



GENSTAR Bi-spectrum Camera
with AI Analytics



ZNT8-25BQVF7-B-2



Key Features:

- 256 × 192 VOx uncooled microbolometer, 12 μm, NETD ≤50 mK
- Lenses: 7 mm thermal / 8 mm optical
- GENSTAR IVS 2.0: human/vehicle detection, lines, zones, SMD and people counting
- Smoke, flame, fire-spot and smoking detection
- Spot, line and area temperature rules; -20°C to 150°C
- Thermal/optical image fusion; response time ≤30 ms
- Built-in speaker and LED warning strobe
- 12/24 VDC or PoE; microSD up to 512 GB
- IP66 housing; NDAA compliant
- IR range increased to 60 m
- NDAA compliant with the U.S. National Defense Authorization Act.**

Model	ZNT8-25BQVF7-B-2
Thermal Sensor	VOx uncooled microbolometer
Resolution	256 × 192 (upscaled to 704 × 576)
Pixel Pitch	12 μm
NETD	≤ 50 mK F1.0
Spectral Range	8–14 μm
Temperature	-20°C to 150°C ±2°C or ±2%
Field of View	H: 24° V: 18°
Lens	7 mm fixed, F1.0
Image Settings	Brightness Contrast Sharpness FFC 2D/3D DNR
Thermal Palettes	17 modes
Optical Sensor	1/2.7" CMOS
Resolution	2880 × 1620
Shutter	1/5 s – 1/20,000 s
Field of View	H: 40° V: 20°
Min. Illumination	Color: 0.05 lx @ F1.6 B/W: 0.005 lx @ F1.6 0 lx with IR
Lens / IR	8 mm, F2.0 850 nm IR up to 60 m
Bit Rate (CBR/VBR)	Main: optical 0.1–12 Mbps thermal 0.1–3 Mbps
	Sub: optical 0.01–6 Mbps thermal 0.01–3 Mbps
Resolution / fps	Main: optical max. 2880×1620 thermal 704×576 25 fps
	Sub: optical D1/VGA thermal D1/CIF/256×192 25 fps
Image Settings	Brightness contrast sharpness 2D/3D DNR
Cybersecurity	Signed/encrypted firmware Digest 802.1X HTTPS/WSS/SRTP SBOM
Digital Functions	120 dB WDR HLC BLC Defog
Privacy / OSD	4 privacy zones up to 8 OSD overlays
Network Protocols	IPv4/6, HTTP/S, RTSP/RTP/RTCP, TCP/UDP, DHCP, NTP, FTP, SMTP,
	QoS, 802.1X, SNMP, Multicast
	ONVIF (S/T/G/M), CGI, SDK

Technical Specifications

GENSTAR IVS 2.0	Human/vehicle detection; intrusion, SMD, lines, zones, loitering, wrong-way, people counting
	Smoke, flame, fire-spot and smoking detection; image fusion
RTSP Support	RFC 2326 (VLC Player / QuickTime)
Compatibility	GENSTAR NVR / CORTROL VMS / ONVIF S/T/G/M / SDK / CGI
Operating Temp.	-40°C to +60°C
Operating Humidity	≤95% RH, non-condensing
Power / Consumption	12 VDC / 24 VDC / PoE (802.3af); max. 12 W
Dimensions / Weight	303 × 95 × 107 mm / approx. 1.38 kg*
Protection	IP66 CE FCC NDAA
microSD Card	Up to 512 GB
Ethernet	1 × RJ45 10/100 Mbps
Audio	1 × IN / 1 × OUT (RCA); G.711 / RAW_PCM
Alarm	2 × IN / 2 × OUT
RS-485	1 × RS-485
Security	802.1X, HTTPS/WSS/SRTP, brute-force protection, logs, SBOM
Speaker / Strobe	Built-in; audible and visual alarm
Reset Button	YES

© CBC | Rev.2026.09

CBC Tokio HQ
CBC Osaka
CBC Nagoya
CBC Fukuoka
CBC Mishima

CBC New Jersey
CBC Los Angeles
CBC Mexico
CBC Beijing
CBC Dongguan

CBC Shanghai
CBC HongKong
CBC Singapore
CBC Taiwan
CBC Bangladesh

CBC Guangzhou
CBC Indonesia
CBC Thailand
CBC UK
CBC Germany

CBC Poland
CBC Italy
CBC Spain
CBC Russia
CBC India

CBC Poland sp. z o.o.

