



Cyber
Security



Artificial
intelligence



Starvis
1/1.8" sensor



Ultra Low Light

BISPTZ-D40XF5CIF

Thermal & Optical Bi-spectrum Network Speed Dome Camera



KEY FEATURE

- 384×288 (the resolution of output image is 1280×720) resolution 12μm, VOx UFPA, NETD ≤ 40mK
- 5/7/15mm thermal lens, 40x optical zoom lens
- Support human/vehicle detection
- Support fire point detection, smoking detection and smoke & fire detection
- Intelligent analytics: intrusion, single/double line crossing, loitering, wrong-way, people counting, enter/leave area, smart motion detection
- Smart tracking: Cold/hot spot tracking, human/vehicle tracking
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature range: -20°C ~ 150°C (-4°F ~ 302°F), Accuracy: ±8°C
- Smart rain-sensing wiper, IP66

ACCESSORIES



WB-506B
Wall Bracket



CB-842
Ceiling Bracket



CM-862
Corner Mount



PM-853
Pole Mount



JB-367
Junction Box

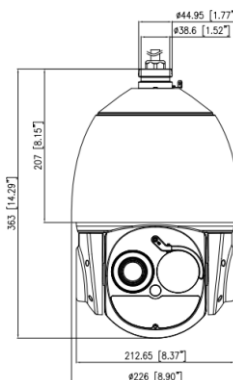


CM-358
Corner Mount

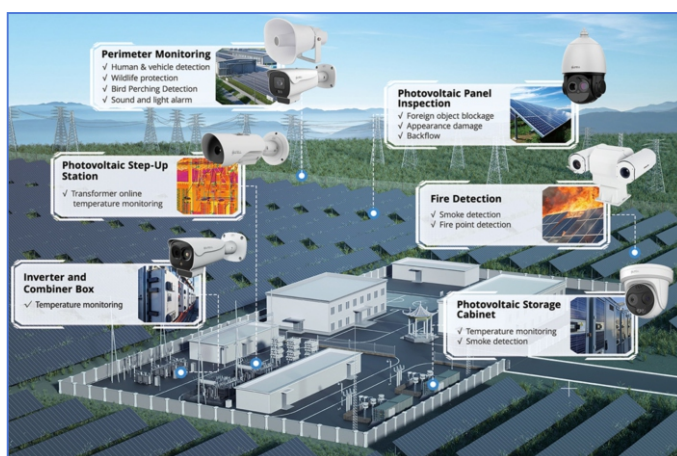
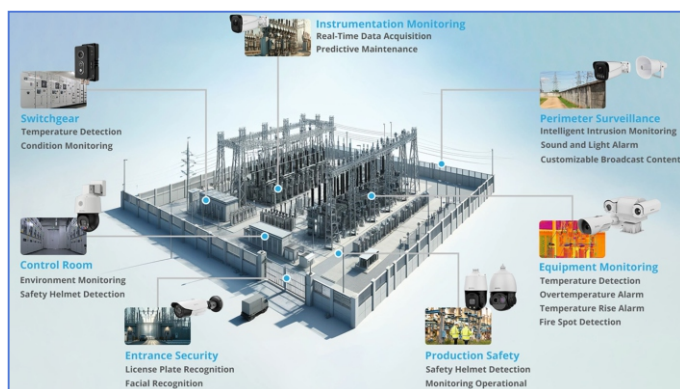
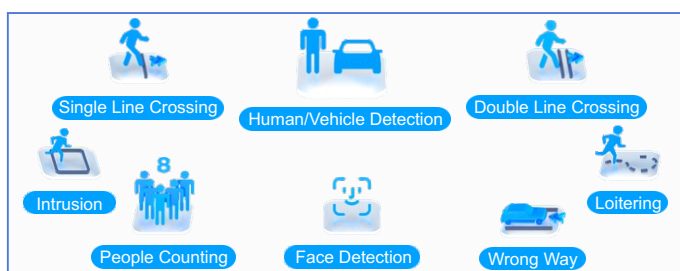


PM-359
Pole Mount

DIMENSIONS (MM)



