

Accessory

Video Camera

Engineered for extreme environments, our rugged outdoor video camera delivers clear, high-quality footage in any lighting condition while minimizing storage requirements. It is simple to set up and maintain, functioning reliably through severe temperature swings. It features automated, built-in analytics for smarter monitoring and a built-in security platform to keep your data fully protected.

As part of some Worldsensing bundle solutions, connected to a Thread X3.

Key features

- High visibility in any light conditions
- Robust and impact-resistant
- Waterproof IP67 enclosure
- Reduced storage with AV1 video encoding
- Next-generation AI-powered analytics



Automated visual observations

Designed to integrate seamlessly with the Thread Manager and CMT Cloud, the Video Camera provides automated remote observations and real-time visual verification for critical infrastructure.

When a field sensor, such as a Tiltmeter or Vibration Meter, detects a threshold breach or structural impact, the system automatically triggers the camera to capture and forward 30–60 seconds of high-quality footage. This allows operators to instantly assess event severity, verify threats, and make rapid, data-driven safety decisions.

Engineered to withstand extreme temperatures and severe weather, this low-maintenance camera is perfect for remote deployments. It features intelligent edge analytics and advanced compression to significantly lower bandwidth and storage requirements on the CMT Cloud, while integrated hardware-based security safeguards your critical field data. It is highly suited for a variety of applications, including:

- ✔ Bridge & tunnel strike detection
- Geotechnical & environmental alerts
- Critical asset protection

TECHNICAL SPECIFICATIONS	
GENERAL	
Dimensions	11.28" (287mm) Length 5.29"(134mm) Width
Weight (with weather shield)	1.38 kg (3.0 lb)
Power	Ethernet IEEE 802.3af/802.3at Type 1 Class 3, max 12.95 W 10–28 V DC, max 12.95 W
Operating temperature	–40°C to 60°C (–40°F to 140°F)
Weather protection	IP66/IP67
IR illuminaton	Power-efficient, long-life 850 nm LEDs with a range of 80+ meters (262+ feet), depending on the scene
Memory	2 GB RAM, 8 GB Flash
Storage	• MicroSD/microSDHC/microSDXC cards with 256-bit AES-XTS-Plain64 encryption • Recording to network-attached storage (NAS)
Connectors	
Network	Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T
Audio	3.5 mm mic/line in
I/O	Terminal block for 1 supervised alarm input and 1 output (12 V DC output, max. load 25 mA)
Power	DC input
CAMERA	
Image sensor	1/2.8" progressive scan RGB CMOS Pixel size 2.9 μm
Lens	• Varifocal, 10.8–28.2 mm, F1.7–1.76 • Horizontal field of view 29.4°–11° • Vertical field of view 16.5°–6.3° • Minimum focus distance: 2.5 m (8.2 ft) • P-iris lens, IR corrected

Day and night	• Automatic IR-cut filter • Hybrid IR filter
Minimum illumination	0 lux with IR illumination on: • Color: 0.06 lux, at 50 IRE F1.7 • B/W: 0.01 lux, at 50 IRE F1.7
Shutter speed	
VIDEO	
Video compression	• H.264 (MPEG-4 Part 10/AVC) baseline, main and high profiles • H.265 (MPEG-H Part 2/HEVC) main profile • AV1 • Motion JPEG
Resolution	• 16:9: 1920x1080 to 640x360px • 16:10: 1280x800 to 320x200px • 4:3: 1440x1080 to 160x120px
Signal-to-noise ratio	>55 dB
WDR	Forensic WDR: Up to 120 dB depending on scene
Noise reduction	• Spatial filter (2D noise reduction) • Temporal filter (3D noise reduction)
AUDIO	
Features	• Automatic gain control (AGC) • Speaker pairing, microphone pairing
Input	• 10-band graphic equalizer • Input for external unbalanced microphone, optional 5 V microphone power • Digital input, optional 12 V ring power • Unbalanced line input
Output	Through network speaker pairing
Encoding	• 24bit LPCM, AAC-LC 8/16/32/44.1/48 kHz, G.711 PCM • 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz • Configurable bit rate

GENERAL DISCLAIMER:

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