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WEOM ZOOM BLOCK THERMAL MODULE

WZB640-N-S-105-60



- Continuous 35–105 mm optical zoom and a 640 × 480 LWIR core deliver distance capability in a ready-to-integrate module
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PRODUCT DESCRIPTION

WEOM® Zoom Block is a range of fully integrated thermal zoom modules engineered for OEMs and system integrators who need fast deployment, reliable outdoor performance and crisp long-range thermal detail. Combining a 640 × 480 LWIR core with a motorized continuous optical zoom lens and standards-based IP video, it slots cleanly into security, industrial, maritime and autonomous platforms—reducing integration time while elevating end-user performance.

Product range overview

- Available in configurations optimized for export-friendly deployment (9 Hz) or high-speed operation (up to 60 Hz, model-dependent), WEOM® Zoom Block lets you match performance and compliance needs to each project.
- A motorized 35–105 mm (3×) continuous optical zoom with motorized focus supports wide-area coverage and confident observation at distance.
- Built around a 640 × 480 uncooled LWIR microbolometer with sensitivity options down to <30 mK (model-dependent) to reveal subtle thermal contrasts.
- Integrates easily via Ethernet with PoE and IP video streaming (ONVIF/RTSP), plus RS485 (PELCO-D) for PTZ control in common security architectures (interfaces model-dependent).
- Designed for outdoor systems with an IP67-rated front lens and DLC coating, in a compact module package (under 760 g).

Typical applications

- Perimeter security & critical infrastructure (utilities, ports, airports, logistics)
- Maritime observation and coastal monitoring
- UAV/UGV payloads for long-range thermal situational awareness
- Industrial monitoring where distance-to-target varies
- PTZ thermal camera systems requiring ONVIF and PELCO-D control

Talk to us: Share your target range, frame-rate requirement (9 Hz vs. up to 60 Hz) and integration environment (VMS/ONVIF, PTZ control, power). We'll recommend the right WEOM® Zoom Block configuration for your platform. vision@oem.co.uk

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TECHNICAL DATA

12101_Pixel size	17 µm
12580_Detector type	Okyld LWIR-sensor, mikrobolometer
12581_Spectral Band	8–14 µm
12582_Resolution (sensor)	640 × 480 px
12583_Thermal sensitivity (NETD)	< 30 mK
12584_Temperature range – High Gain	−50 °C till +160 °C
12585_Temperaturområde – Low Gain	−50 °C till +600 °C

12586_Focus (lens)	Motoriserad (optisk zoom & fokus)
12588_Image rotation – Invert	Yes
12589_Image rotation – Mirror	Yes
12590_AGC	Yes
12590_Spatial image filter	Ja – medianfilter (full frame 60 Hz)
12592_MGC	Yes
12595_GigE plugin	Ethernet RJ45, 1 Gb/s (100 Mb/s kompatibel)
12597_Video outputs	RTSP (H.264) via Ethernet; realtidsström i webbklient
12599_Dimensions (without lens)	82 × 85 × 165 mm
12600_Weight (without lens)	760 g
Certificate	RoHS
Current consumption	≈ 11 W
Frame Rate	60 Hz (full frame)
IP class	IP67
Material of body	Aluminium, Metal
Operating temperature	−20 °C to +70 °C
Power supply	External 9–36 V DC or PoE
Rated voltage	9–36 V DC (2-pol) or PoE via RJ45
Storage temperature	−40 °C to +80 °C

