PB-T23850-Z 36x

Thermal & Optical Bi-Spectrum Network Speed Dome

PB-T23850-Z 36x Thermal & Optical Bi-spectrum Network Speed Dome use a vanadium oxide uncooled focal plane sensor to enhance thermal image quality. The high sensitivity sensor has 384 x 288 resolution and features contrast adjustment for optimized images. AGC (Automatic Gain Control), 3D DNR (Dynamic Noise Reduction), and Dynamic Detail Enhancement further enhance image quality.

This series of cameras also features advanced fire detection and a wide range of Smart functions, including temperature exception, line crossing, intrusion, and region entrance and exit, benefiting users with great improvements in security efficiency and, more importantly, with key events and objects being recorded for further forensic needs.The cameras are outfitted with 50 mm lens to cover a variety of needs.

- 384 x 288 Resolution
- Vanadium Oxide Uncooled Focal Plane Arrays
- 50 mm Lens
- NETD <40 mk
- Adaptive AGC, 3D DNR
- Dynamic Detail Enhancement
- Visible Imager: 2 MP 1/1.9" CMOS
- 36x Optical Zoom, 16x Digital Zoom
- Smart Features:
  - Line Crossing, Intrusion, Region Entrance/Exit
  - Temperature Exception
  - Advanced Fire Detection
  - Smart Tracking
- Temperature Range: -4° F to 1,022° F (-20° C to 550° C)
- Temperature Accuracy: Maximum (± 8° C, ± 2%)
- 15 Psuedo Colors Adjustable
- IP66 Protection
- 24 VAC, 60 W

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Thermal Module	
Image sensor	Vanadium oxide uncooled focal plane arrays
Maximum Resolution	384 × 288
Detector Pitch	17μm
Response waveband	8μm to 14μm
NETD	< 40mk (@ 25° C,F#=1.0)
Lens (focal length)	50 mm
MRAD	0.34 mrad
Field of View	7.47° × 5.61°
Minimum Focusing Distance	7.5 m
F number	1.0
Optical Camera	
Image Sensor	1/1.9'' progressive scan CMOS
Minimum Illumination	Color: 0.002 lux @ (F1.5 , AGC On); B/W : 0.0002 lux @ (F1.5 , AGC On)
Focal Length	5.7 to 205.2 mm, 36x
Digital Zoom	16x
Field of View	58.7° to 2.0° (wide to tele)
Minimum Working Distance	10 to 1,500mm (wide to tele)
Aperture Range	F1.5 to F4.5
Focus Mode	Auto / semiautomatic / manual
WDR	120dB
Shutter Time	PAL: 1 to 1/30,000s / NTSC: 1 to 1/30,000s
White Balance	Auto / manual / ATW / indoor / outdoor / daylight lamp / sodium lamp
Day & Night	IR Cut Filter
Privacy Mask	24 privacy masks programmable; optional multiple colors and mosaics
Optical Defog	Yes
Enhancement	3D DNR
Smart Function	
VCA	Supports 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), 10 scenes, and 8 VCA rules for each scene
Temperature Measurement	Supports 3 temperature measurement rule types, over 256 presets, and 21 rules (10 points, 10 regions, and 1 line) for each scene
Temperature Range	-4° F to 302° F (-20° C to 150° C)
Temperature Accuracy	± 8° C (14.4° F)
Fire Detection	Supports 10 fire points
PTZ	
Movement Range	Pan: 360° continuous rotate; tilt: from -15° to + 90° (auto flip)
Pan Speed	Configurable, from 0.1°/s to 160°/s, preset speed: 240°/s
Tilt Speed	Configurable, from 0.1°/s to 120°/s, preset speed: 200°/s
Proportional Zoom	Yes
Presets	300
Patrol Scan	8; up to 32 presets per patrol
Pattern Scan	4; more than 10 minutes per pattern
Power Off Memory	Yes
Park	Preset / pattern scan / patrol scan / auto scan / tilt scan / random scan / frame scan / panorama scan
PT Status	Turn on / turn off
Scheduled Task	Preset / pattern scan / patrol scan / auto scan / tilt scan / random scan / frame scan / panorama scan / doom reboot / doom adjust / aux output
Infrared	
IR Distance	Up to 655 ft (200 m)
IR Intensity and Angle	Auto adjust
Network	
Main Stream	Optical: 50 Hz: 25 fps (1920×1080), 25 fps (1280×960), 25 fps (1280×720); 60 Hz:30 fps (1920×1080), 30 fps (1280×960), 30 fps (1280×720) Thermal: 50 fps (640 × 512)
Sub-Stream	50 Hz:25 fps (704 × 576), 25 fps (352 × 288), 25 fps (176 × 144); 60 Hz:30 fps (704 × 480), 30 fps (352 × 240), 30 fps (176 × 120) Thermal: 50 fps (640 × 512)
Video Compression	H.264 (Baseline/Main/High Profile) / MJPEG / MPEG4
Audio Compression	G .711u / G.711a / G.722.1 / MP2L2 / G.726 / PCM
Protocols	IPv4 / IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour
Simultaneous Live View	Up to 20-ch
User/Host Level	Up to 32 users, 3 levels: administrator, operator, user
Security Measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering
Integration	
Alarm Input	Up to 7-ch inputs (0 to 5 VDC)
Alarm Output	Up to 2-ch relay outputs, supports alarm linkage
Alarm Action	Preset / patrol scan / pattern scan / SD card record / relay output / smart capture / FTP upload / email linkage
Audio Input	Line in input / microphone input; peak: from 2 to 2.4 V[p-p]; output impedance: 1kΩ ± 10%
Audio Output	Linear level; impedance: 600 Ω
Communication Interface	Built-in RJ45; 10M/100M Ethernet Interface
Onboard Storage	Built-in microSD / SDHC / SDXC card slot, up to 64 GB; supports manual / alarm recording
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface
Analog Video Output	1.0V [p-p]/75 Ω, PAL / NTSC / BNC
RS-485	Half-duplex; HIKVISION, PELCO-P and PELCO-D self-adaptive
API	Open-ended API, supports ISAPI; supports HIKVISION SDK and third-party management platforms
Client	iVMS-4200
Web Browser	IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+; Multiple Languages
General	
Menu	English
Power	24 VAC, 60 W
Work Temperature/Humidity	From -40° F to 140° F (-40° C to 65° C); Humidity: 90% or Less
Protection Level	IP66 standard; TVS 6000V lightning protection, surge protection and voltage transient protection
Weight	17.64 lbs (8 kg)

