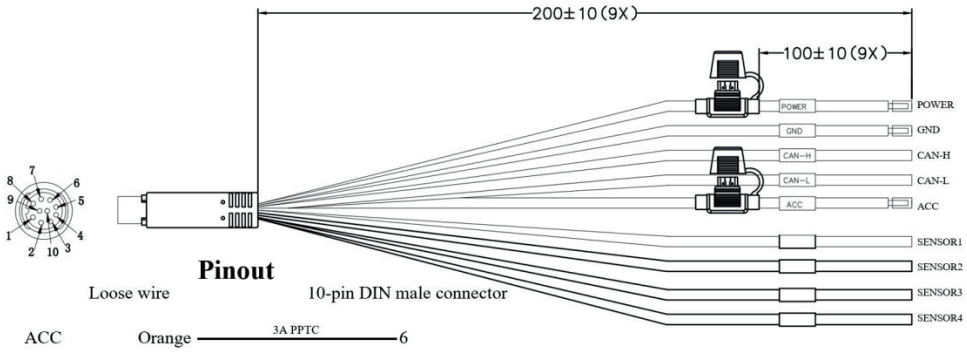
TJC3-12PIN-P1.25		10-pin DIN female connector		
1+2	10	GND	Black+Black-White	
3+4	3	24V+	Red+Red-White	
7	5	SIN1	Purple	
8	7	SIN2	Brown	
10	2	CAN-H	Green	
11	1	CAN-L	Yellow	
12	8	SIN3	Blue	
13	9	SIN4	Grey	
14	6	ACC	Orange	
15	4	OBD-CHK	White	

Pinout

TJC3-2PIN-P1.25		Small 5559-4P	
1	1	+12V	Pink
2	3	+5V	Blue-White

TJC3-15PIN-P1.25		Small 5559-4P	
9	7	GND	Black
6	2	232TX	Green
5	1	232RX	Yellow

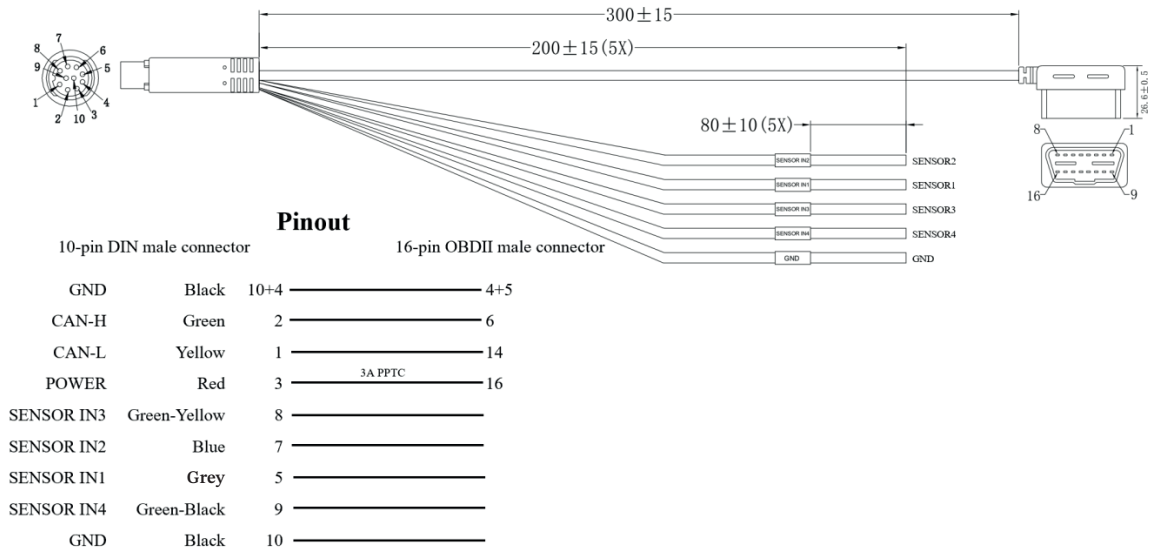
5.3.2 Standard Power Cable Connector Pinout



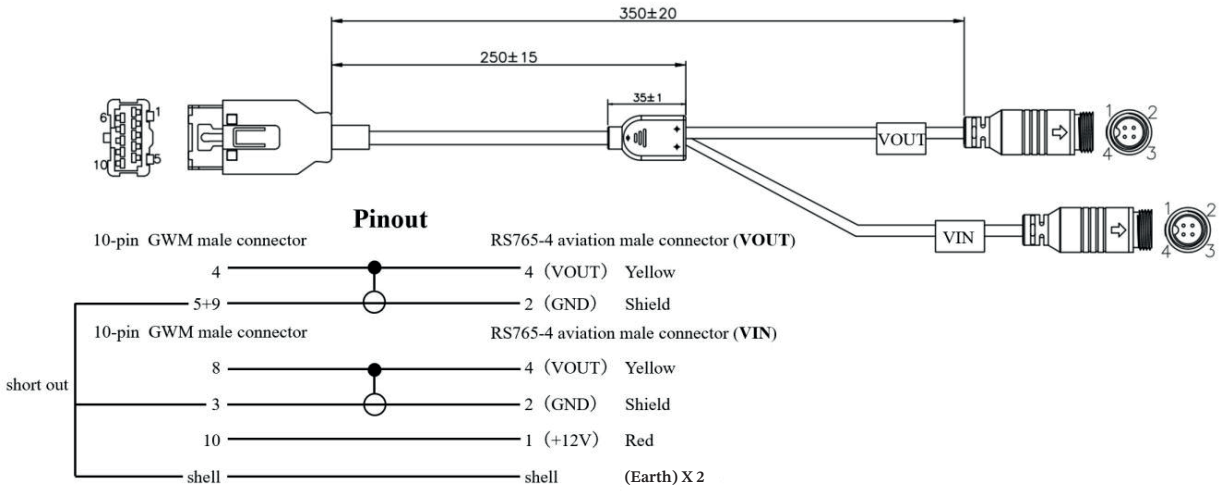
Pinout

semi-stripped	ACC	Orange	3A PPTC	6
	CAN-L	Yellow		1
	CAN-H	Green		2
	SENSOR IN3	Blue		8
	SENSOR IN2	Green-Yellow		7
	SENSOR IN1	Grey		5
	SENSOR IN4	Green-Black		9
semi-stripped	POWER	Red	3A PPTC	3
semi-stripped	GND	Black		10

5.3.3 OBD Power Cable Connector Pinout



5.3.4 Video Output Cable Connector Pinout



6. Notice

1. The product needs to be installed by a professional, otherwise there may be a risk of electric shock or damage to the vehicle.
2. The surface temperature may exceed 60°C when the product is in use under direct sunlight.
3. Please do not touch the surface exposed to direct sunlight to avoid any injury.

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