

# GV-TMEB5800 AI 5MP H.265 Super Low Lux WDR Pro Thermal & Optical

## IR Fixed Eyeball Dome IP Camera



### [Thermal]

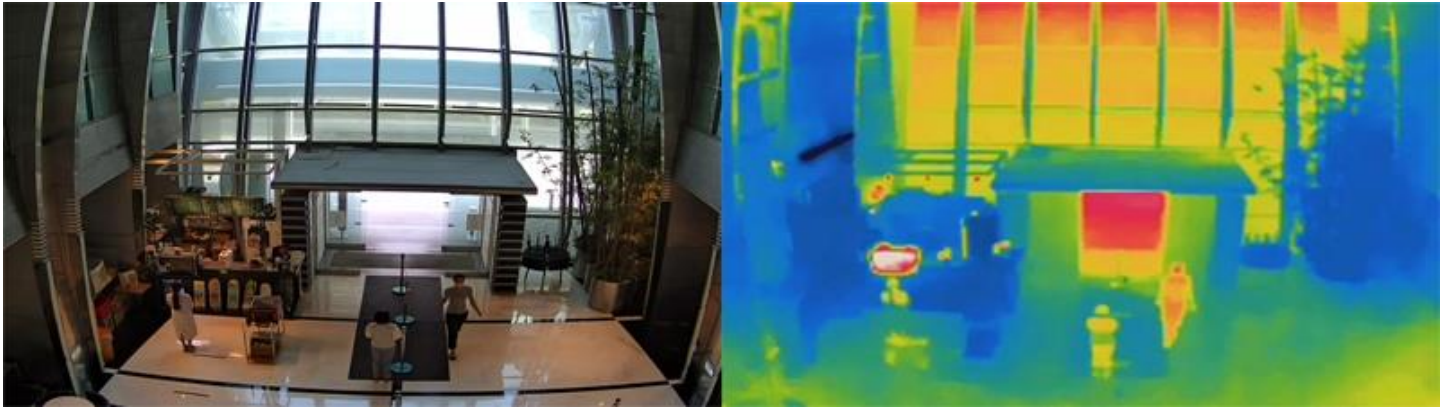
- Vanadium oxide uncooled focal plane detector, 12 um pixel size
- Thermal sensitivity:  $\leq 50$  mK (@25°C, F#=1.0)
- Spectral range: 8 ~ 14 um
- Up to 17 fps at 256 x 192 (output resolution 1280 x 720)
- AI analytics (Fire Detection, Temperature Exception Alarm, Line Crossing, Region Intrusion)
- Sound and light warning

### [Optical]

- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/2.7" progressive scan CMOS sensor
- Min. illumination at 0.02 lux
- Triple streams from H.265, H.264 and MJPEG
- Up to 30 fps at 2592 x 1994
- Intelligent IR
- IR distance up to 30 m (100 ft)
- Day and night function (with removable IR-cut filter)
- Ingress protection (IP66)
- DC 12V / PoE (IEEE 802.3af)
- Built-in micro SD card slot (SD / SDHC / SDXC / UHS-I) for local storage
- Built-in microphone and speaker
- 3-axis mechanism (pan / tilt / rotate)
- Wide Dynamic Range Pro (WDR Pro)
- Defog
- 3D noise reduction
- AI analytics (Line Crossing, Region Entrance, Region Exiting, Target Counting, Region Intrusion, Face Detection)
- Sound and light warning on AI detection events
- Motion detection
- Privacy mask
- Text overlay
- 14 languages supported
- ONVIF (Profile G, S, T) conformant

GV-TMEB5800 is an AI-enabled thermal camera that combines dual thermal and optical images for perimeter protection and fire prevention. The thermal camera can detect fires and measure predefined temperatures, triggering lighting and alarms. Even in low-light and harsh environments, the thermal camera with AI analytics detects intrusion events with very low nuisance alerts. The camera adheres to the IP66 standard, and can be powered through PoE.

## Live View



## Specifications

Camera – Thermal		
Image Sensor	Vanadium oxide uncooled focal plane detector	
Picture Elements	256 (H) x 192 (V) (the resolution of output image is 1280 x 720)	
Pixel Size	12 um	
Thermal Sensitivity	≤50 mK (@25°C, F#=1.0)	
Spectral Range	8 ~ 14 um	
Gain Control	Auto, Manual	
Focal Length	3.2 mm	
Maximum Aperture	F/1.1	
Horizontal FOV	56°	
Min. Focusing Distance	0.5 m (1.5 ft)	
Color Palettes	Black hot, White hot, Iron Oxide Red, Rainbow, Lava	
Camera - Optical		
Image Sensor	1/2.7" progressive scan CMOS	
Picture Elements	2592 (H) x 1944 (V)	
Minimum Illumination	Color	0.02 Lux (F1.6, AGC ON)
	IR On	0 Lux
Shutter Speed	Auto / Manual (1/3 ~ 1/100000 sec)	
White Balance	Auto / Manual	
Gain control	Auto / Manual	
S/N Ratio	50 dB	
WDR	WDR Pro	
Dynamic Range	Up to 120 dB	
Megapixel	5MP	
Day / Night	Yes (with removable IR-cut filter)	
Lens Type	Fixed	
Focal Length	4 mm	
Maximum Aperture	F/1.6	
Mount	M12	