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Range Performance[1]

Standard Range Table	Model	
	PB-T23850-Z 36x	
Johnson Criteria	Human	Vehicle
Detection	4,826 ft (1,471 m)	14,797 ft (4,510 m)
Recognition	1,207 ft (368 m)	3,698 ft (1,127 m)
Identification	604 ft (184 m)	1,850 ft (564 m)

Smart Functions Range Table		Model	
Line Cross/Intrusion/Region Entrance-Exit	Object	PB-T23850-Z 36x	
Optimized to Johnson Criteria (Recognition)	Human	1,181 ft (360 m)	
	Vehicle	3,698 ft (1,127 m)	
Temperature Exception	Size of Point	Max Range	
Accuracy at 5 x 5 pixels	2 m x 2 m	3,839 ft (1,170 m)	
	1 m x 1 m	1,936 ft (590 m)	
Advanced Fire Detection	Size of Point	Max Range	
Accuracy at 2 x 2 pixels	2 m x 2 m	9,646 ft (2,940 m)	
	1 m x 1 m	4,822 ft (1,470 m)	

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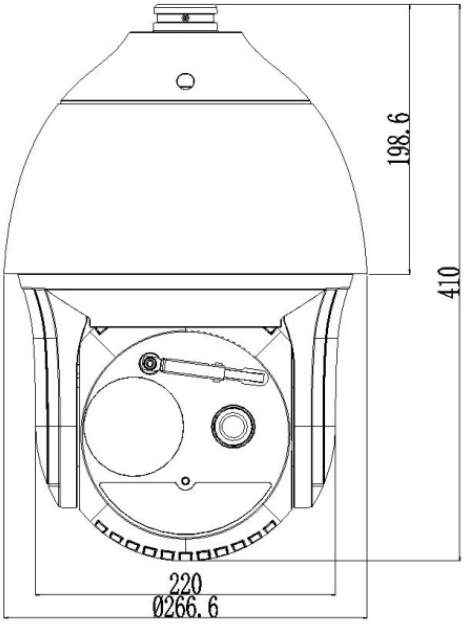
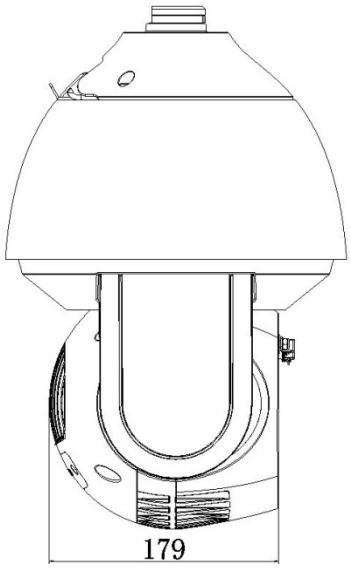
Accessories

PB-1604ZJ-B POLE Mount	**PB-1604ZJ-corner** Corner mount	**PB-1604ZJ-B** Power Box Mount w/Wall Bracket	**PB-1604ZJ-BP** Vertical Pole Mount with junction box	**PB-1604ZJ-BC** Wall Mount with junction box	**PB-1661ZJ** Short Ceiling Pendant Mount	**PB-1662ZJ** Long Ceiling Pendant **Mount**	**PB-1619ZJ** Gooseneck mount	**PB-1663ZJ** Ceiling mount	**PB-1660ZJ** Roof Parapet Mount

Dimensions





Units: mm