ul. Rydygiera 8 bud. 17

01-793 Warszawa

kontakt@ganzsecurity.pl

www.ganzsecurity.pl

Thermal Functions, Events and Cybersecurity

Thermal Function		Cybersecurity	
Temperature Range	-20°C to 150°C (-4°F to 302°F)	OS / Firmware Protect	Encrypted firmware, signed firmware
Accuracy	±2°C or ±2%, whichever is greater	User Authentication	Digest authentication; brute-force protection
Temperature Detection	Spot, line, and area; up to 20 rules: 1 full-screen and 19 spot/line/area rules	Network Authentication	IEEE 802.1X (EAP-TLS)
Temperature Alarm	Temperature difference, threshold, and temperature rise alarms	Secure Communication	HTTPS, WSS (WebSocket Secure), SRTP
Temperature Display	Lower-left corner; cursor display of maximum, minimum, and average values	Access Control	IP-based access control; auto logout
Response Time	≤30 ms	Data Protect	Encryption credentials
Image Fusion	Thermal and optical image fusion	Audit	Access, system, and event logs
Event		Supply Chain Security	SBOM
Alarm Triggers	IVS, temperature anomaly, motion, alarm input, network alarm, disk alarm, and abnormal sound		
Event Actions	Alarm recording, FTP upload, SMTP email, alarm output, flashing light, and audible alarm		

Detection Distances – 7 mm Thermal Lens

DRI – Johnson's Criteria		Thermal Smart Detection	
Detection – human 1.8 × 0.5 m	292 m	VCA – human 1.8 × 0.5 m	60 m
Detection – vehicle 4 × 1.5 m	894 m	VCA – vehicle 4 × 1.5 m	140 m
Recognition – human	73 m	Temperature – 1 × 1 m	116.7 m
Recognition – vehicle	224 m	Temperature – 0.2 × 0.2 m	23.3 m
Identification – human	36 m	Fire detection – 0.2 × 0.2 m	58.3 m
Identification – vehicle	112 m	Smoking detection	25 m

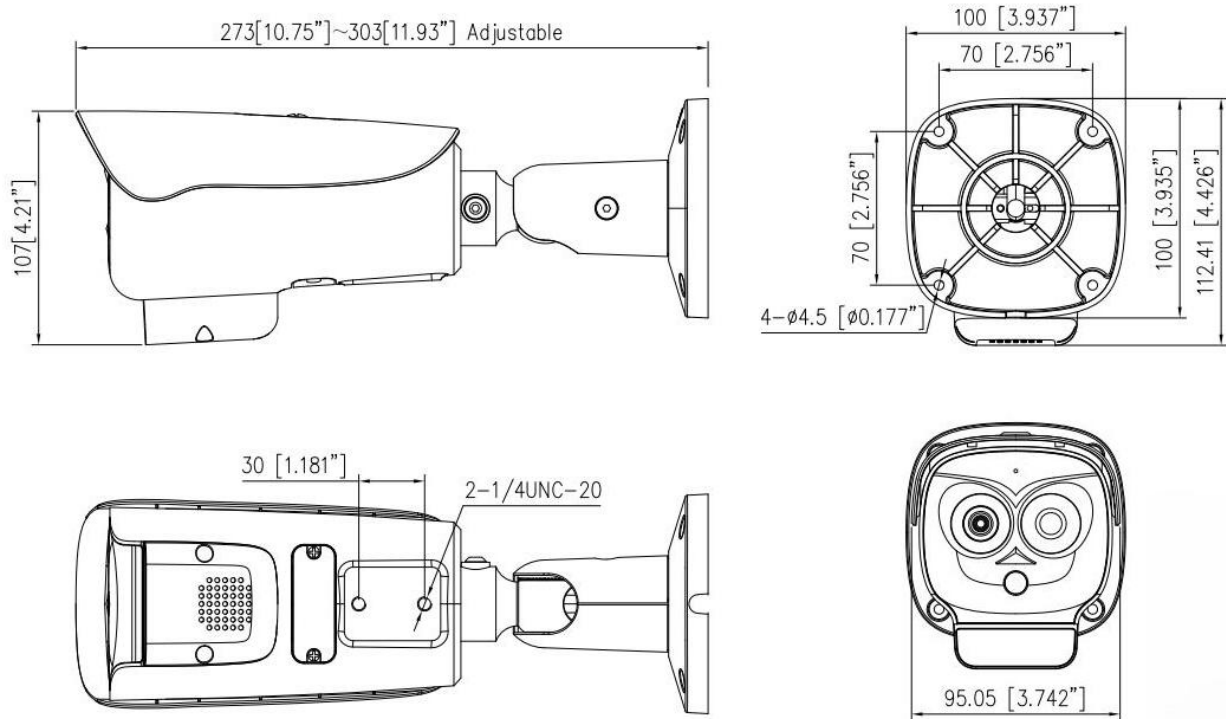
Reference values only; actual range depends on atmospheric conditions, target size, and installation environment.

DORI Distance – Optical Channel				
Lens	Detect	Observe	Recognize	Identify
8 mm	146 m	58.4 m	29.2 m	14.6 m

OODPCVS Distance (calculated using IEC/EN 62676-4:2025 pixel-density thresholds)

General overview	Object outline	Object distinction	Behaviour perception	Object characteristics	Verification	Detailed analysis
182.5 m	91.3 m	45.6 m	29.2 m	14.6 m	7.3 m	2.4 m

Dimensions



Mounting Accessories



ZA8-JBMP-2



ZA8-CBK627D