<b>Horizontal FOV</b>		81°
<b>Operation</b>	<b>Focus</b>	Fixed
	<b>Zoom</b>	
	<b>Iris</b>	
<b>IR LED Quantity</b>		2 IR LEDs
<b>Max. IR Distance</b>		30 m (100 ft)
<b>Operation</b>		
<b>Video Compression</b>		H.265, H.264, MJPEG
<b>Video Stream</b>		Triple streams
<b>Frame Rate</b>	<b>Thermal</b>	17 fps at 1280 x 720, 17 fps at 704 x 480, 17 fps at 352 x 240, 17 fps at 480 x 240 (60 / 50 Hz)
	<b>Optical</b>	30 fps at 2592 x 1944, 30 fps at 2592 x 1520, 30 fps at 2560 x 1440, 30 fps at 2304 x 1296, 30 fps at 1920 x 1080, 30 fps at 1280 x 720, 30 fps at 704 x 480, 30 fps at 352 x 240, 30 fps at 480 x 240 (60 / 50 Hz)  * The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).
<b>Video Analytics</b>		Motion Detection, Video Exception Detection (Scene Change, Video Blur, Video Cast Detection)
<b>Smart Alarm</b>		Motion Detection, SD Card Error, SD Card Full, IP Address Conflict, Cable Disconnection
<b>Image Setting</b>		Brightness, Contrast, Saturation, Sharpness, Flicker-less, 3D Noise Reduction, Image Orientation (Flip, Mirror, 0°, 180°)
<b>White LED Light &amp; Sound Alarm</b>		Flashing light and sound alarm
<b>Noise Reduction</b>		Yes
<b>Audio Compression</b>		G.711
<b>Audio Support</b>		Two-way Audio
<b>Digital I/O</b>	<b>Input</b>	1 Input, dry contact, NO / NC
	<b>Output</b>	1 Relay Output (1A 30V DC / 0.3A 125V AC)
<b>Video Resolution</b>		
<b>Thermal</b>		1280 x 720 (Default), 704 x 480, 352 x 240, 480 x 240
<b>Main Stream</b>		2592 x 1944 (Default), 2592 x 1520, 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720
<b>Sub Stream</b>		1280 x 720, 704 x 480 (Default), 352 x 240
<b>Third Stream</b>		704 x 480 (Default), 352 x 240, 480 x 240
<b>Network</b>		
<b>Interface</b>		10/100 Ethernet
<b>Protocol</b>		UDP, IPv4, IPv6, DHCP, NTP, RTSP, RTP, RTCP, PPPoE, DDNS, SMTP, FTP, SNMP, HTTP, 802.1x, UPnP, HTTPS, QoS, ONVIF
<b>Deep Learning Function</b>		
<b>AI Perimeter Protection</b>	<b>Thermal</b>	-Fire Detection, Temperature Exception Alarm -Line Crossing, Region Intrusion: with Human & Vehicle classification
	<b>Optical</b>	-Line Crossing, Region Entrance, Region Exiting, Target Counting, Region Intrusion: with Human & Vehicle classification -Face Detection
<b>Fire Detection</b>	<b>Object (0.1 x 0.1 m)</b>	11 m (36.1 ft)*

Temperature Measurement	Object (1 x 1 m)	30 m (98.4 ft)*
Video Content Analysis Range (Thermal)	Human (0.75 m)	24 m (78.7 ft)*
	Car (2.3 m)	35 m (114.8 ft)*
Video Content Analysis Range (Optical)	Human	10 m (32.8 ft)*
	Car	20 m (65.6 ft)*
Temperature Alarm Range	-20°C ~ 150 °C (-4 °F ~ 302 °F)	
Temperature Alarm Accuracy	±8°C (±14.4°F)	

\* The data is only for reference and the performance may vary according to the actual environment.

### Mechanical

Camera Angle Adjustment	Pan	0° ~ 360°
	Tilt	0° ~ 75°
	Rotate	0° ~ 360°
Connectors	Power	DC Jack, PoE
	Ethernet	RJ-45 cable
	Audio	1 In (Audio In Wire) 1 In (built-in microphone) 1 Out (built-in speaker)
	Digital I/O	4-pin terminal block pitch 3.81 mm (0.15")
	Local Storage	Micro SD card slot (SD / SDHC / SDXC / UHS-I, Class 10) * UHS-II card type is not supported.

