

# G40 PRO Industry AI Dashcam

## 5 Channel video recording

Built-in Microphone and Speaker, support two-way Audio function and Dual camera.

Compatible  
Available  
Cameras

Support  
2 x NANO SIM  
cards.

Support  
2 x Micro-SD cards  
storage each up to  
1 TB.

Support preview,  
playback and  
editing parameters  
via APP.

36 Month Warranty

# AI Driver Monitoring.

**Distraction Prompts:**  
Fatigue Driving (Closing Eyes)  
Fatigue Driving (Yawn)  
Phone Call  
Smoking  
Seatbelt Unbuckled  
Tampering  
IR Interrupted Sunglasses  
Face Recognition

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## AE-DI5052-G40 PRO Industry Dashcam



- Support up to 5-channel video recording, 2-ch default and 3-ch extension.
- Front camera: 1620P, Rear camera: 1080P, Extension channel: 1080P.
- Built-in Microphone and Speaker, support two-way audio function.
- Support GPS/GLONASS/GALILEO and time, speed overlay on picture.
- Built-in Wi-Fi communication module, support AP access point.
- Built-in Bluetooth module, support connecting to third-party sensors.
- Built-in 4G module, support 2×NANO SIM card.
- Support 2 × Micro-SD card storage, each up to 1 TB. Support recording overwrite.
- Support preview, playback and editing parameters via APP.
- Support HCT, HCP and CMSV6 Platforms.
- Built-in 6-axis gyroscope sensor, start emergency video and video backup lock when the vehicle has a collision or severe vibration.
- Support 2-ch IO alarm input, 3-ch steering signal.
- Support Advanced Driving Assistance System (ADAS), Driver Status Monitoring (DSM), Driver Authentication, People counting.
- Support sentry mode, protect and monitor all-day parking.
- Easy installation and operation.

