



EOS-ZP650T

Smart helmet with integrated fire protection, combining visible light and infrared thermal imaging, featuring 4G connectivity

Smart firefighting helmet with integrated visible light and infrared thermal imaging, equipped with a wireless charging case.

The first dual-lens smart firefighter helmet camera for temperature measurement, equipped with a high-definition thermal display and visible light sensors, a high-temperature alarm, a one-button SOS alarm, real-time 4G image transmission, real-time 4G two-way voice transmission, real-time background monitoring, a self-organising radio mesh network and other functions, with back-end server support. The FAST helmet camera has a high IP67 protection rating.

Product introduction:

The 4G image transmission positioning thermal imaging firefighting helmet is a smart temperature-measuring firefighting helmet, equipped with high-definition thermal imaging and visible light sensors, a high-temperature alarm, one-touch SOS alarm, real-time 4G image transmission, real-time two-way 4G voice transmission, real-time background monitoring via VMS/Smarteye, self-organising mesh radio network and other functions. It can perform functions such as locating the source of a fire through smoke, rescuing people in thick smoke, finding escape routes, providing real-time feedback of on-site images, temperature measurement, alarm activation and other functions, whilst keeping the user's hands free. The control centre can locate and track the device, and communicate in real time.

The helmet is made from high-strength, fire-retardant ABS material; it is drop- and impact-resistant, lightweight and comfortable to wear. The camera's inner lining is made from fire-retardant material, ensuring safety and reliability.

Features:

The high-resolution thermal imaging camera on the helmet can accurately measure temperature and capture images, and can locate people trapped in thick smoke. The high-definition visible-light camera can be used to record or transmit images in real time; it features a one-touch SOS alarm function, and the helmet, which incorporates a dual-module Beidou GPS positioning system, serves as a terminal device that can be fitted with a Mesh radio to enable ad hoc network communication, whilst the background monitoring platform can monitor and analyse data in real time.

Ad hoc network connection.

The headset can connect to the mesh network via Wi-Fi to enable ad hoc network communication. The ad hoc mesh network does not rely on base stations and efficiently and rapidly forms a high-speed wireless network. It supports multi-network relaying, which can effectively extend the coverage range of the wireless network.

The network automatically selects the best route, is self-organising, and automatically forms daisy-chain and star network topologies.

The ad hoc mesh radio network can support speeds of over 20 kbps; individual nodes are compact, capable of long-distance communication, low-power consumption, rechargeable and easy to carry.

VMS/smarteye Visual Command and Dispatch Platform

The background monitoring platform can be installed on mobile phones, tablets and PCs. The background monitoring platform can preview the video and audio transmitted by the head-mounted camera in real time, and supports 4G, LAN and Wi-Fi transmission.

EOS-ZP650T Smart Firefighter Helmet Camera



Technical specifications

Specifications Imaging Thermal	Uncooled vanadium oxide focal-plane array
	Pixels: 320 x 240
	Wide angle: 45–50 degrees, 6.52 mm, f/1.18, minimum focal length: 0.5 metres
	Thermal sensitivity: 0.1 °C
	Frame rate: 9 Hz - Wavelength range: 8–14 µm
	Measurement range: -10 to +600 degrees
	Measurement accuracy: 0.4 to 0.5 °C (32 to 42 °C); above 100 °C, ±1%
	Display: 2.4-inch TFT
Gas detection	CO, O ₂ , H ₂ S, CH ₄
Operating system	OS: Android 8.1
	CPU: MTK6739 Quad-core ARM@Cortex-A53 MPCore
Interfaces	Video interface: MIPI
	Data interface: USB 2.0 micro
	Power interface: USB Type-C
Visible light	Focus range: 0.5 metres – infinity
	Lens angle: 120°
	Image: 16 megapixels / JPEG

