

Rugged Thermal Camera

VEGA Thermal



Key Features

- Tough, Rugged, Vandal-resistant Housing, IK10 & IP66 – Marine Grade
- Uncooled Vox Micro bolometer with 640×512 Resolution
- Fully Cable-managed Solution, Keeps Cables Hidden and Secure
- PoE+ (802.3at), 24VAC or 12VDC
- Thermostatically Controlled Heater and Fan
- 9/15/25/35/50 mm Fixed Lens Optional
- 75mm Motorised Focus Lens
- Sensitivity $\leq 40\text{mK}$
- ONVIF profile S, G & T Compliant
- Intelligent Video Analytics

Thermal Imaging Cameras

Thermal imaging cameras use infrared energy to create images, which allows them to see in complete darkness and through smoke and fog. This contrasts with CCTV cameras, which are only able to see visible light. Thermal imaging cameras detect heat signatures that are given off by people, animals, and objects, making them ideal for human, vehicle, and ship detection.

VEGA Thermal Camera

The VEGA Thermal Camera is a high-performance thermal camera with a fixed lens in a rugged die-cast aluminium housing. The camera features a 640×512 resolution uncooled VOx Micro bolometer, which provides clear and detailed images even in complete darkness, and a sensitivity of ≤40mK, which allows it to detect even the smallest temperature differences.

The VEGA ThermalTM Camera can also measure temperature to support temperature monitoring and fire point detection.

Cable Managed Housing

The VEGA is fully cable-managed, offering bracket base and 20mm conduit access; with two internal 20mm cable glands for enhanced security. Cables can be terminated inside the camera housing itself, so no additional junction box is required. Installation is simplified and the risk of damage from malicious attack, moisture, corrosion or dust is reduced.

Aluminium body, marine grade

A tough, solid die-cast aluminium housing is pretreated and powder coated, resulting in cameras being well-protected against the elements and local environment, to IP66 standard. Rugged IK10 standard housing with an optional Polycarbonate window means your cameras are secure whilst keeping your premises secure.

SD Card Recording

Built-in SD Card recording up to 256GB allows network edge-recording, making sure nothing is missed, even in the event of a network data outage. ONVIF Profile G compliance means the camera can work with a compatible VMS platform or NVR, to automatically interrogate and recover recorded footage, as soon as the network connection is restored.

ONVIF Compliant

ONVIF Profile S, G and T compliance offers compatibility with countless VMS platforms and NVRs. A H.265 streaming option means high-quality images at lower network bandwidth and hard-disk storage.

Additional Features

The VEGA Thermal camera supports temperature monitoring with abnormal temperature alarm. Smart events include intrusion, single line crossing, double line crossing, loitering, wrong way, enter area and leave area alarms.

3 temperature measurement rule types (spot, line, area) are supported, and the temperature measurement range is: -20°C ~ 150°C (-4°F ~ 302°F).

Simple Installation, maintenance free

3D positioning arm allows you to find that perfect spot to view exactly what you need. The bezel is designed to reduce water from running onto the germanium window.

The housing is symmetrical, allowing for pendant or pedestal mounting to ceilings, walls and soffits.

Custom RAL Colour Options

The VEGA rugged camera housing range is available in light grey (RAL 7035) as standard. However, the cameras can also be ordered in any RAL colour. Customers simply specify the colour they require and all the VEGA camera's external parts are painted to order. The powder-coat paint gives a robust, UV light-stable finish.

Image	Part Code and Description
	VEGA-THERMAL-09-WALL: Fully cable managed camera housing and wall bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 9mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-15-WALL: Fully cable managed camera housing and wall bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 15mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-25-WALL: Fully cable managed camera housing and wall bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 25mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-35-WALL: Fully cable managed camera housing and wall bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 35mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-50-WALL: Fully cable managed camera housing and wall bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 50mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-09-PED: Fully cable managed camera housing and pedestal bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 9mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-15-PED: Fully cable managed camera housing and pedestal bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 15mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-25-PED: Fully cable managed camera housing and pedestal bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 25mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-35-PED: Fully cable managed camera housing and pedestal bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 35mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-50-PED: Fully cable managed camera housing and pedestal bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 50mm fixed lens. Ruggedised marine finish.
	VEGA-THERMAL-75-PED: Fully cable managed camera housing and wall bracket. POE+, 12V DC, 24V AC. Factory fitted 640 x 512 resolution, ≤40mK Thermal Box Camera, 75mm motorised focus lens. Ruggedised marine finish.