### General

Environment Temperature	-30°C ~ 60 °C (-22 °F ~ 140 °F)
Humidity	0 ~ 95% (no condensation)
Power Source	12V DC / PoE (IEEE 802.3af)
Max. Power Consumption	9 W
Dimensions	Ø111.5 × 99.6 mm (Ø4.39" x 3.92")
Weight	0.68 kg (1.5 lb)
Ingress Protection	IP66
Regulatory	CE, FCC, RoHS compliant

### Web Interface

Installation Management	Web-based configuration
Maintenance	Firmware upgrade through Web Browser or GV-IP Device Utility (V8.9.8 or later)
Access from Web Browser	Live View, Playback, Video Recording, Image Quality, Bandwidth Control, Image Snapshot, Two-way Audio, Digital Zoom, Text Overlay, Image Masking
Language	Czech, English, German, Hungarian, Italian, Persian, Polish, Romanian, Russian, Spanish, Traditional Chinese, Turkish, Portuguese, Japanese

### Software Applications

Software Supported	GV-VMS (V17.4.5 / V18.3.1, patch files required)
Live Viewing	Browser (IE, Edge, Chrome, Firefox, Safari) *It is required to use <b>IE</b> or <b>Edge IE mode</b> to access thermal images.

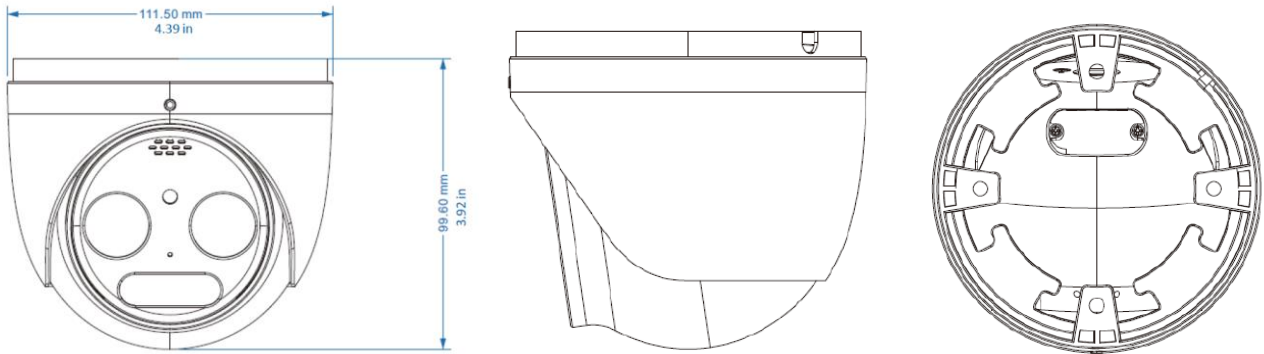
#### Note:

1. The integration with GV-SNVR series is not supported.
2. Specifications are subject to change without notice.

### Packing List

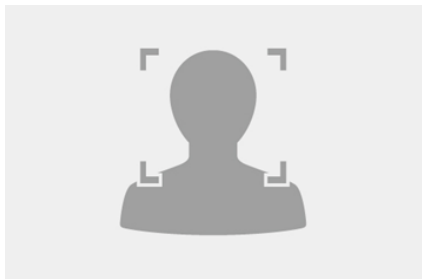
- 1. Eyeball Dome
- 2. Waterproof Rubber
- 3. Screw Kit
- 4. Hex Key
- 5. Drill Template Paster
- 6. Download Guide

### Dimensions



### Deep Learning Function

#### Face Detection

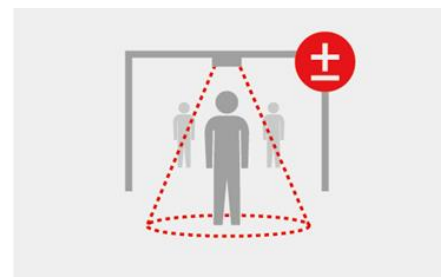


#### AI Perimeter Protection

(Intrusion, Cross Line Enter Area, Leave Area)



#### People Counting





#### Fire Detection



#### Temperature Exception Alarm



## Accessories

Model No.	Name		Details
Mount211-4	Wall Mount Bracket		Dimensions: 129.8 x 154.9 x 74.4 mm (5.11" x 6.1" x 2.93") Weight: 0.527 kg (1.16 lb)
GV-PA191	Power over Ethernet (PoE) Adapter		GV-PA191 is a Power over Ethernet (PoE) adapter to provide power to the IP device through a single Ethernet cable.
GV-POE Switch			GV-POE Switch is designed to provide power along with network connection for IP devices. It is available in various models with different numbers and types of ports.
Power Adapter			Contact our sales representatives for the countries and areas supported.