



# NWBS-4PTZ62

## 4MP Bi-Spectrum Thermal & PTZ Camera



### Key Features:

- 1/2.8" Progressive Scan CMOS
- 62.5x Optical Zoom; 16x Digital Zoom
- 25fps/30fps @ 4MP(2560\*1440)
- 31mm ~ 310mm // 22mm ~ 450mm Motor Thermal Lens options
- VOx uncooled focal plane @ 640x512 resolution // NETD  $\leq$  20mK
- Support human/vehicle detection and fire point detection
- Intelligent analysis: intrusion, single/double line crossing, loitering, wrong way, people counting, enter/leave area
- Operating temperature -40°C ~ 65°C
- Support 3 temperature measurement rule types (point, line, area)
- Power off self-locking, strong wind resistance
- IP67 Weather rating

## Product Overview

Infinity Bi-Spectrum cameras bring together the best of thermal and visual worlds into a single unit. Combining industry-leading thermal technology and PTZ (pan and tilt and zoom) technologies together, you can securely secure any site in any condition thanks to its ability to withstand wind and freezing and its IP67 weatherproofing.

## Features

### Thermal and Video

Temperature analytics and 4MP PTZ with 62.5x zoom and 16x digital zoom; supporting 1080p at 25fps and offering a 2MP Thermal stream with full analytics for both sensor types.

### Environmental

With a temperature range of -40°C to +65°C the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

### Smart Encode (H.265+)

Deliver high quality video without straining the network, Smart Encode H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265.

### HEVC (H.265)

H.265 ITU-T VCEG is a new video coding standard. H.265 Following standard developed around the existing video coding standard H.264, some retain the original technology, while some of the relevant technology to improve the new technology uses advanced technology to improve the relationship between the code stream, encoding quality, and the delay between algorithm complexity, optimize settings specific contents include: Improve compression efficiency, improve the robustness and error recovery capabilities, real-time to reduce the delay, reduce channel acquisition time and a random access delay, reduce complexity.

# Technical Specification

Visual Camera	
Image Sensor	180/240/330/500/860/2000mm 1/2.8" Star Level Progressive Scan CMOS
Effective Pixels	2560(H)x1440(V) / Shutter: 1/5s ~ 1/20,000s
Min. illumination	Color:0.0005Lux@(F1.2,AGC ON) , B/W:0Lux@(IR LED ON)
Pan/Tilt Range	Pan: 0° ~ 360° endless, Tilt: +45° ~ -45°
Pan/Tilt Speed	Pan: 0.01° ~ 30°/s, Tilt: 0.01° ~ 15°/s
Preset & Tracking	3000 Presets // 16 Tracks/Patrols // 256 preset for every patrol

Visual Lens	
Lens Type	Motor
Focal Length	8 ~500mm, 62.5x optical zoom
Optical Zoom	62.5x
Digital Zoom	16x
Focus Control	Auto/Manual
Functions	Mirror, Defog, Privacy Mask, 3D positioning, Radar Support
Wiper	Optional

Video	
Compression and Resolution	H.265,H.265,MJPEG
Max. Resolution	1440P(2560x1440)
Streaming Capability	3 Streams
Main Stream / Frame Rate	<b>Optical:</b> 2560x1440, 1920x1080, 1280x720 @25/30fps <b>Thermal:</b> 640x512 @ 25/30fps
Sub Stream / Frame Rate	<b>Optical:</b> D1, VGA, 640x360, CIF, QVGA @25/30fps
Bit Rate Control	CBR/VBR 32Kbps ~ 16Mbps
Image Enhancement	HLC / Defog / WDR
White Balance	Auto/Tungsten/Fluorescent/Daylight/Shadow/Manual
Features	AGC, WDR, Image Stabilizer, 2D/3D DNR

Electrical	
Power Supply and Consumption	24V DC/48V DC // 200W Max
Operating Conditions	-40°C ~ 65°C // Less than 95% RH // IP67
Certifications	CE / FCC // Metal Casing / PTA coating salt water resistant PH 6.5-7.2

Thermal Camera	
Sensor	640x512
Lens	Motor 31mm ~ 310mm or 22mm ~ 450mm option
Pixel Pitch and Range	15µm @ NETD ≤20mK // 3.7 µm ~ 4.8 µm range
Image Setting	Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR, SDE digital image processing, AGC
Palettes	Black-Heat / White-Heat / Rainbow / Iron-Red -> up to 16 modes

Network	
Protocols:	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTCP/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP
Interoperability	ONVIF, CGI, SDK
Max. User Access	10 Users
Web Viewer	<IE11, Chrome, Firefox, Safari, Edge

Thermal Detections	
Temperature Detection	3 temperature measurement rule types (point, line, area)
Temperature Alarm	Over temperature alarm, Temperature difference alarm
Accuracy and Response Time	±2°C / ±2% @ < 3ms
Fire Detection	Hot spot tracking, 1-16 targets, 255 thresholds

Smart Functions	
Optical Smart Functions	Intrusion detection, Line crossing, entering/leaving Area, Video Motion Detection (VMD), Wandering detection, People Gathering, Fast Moving, Auto tracking, items left behind, items taken; people/vehicle target detection, Face Detection; support 16 area settings for intrusion detection, people & vehicle filtering function; support target temperature filtering
Thermal Smart Functions	Intrusion, line crossing, People counting Loitering, Wrong way, Enter/Leave area, (all functions support accurate detection of people/vehicles)

Thermal Capabilities		
	31~300mm	22~450mm
Detection Distance (Fire: 1m x 1m)	Up to 12km	Up to 14km
Detection Distance (Fire: 3m x 3m)*	Up to 20km	Up to 25km
Detection Distance (Humans: 1.8m x 0.5m)	Up to 12km	Up to 13km
Detection Distance (Vehicles: 2.3m x 2.3m)	Up to 20km	Up to 22km
Detection Distance (Vehicles: 5m x 2m)*	Up to 30km	Up to 35km
Recognition Distance (Humans: 1.8m x 0.5m)	Up to 4km	Up to 5km
Recognition Distance (Vehicles: 2.3m x 2.3m)	Up to 8km	Up to 10km
Recognition Distance (Vehicles: 5m x 2m)	Up to 12km	Up to 14km
Identification Distance (Humans: 1.8m x 0.5m)	Up to 2km	Up to 2.5km
Identification Distance (Vehicles: 2.3m x 2.3m)	Up to 4km	Up to 5km
Identification Distance (Vehicles: 5m x 2m)	Up to 6km	Up to 8km

Interface	
Ethernet	1 Ethernet (10/100 Base-T) RJ-45 Connector
Features	GPS, RS485, RS-232, Reset Button, SD Card Slot up to 256GB

\*these detections are reliant on environmental conditions and target areas are outside of the established 'Johnson criteria' of thermal detection targets