Options: *VEGA-WASH, VEGA-VISOR, VEGA-CUSTOM-PAINT, VEGA-PC4, RVX2-POLE-G, RVX2-POLE-B, RVX2-CNR-G, RVX2-CNR-B* (Pole and corner mount adaptors interface with WALL version of VEGA)

Thermal Camera						
Detector Type	VOx Uncooled Focal Plane Arrays					
Resolution	Sensor is 640×512. Image can be scaled up to 1280×1024					
Pixel Pitch	12μm					
Response Waveband	8-14μm					
Thermal Sensitivity (NETD)	≤ 40mK					
Lens Type	Fixed focal length					
Focus Control	Free focus					
Focal Length (mm)	9	15	25	35	50	75
F No.	F1.0	F1.0	F1.0	F1.0	F1.0	F1.0
Angle of View	H: 48°, V:38°	H: 29°, V:23°	H: 17°, V:14°	H: 12°, V:10°	H: 8°, V:7°	H: 6°, V:5°
Detection Distance for Humans (m)(1.8×0.5m)	375 (47)*	624 (84)*	1040 (145)*	1456 (188)*	2081 (280)*	3,125 (336)*
Detection Distance for Vehicles (m) (4×1.5m)	1150 (110)*	1917 (190)*	3194 (280)*	4472m (380)*	6389 (450)*	9,583 (630)*
Recognition Distance for Human (m) (1.8×0.5m)	94	156	260	364	520	781
Recognition Distance for Vehicle (m) (4×1.5m)	288	479	799	1118	1597	2,396
*Detection and Recognition Distances are based on Johnson Criteria. Camera intelligent analytic distances are given in parenthesis below.						
Video and Audio						
Frame Rate	Main Stream: 1280×1024, 1280×720, 640×512 @ 25/30fps Sub Stream: D1, CIF @ 25/30fps					
Bit Rate Control	CBR/VBR/ Smart Encode					
Bit Rate	Main stream: 100Kbps ~ 6Mbps Sub stream: 10Kbps ~ 1.5Mbps					
Region of Interest	Off / On (8 Zone, Rectangle)					
Mirror	Supported					
Defog	Supported					
Motion Detection	Supported					
Privacy Masking	Off / On (5 Area, Rectangle)					
DVE Image Enhance	Supported					
Image Setting	Brightness/Sharpness/Contrast/Mirror/FFC/3D DNR					
Pseudo-Colour Settings	White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes					
Audio Compression	G.711: 8kbps, RAW_PCM: 16kbps					
Intelligent Analysis						
Smart Alarm	Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection & alarm					
Smart Detection	Support human/vehicle detection, fire point detection, ship detection					
Smart Events	Intrusion, Single line crossing, Double line crossing, Loitering, Wrong way, Enter area, Leave area (these 7 function support accurate detection of people/vehicles) , People counting					

Temperature Detection	
Temperature Detection	Support 3 temperature measurement rule types (Spot, Line, Area)
Temperature Alarm	Over temperature alarm, Temperature difference alarm
Accuracy	±2°C / ±2%
Response Time	≤ 30ms
Theory of temperature measurement range	-20°C ~ 150°C (-4°F ~ 302°F)
Network	
Protocols	IPv4/IPv6 ,HTTP,RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, PPPOE, SMTP, 802.1x
Interoperability	ONVIF, CGI, SDK
Edge Storage	Local PC for instant recording
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Web Language	English, Polish, Italian, Portuguese, Spanish. Russian, French, Czech, Hungarian
Interface	
Ethernet	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch Audio In, 1ch Audio Out
Alarm Interface	1ch Alarm In, 1ch Alarm Out
RS485	Supported
Reset Button	Supported
Built-in SD Card Slot	Yes, up to 256GB
General	
Power Supply	12VDC, 24VAC, PoE+ (802.3at)
Power Consumption	13.8W @ 12VDC, 9.6W @ 24VAC, 16W @ PoE+ (Heater ON)
Dimensions	L 358mm x W 152mm x H 134mm
Weight	4.7kg
Operating Temperature	-40°C ~ +70°C
Relative Humidity	≤95%, non-condensing
Ingress Protection	IP66
Corrosion Testing	BS EN ISO 9227:2022 1000 Hours Salt Spray
Impact Rating	IK10
Camera Body	Marine finish as standard, Aluminium, die-cast alloy, with anodised, powder-coated finish
Colour	RAL 7035 Light Grey, Custom RAL Available
Certifications	CE