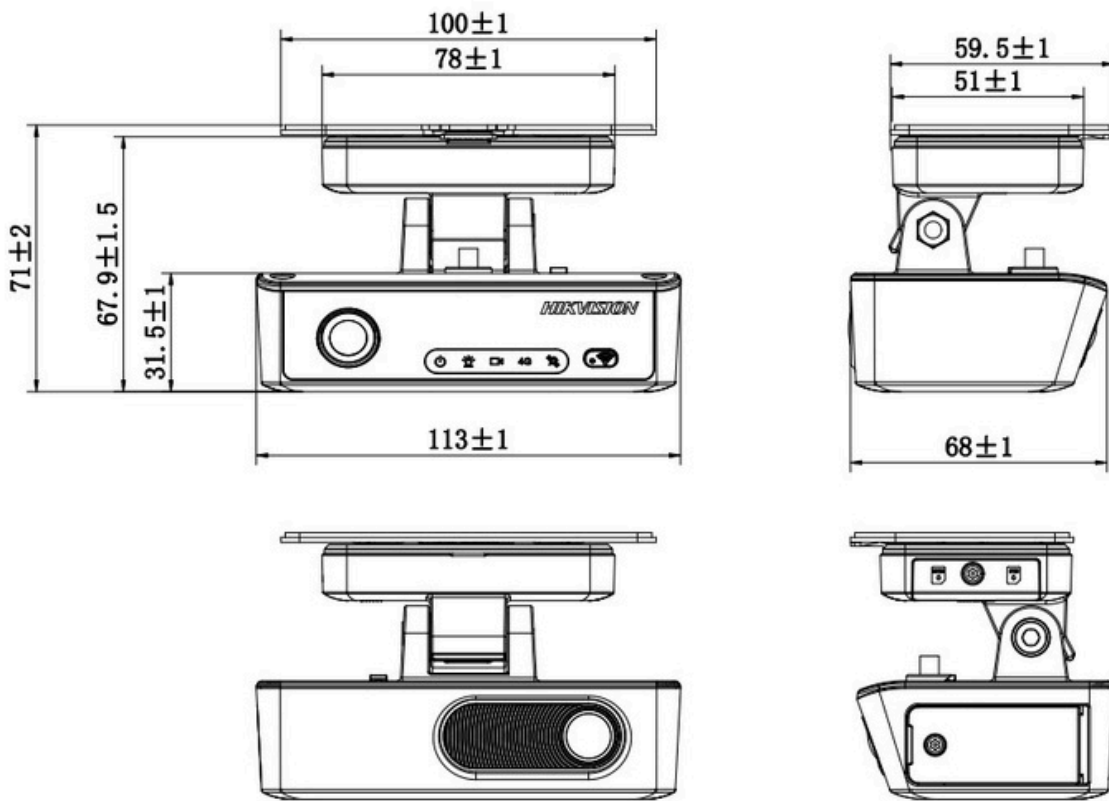
## □ Specification

Camera	
Image Sensor	Front view: 1/2.7" CMOS Rear view: 1/2.8" CMOS
Min. Illumination	Front view: 0.1 Lux Rear view: support IR
Shutter Speed	Front view: 1/30 s Rear view: 1/30 s
Lens	
Focal Length	Front view: 3mm Rear view: 2.28mm
Max. Aperture	Front view: F1.6 Rear view: F2.2
Lens Mount	Front view: M12 Rear view: M12
FOV	Front view: HFOV: 123° VFOV: 63° DFOV: 142°  Rear view: HFOV:145° VFOV:78° DFOV: 172°  Note: Horizontal, Vertical Tolerance±3°; Diagonal Tolerance±5°
Video Audio Input	
Video Input	5-Channel Video (Default: 2-Channel; Extension: 3-Channel)
Audio Input	2-Way, Built-In Sound Pickup
Video Audio Output	
Audio Output	1-Way, Built-In Speaker
Video Output	1-Way CVBS/TVI/AHD Video Output
Video Audio Decoding Parameters	
Main Stream Resolution	CH1: 2880 × 1620, 1920 × 1080 (default), 1280 × 720 CH2: 1920 × 1080, 1280 × 720(CH2 Default) Note: The default resolution of CH3-CH5 is decided by external camera.
Sub-Stream Resolution	CH1: 1280 × 720 (Default), 640 × 480 CH2~CH5: 640 × 480 (Default)
Main Stream Frame Rate	10 fps, 15 fps, 25fps, 30 fps available. The default CH1 is 25 fps, and CH2-CH5 is 15 fps.
Sub-Stream Frame Rate	10fps, 15fps, 25fps, 30 fps available, CH1-CH5 default 15 fps.
Video Compression Standard	H.264 (Default), H.265
Video Bit Rate	CH1: 20 Mbps, 16 Mbps, 8 Mbps, 4 Mbps (default), 2 Mbps, 1 Mbps CH2~CH5: 4 Mbps, 2 Mbps, 1 Mbps (default), 512 Kbps
Video Format	MP4
Audio Sampling Rate	G711U: 8kHz(Default) G711A: 8kHz
Audio Compression Standard	AAC: 16kHz AAC/G711u (Default)/G711A G711U: 64 kHz (Default)
Audio Bit Rate	G711A: 64 kHz AAC: 64 kHz
Two-Way Audio Compression Standard	AAC/G711u (Default)/G711A
Stream Type	PS Stream
Audio	
Built-in microphone.	Support
Internal Speaker	Support

