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WEOM HD THERMAL CORE (1280 × 1024)

P-WHC-H-UVC
WEOM USB-C UVC plugin



- HD thermal detail for better decisions: 1280 × 1024 LWIR resolution and sensitivity below 50 mK support clearer detection, recognition and analysis in challenging conditions.
- Integration-ready connectivity: Real-time HDMI output and straightforward USB C connection speed up evaluation, prototyping and productization.
- IP67-rated aluminum housing for dependable long-term deployment
- Export-friendly European supply: ITAR free design and manufacture in Europe

PRODUCT DESCRIPTION

WEOM HD Thermal Core is a next-generation, high-resolution LWIR module built for OEMs who need maximum thermal detail in a compact, low-power package. With a 1280 × 1024 uncooled detector, advanced on-board FPGA image processing and fast start-up, it helps you deliver premium thermal products faster—without compromising reliability in the field.

Three USPs

- **HD thermal detail for better decisions:** 1280 × 1024 LWIR resolution and sensitivity below 50 mK support clearer detection, recognition and analysis in challenging conditions.
- **Integration-ready connectivity:** Real-time HDMI output and straightforward USB-C connection speed up evaluation, prototyping and productization.
- **Rugged, export-friendly European supply:** ITAR-free design and manufacture in Europe with IP67-rated aluminum housing for dependable long-term deployment.

Key features at a glance

- **Detector:** uncooled LWIR, 1280 × 1024 px
- **Image processing:** advanced FPGA processing with AGC plus spatial/temporal filtering
- **Optics:** wide selection of fixed lenses; lens-less option for custom optics
- **User experience:** multiple colour palettes; fast start-up (under 5 seconds)
- **Mechanical:** compact, lightweight module (under 85 g)
- **Power:** low consumption (approx. 2.9 W)
- **Environmental:** IP67-rated aluminium housing; operating range -32°C to +70°C

Typical applications

- UAV/UGV payloads requiring maximum thermal detail
- Handheld thermal cameras and professional inspection tools
- Fixed security and perimeter surveillance systems
- Industrial monitoring in harsh environments
- Transportation and mobile sensing platforms

Talk to us: Tell us your target use case, lens choice and interface requirements. We'll help you select the right WEOM HD configuration and accelerate your path from evaluation to deployment.Vision@OEM.co.uk

TECHNICAL DATA

12594_USB plugin	Ja (1× USB-C UVC & matning; 1× JST AUX; video Pre-IGC MONO 14-bit, Post-coloring YCbCr)
12597_Video outputs	USB-C (UVC)