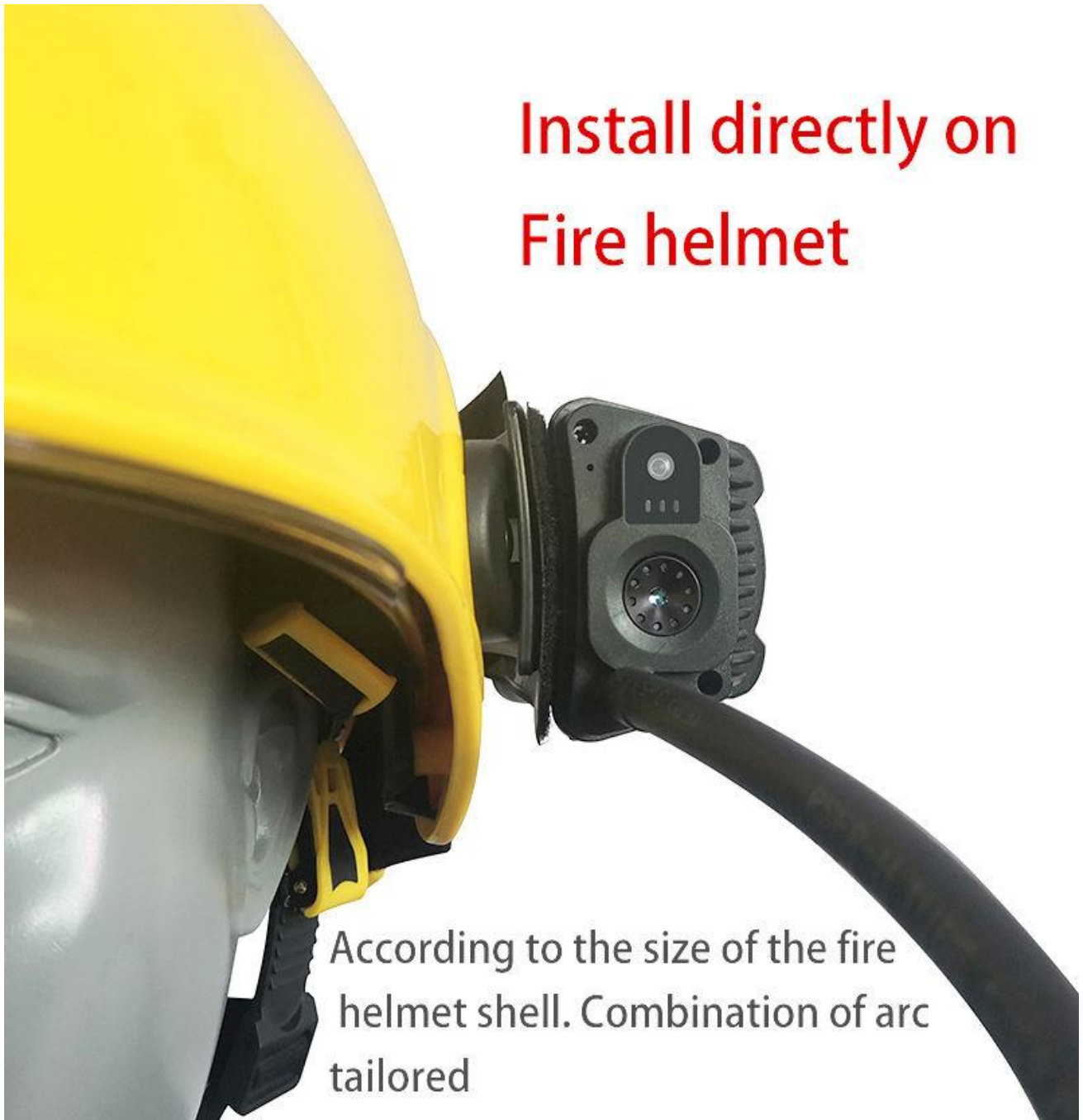


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	Night vision range: 10 metres (visible)
	Target indicator: laser beam, auxiliary positioning
	Operating time: Standby 25 hours minimum, operation 10 hours minimum
	Protection rating: IP66
	Battery: high-performance lithium-polymer battery with a maximum capacity of 3600mAh, ensuring prolonged operation of the device
Monitor	4G data download: real-time data download
	Monitor (real-time data download)

Video and audio	Video resolution	1080p/720p .mp4
	Frame rate	1080P@30fps / 720P@30fps
	Video bitrate	256 kbps–8 Mbps
Wi-Fi	Wi-Fi	Support for 802.11b/g prototype, 2.4 GHz
	4G/5G	(French networks)
	Frequency bands	TDD: B38, B39, B40, B41; FDD: B1, 3, 5, 8, 4, 7, 28B
	Bluetooth	BT 4.0
Physical specifications	Weight	Approx. 180 g (headset not included)
	Dimensions	Length/width/height 115 x 45 x 60 (headset not included)
	Operating temperature	-30 °C to +70 °C
Management system Management software	Real-time data reading	160 real-time data points
	GPS Beidou	Visible trajectory
	Data download	Supports D1 H.264 data download
	Intercom	Real-time 4G intercom with software
	Command / Support	Real-time image retrieval from each camera in the heat of the action. User manual available

Install directly on
Fire helmet



According to the size of the fire
helmet shell. Combination of arc
tailored

4G Smart Fire Helmet

For fire protection
Thermal Imaging

Live Streaming

4G/GPS/PTT

Gas Detection



Gas Detection

CO

O₂H₂S

The gas detection results will be displayed at the bottom of the screen regardless of whether it is under the optical lens or the thermal imaging lens.