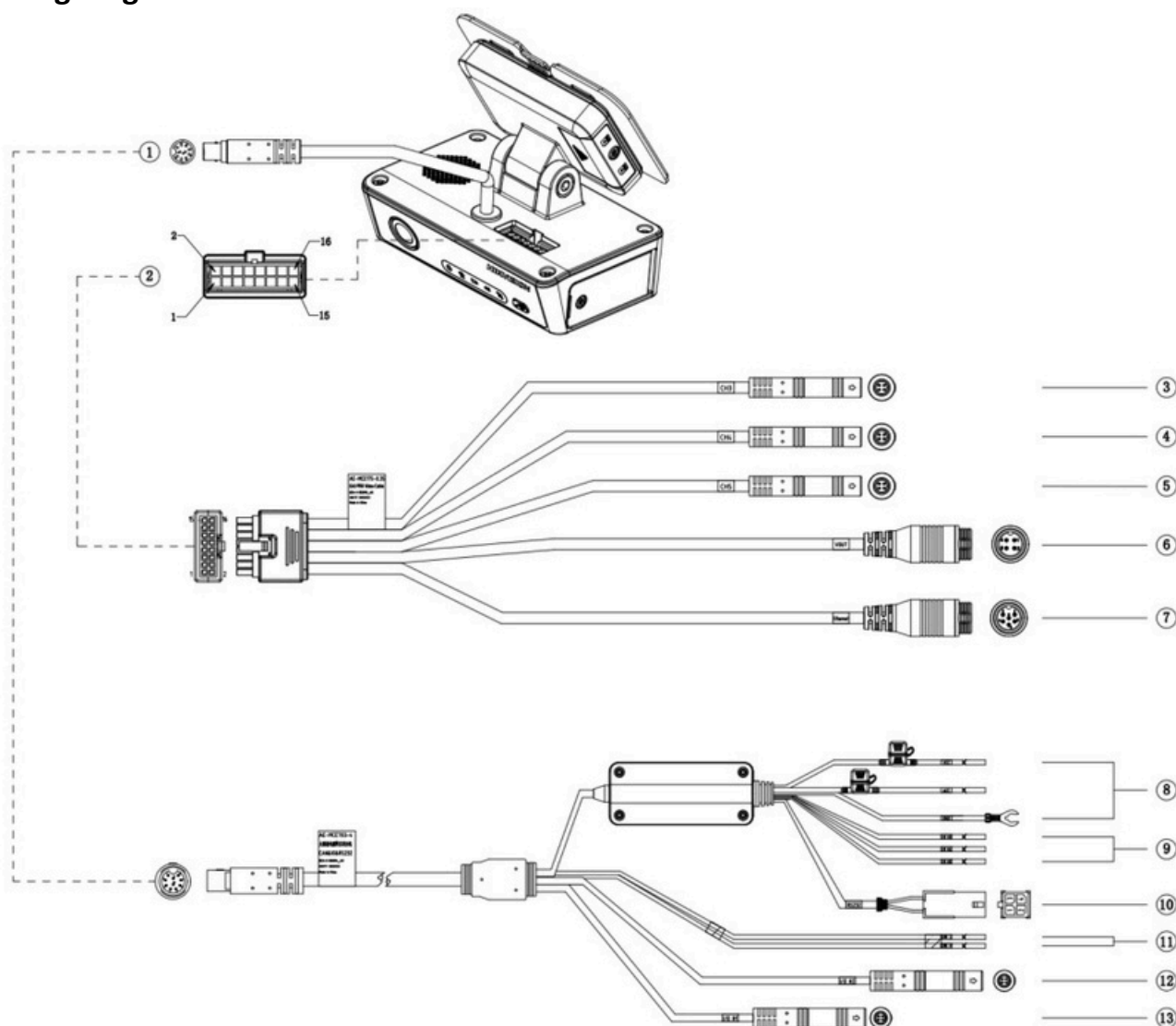
Wireless Network	
Mobile Network	<p>Europe:            LTE-FDD: B1, B3, B5, B7, B8, B20, B28            LTE-TDD: B38, B40, B41            WCDMA: B1, B5, B8            GSM/EDGE: B3, B8</p> <p>Latin America:            LTE-FDD: B1, B2, B3, B4, B5, B7, B8, B28, B66            LTE-TDD: B40            WCDMA: B1, B2, , B4, B5, B8            GSM/EDGE: B2, B3, B5, B8</p> <p>Warning: The device requires industrial SIM card. Normal SIM card is not allowed. We are not responsible for any problems caused by using any normal SIM card.</p>
Image	
WideDynamic Range	Front view: Wide Dynamic Range Rear view: Linear
Signal to Noise Ratio OSD	Front view: 42dB Rear view: 42dB
	Date, time, GPS latitude and longitude, speed, license plate, and channel name.
Peripheral Interface	
Alarm Input	2-Way Alarm(4pin BMW), 3-Way Steering(Half Stripped Lines)
CAN	1
SIM Card Slot	2 (plug-in type, support industrial-grade Nano SIM card, dual-card single waiting)
Network Interface	1 x 6-pin aviation header
Interface	
RS232	1
Power Supply Interface	1 (10pin BMW)
Reset Key	1 (pinhole button) Press ( $\geq 1$ sec & $< 5$ sec) to reset the device to restart.
Function Key	Press and hold the reset key ( $\geq 5$ sec) to restore the default parameter settings. One Wi-Fi button. Short press to enable AP mode.
Wireless Transmission	
Wi-Fi Band	2.4 GHz
Wi-Fi Protocol	802.11 b/g/n
Wi-Fi Working Mode	AP, STATION
Satellite Positioning	
Positioning	GPS (Global Positioning System) GLONASS (Global Navigation Satellite System) GALILEO (Galileo satellite navigation system)
Sensor	
G-Sensor	6-Axis
Location Algorithm	
Inertial Navigation	Support
Intelligent Function	
Face Picture Comparison	Support

