

# 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

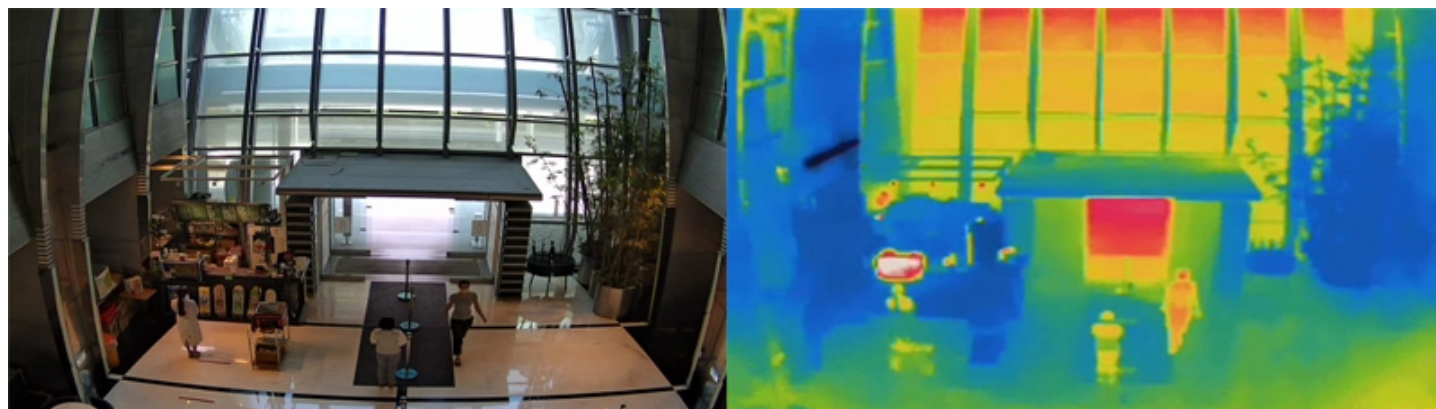
## [Optical]

- 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
- Two-way audio
- 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)
- Active Deterrence: sound and light warning on AI detection events
- Motion detection
- Privacy mask
- 12 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 is able to detect intrusion events with minimal false alarms. The camera adheres to the IP66 standard, and can be powered through PoE.

GV-TMEB5800 is also a camera for active deterrence. It can deter intruders and prevent potential crime by utilizing the built-in white LED and alarm sound.

## 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>DORI</b>		<b>Detect</b>	<b>Observe</b>	<b>Recognize</b>	<b>Identify</b>	
<b>Lens</b>	<b>Thermal</b> (Human: 0.75 m in width)	<b>3.2 mm</b>	133 m (436.3 ft)	N/A	33 m (108.2 ft)	17 m (55.7 ft)
	<b>Thermal</b> (Vehicle: 2.3 m in width)	<b>3.2 mm</b>	409 m (1341.8 ft)	N/A	102 m (334.6 ft)	51 m (167.3 ft)
	<b>Optical</b>	<b>4 mm</b>	70.1 m (229.9 ft)	28.0 m (91.8 ft)	14.0 m (45.9 ft)	7.0 m (22.9 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; Alarm Sound</b>		Flashing light and alarm sound				
<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)*
<b>Temperature Measurement</b>	<b>Object (1 x 1 m)</b>	30 m (98.4 ft)*
<b>Video Content Analysis Range (Thermal)</b>	<b>Human (0.75 m)</b>	24 m (78.7 ft)*
	<b>Car (2.3 m)</b>	35 m (114.8 ft)*
<b>Video Content Analysis Range (Optical)</b>	<b>Human</b>	10 m (32.8 ft)*
	<b>Car</b>	20 m (65.6 ft)*
<b>Temperature Alarm Range</b>	-20°C ~ 150 °C (-4 °F ~ 302 °F)	
<b>Temperature Alarm Accuracy</b>	±8°C (±14.4°F)	

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

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

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

<b>Web Interface</b>		
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<b>Installation Management</b>	Web-based configuration
<b>Maintenance</b>	Firmware upgrade through Web Browser or GV-IP Device Utility (V8.9.8 or later)
<b>Access from Web Browser</b>	Live View, Playback, Video Recording, Image Quality, Bandwidth Control, Image Snapshot, Two-way Audio, Digital Zoom, Text Overlay, Image Masking

<b>Language</b>	Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Traditional Chinese
<b>Software Applications</b>	
<b>Software Supported</b>	GV-VMS (V17.4.5 / V18.3.1, patch files required), GV-Recording Server (V2.1.0 or later), GV-Control Center (V4.1.1 or later)
<b>Live Viewing</b>	Browser (IE, Edge, Chrome, Firefox, Safari) *It is required to use <b>IE</b> or <b>Edge IE mode</b> to access thermal images.

