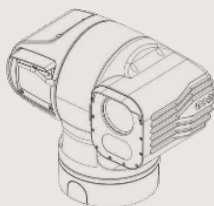


W-Q6225-ZTIR

ISO 9001:2015

31x Optical Zoom
3x Thermal Zoom
1,5°-60° IR Illuminator
2-1,500m Laser Range Finder



DETECT & VERIFY
AI-SOFTWARE COMPATIBLE

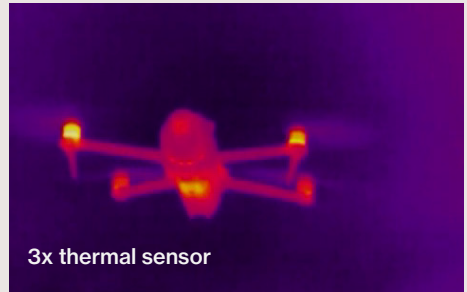


WISELED

IR Illumination – enhanced camera capabilities



Detect & Verify

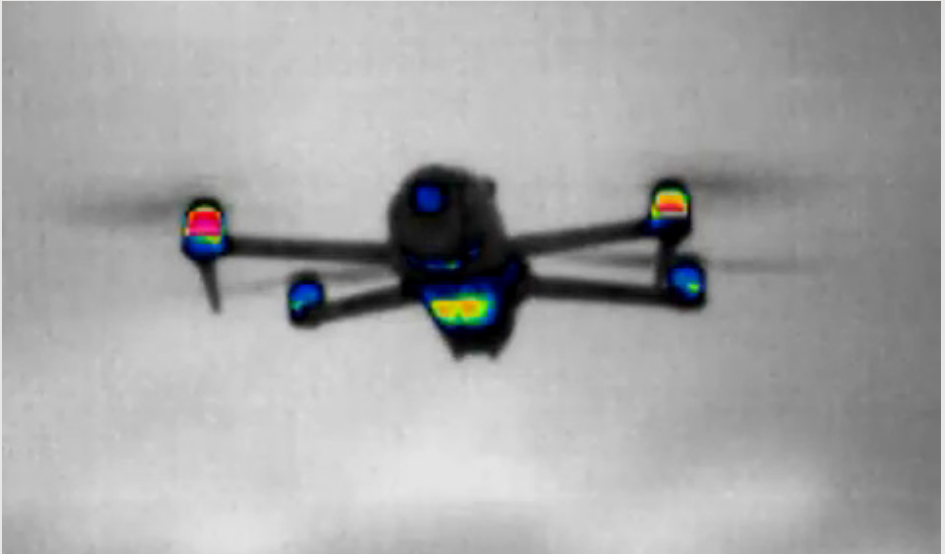


The W-Q6225-ZTIR pairs its 31x optical with a focusable IR laser and 3x thermal sensor.

Integrated into C-UAS systems this allows AI software to detect, acquire and classify targets - within the camera's field of view.

With enhanced illumination, the ability to classify what has been detected by feature, not purely motion or contrast, reduces false alarms from birds, foliage and weather in cluttered environments. Multiple tracks are prioritised autonomously or on operator instruction through the operating software system.

Integrated IR illumination extends visual verification into darkness, giving the operator a confirmed image of the track - not just a radar or RF contact. This closes the gap between detection and confident, human-verifiable identification.



W-Q6225-ZTIR

AI-Software Ready - Drone Detection & Visual Verification

The detection & tracking capability, based on the thermal channel, operates in complex, cluttered scenarios and at operationally useful ranges.

The sensor layer is system-agnostic and offering an API for integration with existing command-and-control and layered detection systems. W-Q6225-ZTIR, Radar, RF and acoustic sensors can feed a single operating picture.

Cost effective detection and verification - the system does not neutralise or mitigate. It hands a validated, classified track to the operator or an integrated response system, keeping deployment inside current EU legal boundaries for civilian counter-UAS use.

Built on a commercially available ruggedised PTZ platform, Wiseled has unique authorised access to the platform which allows the addition of enhanced IR illumination and thermal capabilities. As a package this delivers capabilities comparable with systems many times the cost.

Detection Capabilities:

- EO/IR sensing
- AI classification

Platform:

- 31x optical
- 3x thermal zoom
- 1,5°–60° IR illumination
- 2–1,500m Laser Range Finder
- Software-agnostic sensor layer

Scan QR code to
view our website





W-Q6225-ZTIR build on Axis Communications Q6225 PTZ system

The W-Q6225-ZTIR starts with the Axis Q6225-LE — a proven, PTZ camera trusted by governments and critical-infrastructure operators and security providers worldwide.

It delivers 1080p video with 31x zoom, so you can see detail from 400+ metres away in daylight and darkness alike.

The camera is built to survive harsh conditions: it withstands wind speeds of 245 km/h, operates from -50°C to +55°C, and is rated IK10 (vandal-proof) and IP68 (sealed against dust and water).

Wiseled add an enhanced zoomable IR laser, zoomable thermal camera and laser range finder. The basic detection engine runs directly on the camera's built-in processor and can be integrated into third party C-UAS software-based systems.

This enables recognition of targets in real time, not from motion or contrast, but from learned shape and behaviour patterns. This means fewer false alarms and more accurate identification.