Advanced Driving Assistance System (ADAS)	<ul style="list-style-type: none"> <li>Forward Collision Warning (FCW)</li> <li>Lane Departure Warning (LDW)</li> <li>Pedestrian Collision Warning (PCW)</li> <li>Traffic Sign Recognition (TSR)</li> <li>Headway Monitoring Warning (HMW)</li> <li>Forward Car Leaving (FCL)</li> <li>Traffic Light Detection (TLD)</li> <li>Solid Lane Departure Warning(SLW)</li> </ul>
Driver Status Monitoring (DSM)	<ul style="list-style-type: none"> <li>Distraction Prompt</li> <li>Fatigue Driving (Closing Eyes)</li> <li>Fatigue Driving (Yawn)</li> <li>Phone Call</li> <li>Smoking</li> <li>Seatbelt Unbuckled</li> <li>Tampering</li> <li>IR Interrupted Sunglasses</li> </ul>
<b>General Standard</b>	
Product Dimension	113 mm × 71 mm × 68 mm (including mounting bracket).
Package Dimension	195 mm × 138 mm × 100 mm
Protection	IP4X (not water-proof)
Operating Temperature	-30 °C to 70°C
Operating Humidity	10% to 95% (non-condensing)
Storage Temperature	-40°C to 85°C
Product Weight	321 g (with mounting bracket)
With Package Weight	748 g
Storage	Supports dual TF card (up to 1TB each). Class 10 or above are recommended.
Image Format	JPEG
Indicator	<ul style="list-style-type: none"> <li>GNSS Indicator:</li> <li>Solid light: Normal;</li> <li>Not on: Abnormal;</li> <li>Record Indicator:</li> <li>Solid light: Recording normal;</li> <li>Not on: Recording exception</li> <li>4G indicator:</li> <li>Solid light: 4G signal is normal. Platform connected.</li> <li>Flashing: 4G signal is normal. Platform not connected.</li> <li>Not on: No 4G signal.</li> <li>Alarm Indicator:</li> <li>Flashing: Active Security Alarm</li> <li>Not on: Normal</li> <li>Power Status Indicator:</li> <li>Solid light: Device is on.</li> <li>Not on: Device is off.</li> <li>Wi-Fi Status Indicator:</li> <li>Solid light: Wi-Fi AP is on. App is connected.</li> <li>Flashing: Wi-Fi AP is on. APP is not connected.</li> <li>Not on. Wi-Fi AP is off.</li> </ul>
Power Supply	Max: 15 W
Power Consumption	English, Turkish, Portuguese, Spanish, Russian
Language	Embedded System
System	

□ Dimension (Unit: mm)



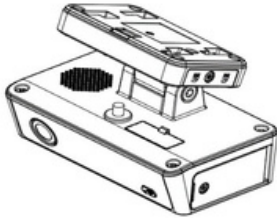
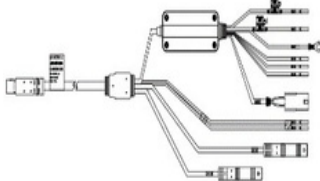
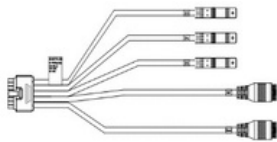



## □ Wiring diagram



No	Interface Name	Interface Form	Interface Definition	Description
1	POWER	10-pin BMW Connector Socket Plug-In	1. ACC 2. CAN_L 3. CAN_H 4. 5V_OUT 5. I/O #2 6. I/O #1 7. RS232_TX 8. RS232_RX 9. GND 10. VCC	10-pin BMW Female Connector connected to power cord.
2	Video Interface	16-pin male plug-in	1. RJ45_TXP 2. RJ45_TXN 3. RJ45_RXP 4. RJ45_RXN 5. AIN1 6. TVI_IN1 7. P12V0_CAM1 8. GND 9. P12V0_CAM2 10. TVI_IN2 11. P12V0_CAM3 12. GND 13. GND	16-pin male plug-in connected to video connection line 16-pin female plug-in.