FREE STANDARD EMBEDDED ANALYTIC



SPECIFICATION	
OPTICAL MODULE	
Image Sensor	1/1.8" CMOS
Max. Resolution	2688 (H)×1520 (V), 4MP
Shutter Speed	1/5 ~ 1/20,000s
Min. illumination	Color: 0.001Lux @ (F1.5, AGC ON), B/W: 0.0001Lux, 0Lux with IR
WDR	True WDR
Focal Length	6.27 ~ 251mm, 40x optical zoom
Aperture	F1.5 ~ F4.8
Angle of View	H: 60.7° ~ 2.33°, V: 36.8° ~ 1.38°
Digital Zoom	16x
Focus Control	Auto/Manual/Semi-automatic
Mirror	Support
Defog	Support
Anti-shake	Support Gyroscope
Privacy Masking	Support
PTZ	
Pan/Tilt Range	Pan: 0°~360° endless, Tilt: -10°~90°
Pan Speed	Pan: 0.01°~300°/s, preset speed: 300°/s
Tilt Speed	Tilt: 0.01°~240°/s, preset speed: 240°/s
Wiper	Support
Preset Accuracy	≤ 0.2°
Presets	400
Scan	12 scans
Patrol	12 patrols, up to 32 presets per patrol
Track	6 tracks
3D Positioning	Support
Speed Setup	Auto/Manual (0-8)
Power Off Memory	Support
Idle Motion	The time can be set (1-240 minutes), and functions such as preset positions, patrols, scans, and tracks can be run.
ILLUMINATOR	
Type	IR
Distance	Up to 300 m (984.25 ft)
Intensity And Angle	Automatically adjusted
VIDEO AND AUDIO	
Main Stream	Thermal: 1280×720, 704×576, 384×288@25fps Optical: 2688×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25/30fps
Sub Stream	Thermal: 704×576, 384×288, 352×240@25fps Optical: D1, VGA @25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	Thermal: Main stream: 100Kbps ~ 8Mbps Sub stream: 100Kbps ~ 6Mbps Optical: Main stream: 100Kbps ~ 16Mbps Sub stream: 100Kbps ~ 6Mbps
Region of Interest	Off/On (8 Zone, Rectangle)
Audio Compression	G711: 64kbps, RAW_PCM: 128kbps
SMART FUNCTION	
Smart Alarm	Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection & alarm
Smart Detection	Support human/vehicle detection, fire point detection, smoking detection and smoke & fire detection

Intelligent Analysis	Intrusion, Single/Double line crossing, Loitering, Wrong way, Enter/Leave area and Smart motion detection (these functions support accurate detection of human/vehicles)
People Counting	Support
Smart Tracking	Cold/hot spot tracking, human/vehicle tracking
TEMPERATURE DETECTION	
Temperature Detection	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line).
Temperature Alarm	Over temperature alarm, Temperature difference alarm
Accuracy	±8°C
Temperature Range	-20°C ~ 150°C (-4°F ~ 302°F)
NETWORK	
Protocols	IPv4/IPv6, HTTP, RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, DDNS, PPPoE, UPNP, ICMP, IGMP, FTP, NTP, SMTP, 802.1x, SNMP
Interoperability	ONVIF, SDK
Max. User Access	10 Users
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Language	English, Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian
INTERFACE	
Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch Input, 1ch Output
Alarm Interface	7ch Input, 2ch Output
RS-485	Support
BNC Output	Support
SD Card Slot	Built-in, up to 256GB
GENERAL	
Power Supply	24VAC/36VDC/PoE++ (802.3bt), Standard Equipped: 36VDC
Power Consumption	Max 45 W
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140 °F)
Operating Humidity	0 ~ 90% RH
Certifications	CE /FCC
Ingress Protection	IP66
Material	Metal
Dimensions	φ226 × 362.8 mm (φ8.9 × 14.28 inch)
Net Weight	6 kg (13.2 lb)

THERMAL MODULE

Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	Sensor 384×288. Image can be scaled up to 1280×720
Pixel Pitch	12µm
NETD	≤ 40mK
Spectral Range	8 ~ 14 µm
Image Setting	Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR
Pseudo-color Setting	White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes

THERMAL LENS

Focus Control	Free Focus		
Focal Length	5mm	7mm	15mm
Aperture	F1.0	F1.0	F1.0
Angle of View	H: 56°, V: 40°	H: 44°, V: 33°	H: 21°, V: 16°
Detection Distance (Humans: 1.8×0.5m)	208 m (682.4 ft)	291 m (954.7 ft)	624 m (2,047.2 ft)
Detection Distance (Vehicles: 4×1.5m)	639 m (2,096.5 ft)	894 m (2933.1 ft)	1,917 m (6,289.4 ft)
Recognition Distance (Humans: 1.8×0.5m)	52 m (170.6 ft)	73 m (239.5 ft)	156 m (511.8 ft)
Recognition Distance (Vehicles: 4×1.5m)	160 m (524.9 ft)	224 m (734.9 ft)	479 m (1,571.5 ft)
Identification Distance (Humans: 1.8×0.5m)	26 m (85.3 ft)	36 m (118.1 ft)	78 m (255.9 ft)
Identification Range (Vehicles: 4×1.5m)	80 m (262.5 ft)	112 m (367.5 ft)	240 m (787.4 ft)

* The table is only for reference and the performance may vary according to different environment.

* The optimal detection, recognition, and identification distances are calculated according to Johnson's Criteria.

Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.

DETECTION RANGE TABLE

Temp. Measurement (Object: 1 × 1m)	83 m (272.3 ft)	117 m (383.9 ft)	250 m (820.2 ft)
Temp. Measurement (Object: 0.2 × 0.2m)	17 m (55.8 ft)	23 m (75.5 ft)	50 m (164 ft)
Fire Detection (Object: 1 × 1m)	208 m (682.4 ft)	292 m (958 ft)	625 m (2,050.5 ft)
Fire Detection (Object: 0.2 × 0.2m)	42 m (137.8 ft)	58 m (190.3 ft)	125 m (410.1 ft)

Note: The table is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.

