



# NWBS-2PTZ40

2MP Bi-Spectrum Thermal & PTZ Camera with Wiper



## Key Features:

- 1/1.8" Progressive Scan CMOS
- 40x Optical Zoom; 16x Digital Zoom
- 25fps/30fps @ 4MP(1920\*1080)
- 30mm ~ 150mm Motor Thermal Lens
- VOx uncooled focal plane @ 640x512 resolution // NETD  $\leq$  35mK
- Support human/vehicle detection and fire point detection
- Intelligent analysis: intrusion, single/double line crossing, loitering, wrong way, people counting, enter/leave area
- Support temperature monitoring to -25°C ~ 65°C
- Support 3 temperature measurement rule types (point, line, area)
- Power off self-locking, strong wind resistance
- IP67 Weather rating // comes with Wiper to keep rain off

## 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 2MP PTZ with 40x zoom and 16x digital zoom; supporting 1080p at 25fps.

### Environmental

With a temperature range of -25°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	1/1.8" Progressive Scan CMOS
Effective Pixels	1920(H)x1080(V)
Electronic 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
Visual Lens	
Lens Type	Motor
Focal Length	8 ~320mm, 40x optical zoom
Optical Zoom	40x
Digital Zoom	16x
Angle of View	H: 38.4° ~ 0.48°
Focus Control	Auto/Manual
Functions	Mirror, Defog, Privacy Mask, 3D positioning, Radar Support
Wiper	Support
Video	
Compression and Resolution	H.265,H.265,MJPEG
Max. Resolution	1080P(1920x1080)
Streaming Capability	3 Streams
Main Stream / Frame Rate	<b>Optical:</b> 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
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	48V DC // 120W Max
Operating Conditions	-25°C ~ 65°C // Less than 90% RH // IP67
Certifications	CE / FCC // Metal Casing

Thermal Camera	
Lens	Motor Focus; 30mm ~ 150mm
Pixel Pitch and Range	17µm
Image Setting	Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR
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
Temperature Range	-20°C to 150°C (-4°F to 302°F) @ 75mm // -20°C to 550°C (-4°F to 1022°F) @ 100mm
Smart Functions	
Optical Smart Functions	Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection & alarm // Support human/vehicle detection and fire point detection
Thermal Smart Functions	Intrusion, line crossing, People counting Loitering, Wrong way, Enter/Leave area, (all functions support accurate detection of people/vehicles)
Thermal Capabilities	
Detection Distance (Humans: 1.8m x 0.5m)	Up to 7km*
Recognition Distance (Humans: 1.8m x 0.5m)	Up to 4km*
Identification Distance (Humans: 1.8m x 0.5m)	Up to 2km*
Detection Distance (Vehicles: 2.3m x 2.3m)	Up to 12km*
Recognition Distance (Vehicles: 2.3m x 2.3m)	Up to 6km*
Identification Distance (Vehicles: 2.3m x 2.3m)	Up to 4km*
Interface	
Ethernet	1 Ethernet (10/100 Base-T) RJ-45 Connector
I/Os	2x Audio In, 2x Audio Out // 3x Alarm In, 3x Alarm Out
Features	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