			14.TVI_IN3 15. GND 16. CVBS_OUT	
3	CH3	4-pin BMW Male Connector	1. P12V0_CAM1 2. GND 3. TVI_IN1 4. AIN1	4-pin BMW Male Connector connects to 4-pin BMW Female Connector Camera
4	CH4	4-pin BMW Male Connector	1. P12V0_CAM2 2. GND 3. TVI_IN2 4. NA	4-pin BMW Male Connector connects to 4-pin BMW Female Connector Camera
5	CH5	4-pin BMW Male Connector	1. P12V0_CAM3 2. GND 3. TVI_IN3 4. NA	4-pin BMW Male Connector connects to 4-pin BMW Female Connector Camera
6	Video Output	4-pin Aviation Connector	1.NA 2. GND 3.NA 4. AV_OUT	4-pin Aviation Connector connects to 4-pin Aviation Female Connector display screen (additional power supply is required for display screen).
7	Network Interface	6-pin Aviation Connector	1. RJ45_TXN 2. RJ45_TXP 3. NA 4. RJ45_RXN 5. RJ45_RXP 6. NA	6-pin Aviation Connector connects to 6-pin Aviation Female Connector network cable
8	VCC	Half Stripped Lines	/	VCC connects to vehicle positive via the power connector.
8	ACC	Half Stripped Lines	/	ACC connects to vehicle ACC via the power connector.
8	GND	FORK Naked Terminal	/	GND connects to the ground line.
9	IO3/IO4/IO5	Half Stripped Lines	/	Connect the vehicle with the signal of left turning, right turning, and reverse turning.
10	RS232	MOLEX	1.5V 2. GND 3. RS232_TXD 4. RS232_RXD	Reserved connection to permission.
11	CAN_L	Half Stripped Lines	/	Connect the vehicle and transmit the data of the vehicle.
11	CAN_H	Half Stripped Lines	/	
12	I/O #2	4-pin BMW Male Connector	1. GND 2. I/O #2 3.NA 4.NA	Connects to alarm button, separate capture and upload alarm information to the platform.
13	I/O #1	4-pin BMW Male Connector	1. GND 2. I/O #1 3.NA 4.NA	

□ Packing list

No	Name	Quantity	Picture	Specifications
1	Dashcam	1		Dashcam Size:113 mm × 71 mm × 68 mm
2	Power cord	1		Line length:3.9m
3	Video line	1		Line length:0.35m
4	L-type wrench	1		T8 plum blossom with column M5 hexagon Size: 55mm*25mm
5	Install the bracket	1		Size:59.5mm*100mm
6	QUG	1		/

## AE-VC124T-IT IR Waterproof Vehicle-Mounted Camera



- Adopts progressive scan CMOS to prevent motion image aliasing
- Supports HD image coaxial output with 720P resolution
- Min. illumination: 0.1 Lux @(F1.2, AGC ON), 0 Lux with IR
- Supports auto electronic shutter to adapt to different monitoring environments
- Supports auto electronic gain and self-adaptation to light
- IP68, IK10
- Adopts shock-proof design and aviation output plug
- (Optional) Supports left-right mirroring

# NB

Extension Camera Cable and converter cable at additional costs.

Extension Camera Cable available in 5m.