What it Detects:

- Unmanned systems
- Personnel
- Vehicles
- Real-time, multi-track
- Day and night (with IR)
- Reduced false alarms





GENERAL SPECIFICATIONS

Casing : IP66-, IP68-, NEMA 4X- and IK10-rated aluminum

CASING

Color: urban grey NCS S 5502-B pr
FOREST GREEN
Wiper included (silicone wiper blade)
Sustainability
PVC free

POWER

High Power over Ethernet, max 90 W
Power over Ethernet (PoE) IEEE 802.3bt Type 4
Possibility to optimize power consumption of camera:
Full power: typical 16 W (no IR), max 71 W
Low power: typical 16 W (no IR), max 32 W. With
IR: 53 W
Features: power profiles, power meter

CONNECTORS

RJ45 10BASE-T/100BASETX/1000BASE-T PoE

STORAGE

Support for SD/SDHC/SDXC card
Support for SD card encryption (AES-XTS-Plain64 256bit)
Recording to network-attached storage (NAS)
For SD card and NAS recommendations, see axis.com

OPERATING CONDITIONS

Temperature with full power: -40 °C to 55 °C
Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F)
Arctic Temperature Control: Startup as low as -40 °C (-40 °F)
Humidity: 10-100% RH (condensing)
Wind speed (sustained): 68 m/s (245 km/h, 150 mph)
Storage conditions
-40 °C to 65 °C (-40 °F to 149 °F)

PTZ platform

Pan/Tilt/Zoom
Pan: 360° endless, 0.05°/s to 150°/s
Tilt: -90° to +90°, 0.05°/s to 150°/s
Zoom: 31x optical zoom, 12x digital zoom
Preset accuracy: 0.10°
300 preset positions, tour recording, guard tour, control queue, orientation aid PTZ, focus recall

CAMERA

Image sensor
1/2" progressive sc an CMOS
Lens
Focal length: 6.91 – 214.64 mm, F1.36 – F4.6
Horizontal field of view: 63.8°– 2.2°
Vertical field of view: 37°– 1.3°
Autofocus, P-iris
Day and night
Automatically removable infrared-cut filter
Minimum illumination
Color: 0.05 lux at 30 IRE F 1.36
B/W: 0.001 lux at 30 IRE F 1.36, 0 lux with IR
illumination on
Color: 0.08 lux at 50 IRE F 1.36
B/W: 0.008 lux at 50 IRE F 1.36, 0 lux with IR
illumination on
Shutter speed
1/111000 s to 1/2 s

VIDEO

@Video compression
H.264 (MPEG-4 Part 10/AVC)
Baseline, Main and High
Profiles
H.265 (MPEG-H Part 2/HEVC) Main Profile
Motion JPEG
Resolution
1920x1080 HDTV 1080p to 320x180
Frame rate
Up to 60/50 fps (60/50 Hz) in all resolutions
Videostreaming
Multiple, individually configurable stream s in H.264, H.265, and Motion JPEG
Axis Zipstream technology in H.264 and H.265
Controllable frame rate and bandwidth
VBR/ABR/MBR H.264/H.265
Low latency mode
Image settings
Compression, color, brightness, sharpness, white balance, exposure control, exposure zones, image freeze on PTZ, scene profiles, rotation, electronic image stabilization (EIS)1, defogging, contrast, local contrast, auto focus, Forensic WDR: Up to 120 dB depending on scene, 32 individual polygon privacy masks including mosaic and chameleon privacy masks
Signal-to-noise ratio
>55 dB



Infrared Illuminator:

The system has an integrated infrared VCSEL illuminator which synchronises with the day/night camera of the camera platform.

Type: VCSEL

Class 4 Infrared laser
940nm

Divergence: 1,5°-60°
NOHD: 59m

(When focused all the way and
100% output power)

Illumination distance: ca 2km
(Depending on weather
conditions)

For additional questions, contact
Wiseled ApS for additional safety
measurements and data

Laser Range Finder (LRF):

The laser range finder is
connected to the infrared
illuminator and monitors distance
to subject.

If subject is closer to system than
NOHD of the illuminator in current
focusing state, the laser
range finder turns the laser off or
focus the laser out, depending on
distance and surroundings
configured by operator/integrator.

Wavelength: 905nm

Distance: 2-1500m

Standard target range: 700m

Frequency: 0,1-10 Hz

Resolution: 0.1m

Accuracy: +/- 0,5m

**3 x Optical zoom thermal
camera module:**

The system is delivered with an
uncooled LWIR Sensor with
detector sensitivity of 30mK,
640x480 px resolution and
Ethernet RJ45 ONVIF camera
communication and PELCO-D
RS485 PTZ interface

Spectral band: 8 – 14 μ m

Framerate:

9 Hz (non-dual-use) or 60 Hz full
frame rate

Temperature range:

Super Gain mode -32 °C to 80 °C (-
25.6 °F to +176 °F)

High Gain mode up to +160 °C (up
to +320 °F)

Non-uniformity correction (NUC):

Integrated shutter, factory
calibrated

Optical zoom 35 – 105 mm

Zoom ratio: 3x; object distance:
minimum 7 m, maximum 3 083 m
Sealing rated at IP67 (front lens)
with DLC coating, F number: f/1.6
Horizontal FOV 18° to 5.9°
Vertical FOV 14.3° to 4.8°

Image palettes:

14 image color palettes

Palette inversion

Image Orientation:

Invert (Flip the image vertically),
Mirror (Flip the image horizontally)

Image gain control:

Automatic Image Gain Control
function
Manual Image Gain Control
function (Brightness, Contrast)

Communication interface:

Ethernet, RJ45 (PoE), 1Gb/s
(100Mb/s compatible)
2-pin power supply connector
Harting 14110213001000
8-pin AUX connector Phoenix
1780837 (DI, DO, RS485,
Termination)

Temperature drift compensation:

Factory calibrated for temperature
drift compensation

Smart spatial image filter:

Median full frame 60Hz spatial filter
for improved image quality

Smart temporal image filters:

Advanced 2nd-Generation
Temporal Filter for Enhanced Image
Quality