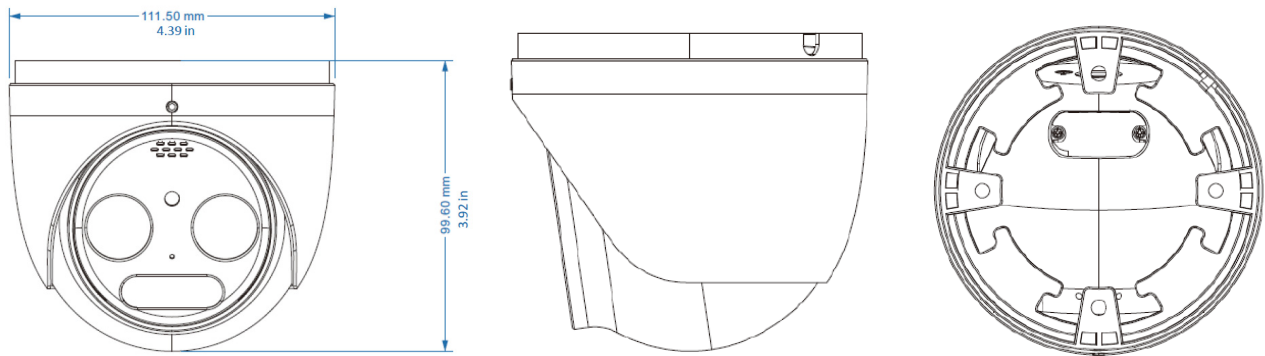
**Note:**

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

**Packing List**

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

**Dimensions**



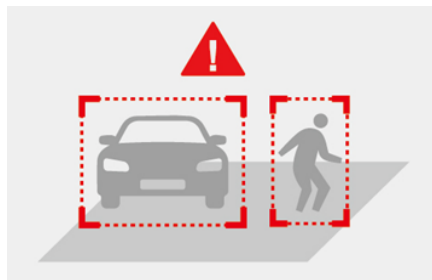
**Deep Learning Function**

**Face Detection**

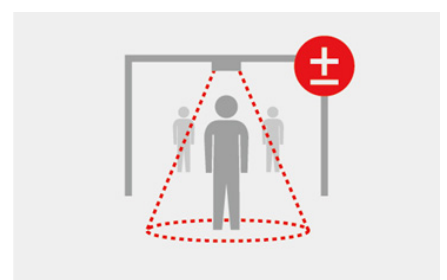


**AI Perimeter Protection**

(Intrusion, Cross Line Enter Area, Leave Area)



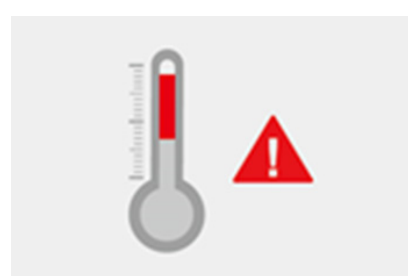
**People Counting**



**Fire Detection**



**Temperature Exception Alarm**



## Accessories

Model No.	Name		Details
GV-Mount506	Junction Box		Dimensions: 139.3 x 171.6 x 50 mm (5.48" x 2.81" x 1.97") Weight: 0.512 kg (1.13 lb)
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-Mount211-6 (must be used with GV-Mount506)	Wall Mount Bracket		Dimensions: 199 x 139.3 x 140.9 mm (7.83" x 5.48" x 5.55") Weight: 0.56 kg (1.23 lb)
GV-PA191	PoE Adapter		GV-PA191 is a Power over Ethernet (PoE) adapter to provide power to the IP device through a single Ethernet cable.
GV-PA301	Gigabit PoE Adapter		GV-PA301 is a Gigabit Power over Ethernet (PoE) adapter.
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.