# Side View

## □ Specification

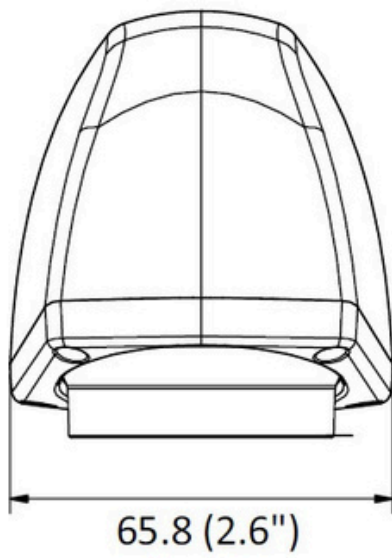
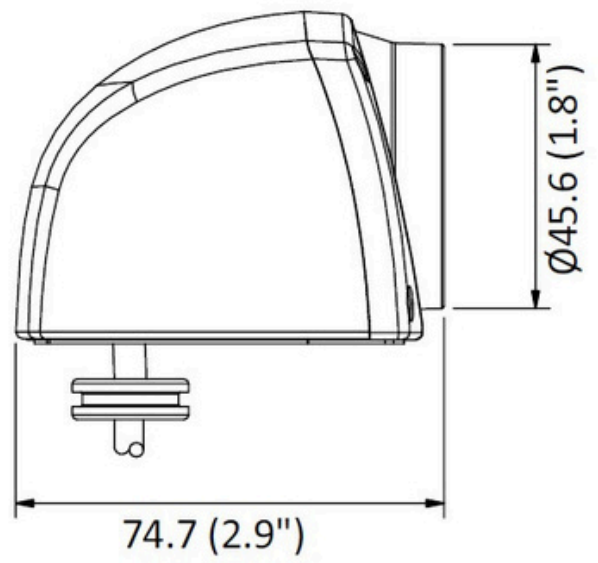
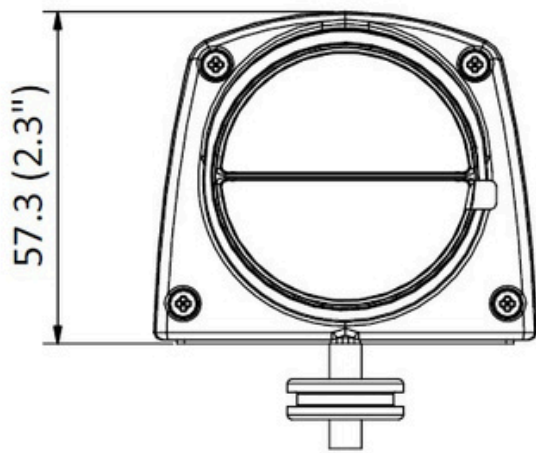
Selection Parameter	
Min. Illumination	0.1 Lux@(F1.2, AGC ON), 0 Lux with IR
Protection Level	IP68,IK10
Case Type	Turret
Resolution	1280×720
Lens Type	Fixed focal lens, 2.1, 2.8, 3.6 mm optional
FOV	2.1 mm, horizontal: 117°, vertical: 66°, diagonal: 143° 2.8 mm, horizontal: 96°, vertical: 50°, diagonal: 115° 3.6 mm, horizontal: 75°, vertical: 42°, diagonal: 86°
Sensor	Progressive Scan CMOS
IR Distance	10m
Camera	
Shutter Speed	1/50 s to 1/50,000 s
P/N	NA
Wide Dynamic Range	NA
Day & Night	Electronic
Lens	
Lens Mount	M12
Video	
Frame Rate	720P@25 fps
Image	
SNR	42 dB
Interface	
Video Output	TVI
Built-in Microphone	NO
Built-in Speaker	NO
Audio	NO
Interface Style	1 Vpp Composite Output (aviation plug) 1: video, 2: empty, 3: power, 4: ground
Supplement Light Unit	
Power Supply	9 to 16 V DC
Power Consumption	Max. 2.5 W
General	
Camera Material	Metal
Camera Dimension	74.7 mm × 65.8 mm × 57.3 mm (2.9" × 2.6" × 2.3")
Startup and Operating Conditions	-40 °C to 75 °C (-40 °F to 167 °F), 90%

## □ Available Model

AE-VC124T-IT(2.8mm)

AE-VC124T-IT(2.1mm)

Dimension



Unit: mm (inch)

## AE-VC153T-IT Square Analog Camera



- Progressive scan CMOS
- Up to 720P resolution
- Low illumination, 0.1lux @ (F1.2, AGC ON), 0 lux with IR
- Supports auto electronic day & night switch
- Supports auto white balance
- Supports left & right mirror mode
- IP 68 protection level

# NB

Extention Camera Cable and converter cable at additional costs.

Extention Camera Cable available in 5m.

