

WEOM THERMAL CAMERA MODULE

ITAR-free thermal imaging camera

WTC640-N-S-H25-60 2 895



- Outstanding thermal detail for confident decisions: High detector sensitivity (down to <30 mK on selected models) combined with advanced FPGA image processing helps reveal subtle temperature differences—supporting earlier detection, clearer targeting and more reliable interpretation.
- Integration-ready, with interfaces that match your system: Multiple output and control options (e.g., HDMI, USB, GigE/Ethernet; model-dependent) plus straightforward configuration tools accelerate prototyping and reduce engineering effort from first test to production.
- European, ITAR-free supply and rugged reliability: Designed and manufactured in Europe for dependable availability and long-term deployment—an ideal foundation for OEM products that must meet stringent operational and procurement requirements.

PRODUCT DESCRIPTION

Workswell's WEOM range is a family of ITAR-free, European-designed thermal camera modules built for fast, reliable OEM integration into demanding systems—whether you're developing autonomous platforms, industrial monitoring solutions, or next-generation security products. Designed around high-sensitivity LWIR microbolometer technology and advanced on-board image processing, WEOM delivers clear thermal imagery and dependable performance in real-world conditions.

The WEOM portfolio spans multiple integration configurations—from compact thermal cores to higher-resolution variants—offering flexible interface options such as HDMI, USB-C/USB, GigE/Ethernet and other industrial outputs (model-dependent). With a choice of fixed-focus lenses (and lens-less options for custom optics) and configurable frame rates, integrators can tailor performance, form factor and connectivity to the needs of each platform.

Anywhere you need compact thermal sensing with high image quality, stable operation and flexible system connectivity. Whether your application is thermal monitoring for security, maritime observation, industrial condition monitoring or machine vision, contact us to discuss your requirement: vision@oem.co.uk

TECHNICAL DATA

| | |
|-------------------------------------|--|
| 12101_Pixel size | 17 µm |
| 12580_Detector type | Uncooled LWIR detector, microbolometer |
| 12581_Spectral Band | 8-14 |
| 12582_Resolution (sensor) | 640 x 480 px |
| 12583_Thermal sensitivity (NETD) | 50 mK |
| 12584_Temperature range – High Gain | -50 °C to +160 °C |
| 12585_Temperaturråde – Low Gain | -50 °C to 600 °C |
| 12586_Focus (lens) | Fast fokus (ej motoriserad) |

| | |
|---------------------------------|--|
| 12587_Objective selectable | Välj en M25 lins under tillbehör (går även att köpa utan lins) |
| 12588_Image rotation – Invert | Yes |
| 12589_Image rotation – Mirror | Yes |
| 12590_AGC | Yes |
| 12590_Spatial image filter | Median full frame 60Hz |
| 12592_MGC | Yes |
| 12598_Dead Pixel Correction | Yes |
| 12599_Dimensions (without lens) | 40.1 (h) x 37.8 (w) x 42.6 (l) mm (1.57 x 1.48 x 1.67 in) |
| 12600_Weight (without lens) | 65 g |
| Current consumption | Typ: 2.0 W, Max: 2.2 W |
| Frame Rate | 9 Hz |
| IP class | IP67 |
| Material of body | Aluminium |
| Operating temperature | -30 °C till +70 °C |
| Rated voltage | 5 VDC |
| Start-up time | < 5 sec |
| Storage temperature | -50°C to +90°C |

Innovation in every frame
The WEOM family of thermal camera modules



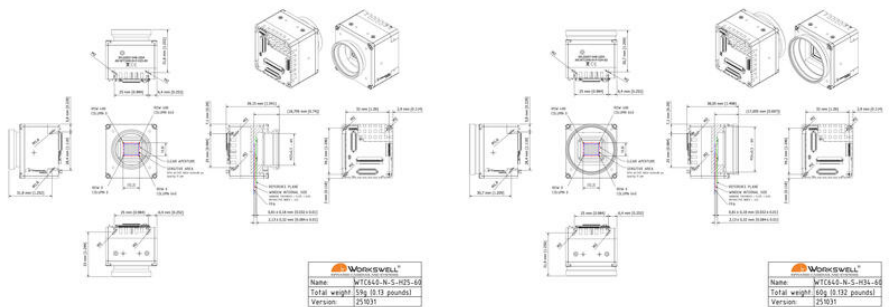
European technology

- WEOM technology is designed and manufactured within the European Union, ensuring high-quality production and standards according to ISO certification.
- Non-Chinese components integrated to ensure the high European quality and comply with CE, RoHS, REACH, and other regulations.
- WEOM technology is MIL-PRF regulated.
- Heater technology provides for a wide configuration needs to solve issues for global market.
- VSP integration support for precision & accurate alignment.

Technical advantages

- WEOM sensor resolution is 640px or 1280px (HD resolution) with frame rate up to 60Hz.
- WEOM module offers excellent thermal stability up to 300K.
- Exchangeable optics: OMNI, CYRIL, Mico-OMNI, OMNI, Dig, and OMNI for easy deployment under various environments and applications.
- Interchangeable lens and zoomable lenses provide added versatility for any kind of application.
- Low latency technology ensures a real-time performance for AI tracking and image processing.

For more details on how the WEOM can fit into your operations, please reach out to us at sales@workswell.com or visit our website workswell.com.



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