# Rear View

## □ Specification

Selection Parameter	
Min. Illumination	0.1 Lux@(F1.2, AGC ON), 0 Lux with IR
Protection Level	IP68
Case Type	Square camera
Resolution	1280×720
Lens Type	Fixed focal lens, 2.1, 2.8, 3.6 mm optional
FOV	2.1 mm, horizontal FOV 98°, vertical FOV 81°, diagonal FOV 125° 2.8 mm, horizontal FOV 96°, vertical FOV 51°, diagonal FOV 115° 3.6 mm, horizontal FOV 75°, vertical FOV 44°, diagonal FOV 90°
Sensor	Progressive Scan CMOS
IR Distance	15m
Camera	
Shutter Speed	1/25 s to 1/50,000 s
P/N	P (Default format is PAL and support switching to NTSC)
Wide Dynamic Range	85dB
Day & Night	Electronic
Lens	
Lens Mount	M12
Video	
Frame Rate	720P@25 fps
Image	
SNR	42 dB
Interface	
Video Output	TVI
Built-in Microphone	No
Built-in Speaker	No
Audio	No
Interface Style	1 Vpp Composite Output (aviation plug) 1: video, 2: empty, 3: power, 4: ground
Supplement Light Unit	
Power Supply	9 to 16 V DC
Power Consumption	Max. 2.5 W
General	
Camera Material	Metal
Camera Dimension	83.2 mm × 46 mm × 41.6 mm (3.28" × 1.81" × 1.64")
Startup and Operating Conditions	-40 °C to 75 °C (-40 °F to 167 °F), 90% or less (non-condensing)

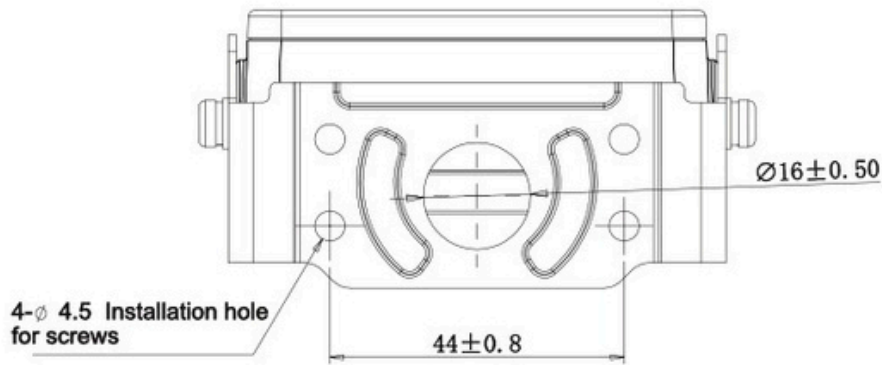
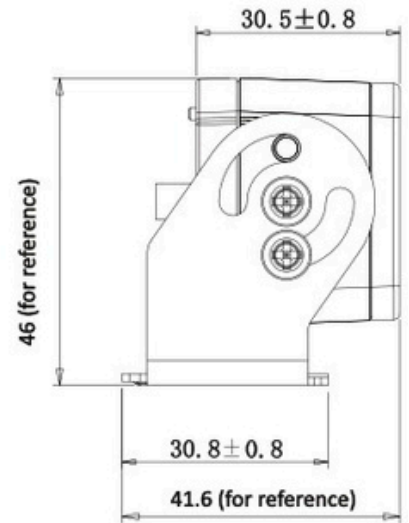
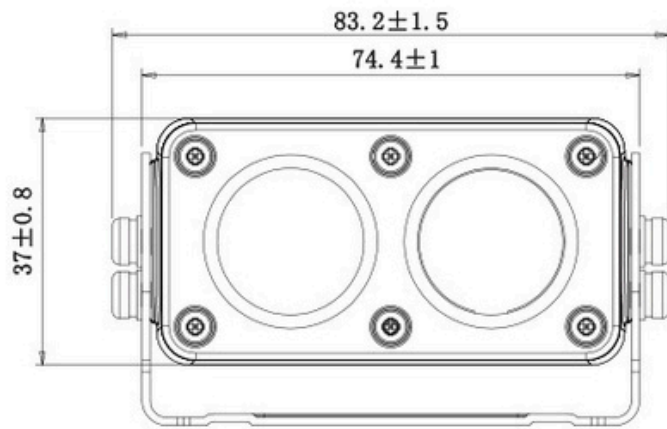
## □ Available Model

AE-VC153T-IT(2.1mm)

AE-VC153T-IT(2.8mm)

AE-VC153T-IT(3.6mm)

Dimension



Unit: mm