



DN2MPTZ645XAiAT



Key Features



- 1/2.8" 2MP STARVIS™ CMOS
- 45x optical zoom
- Starlight technology
- Max. 2MP@50/60fps
- IR Distance: up to 250m.
- Auto-Tracking 3.0
- Perimeter Protection
- Face Detection
- SMD 4.0
- IP67, IK10



Specifications

Camera					DN2MPTZ645XAiAT				
Image Sensor		1/2.8" CMOS							
Pixel		2MP							
Max. Resolution		1920 (H) x 1080 (V)							
ROM		4GB							
RAM		1GB							
Electronic Shutter Speed		1/1s ~ 1/30,000s							
Scanning System		Progressive							
Min. Illumination		Color: 0.005 Lux@F1.6 B/W: 0.0005 Lux@F1.6 0 Lux@F1.6 (IR On)							
Illumination Distance		250m (820.21ft)							
Illuminator On/Off Control		Zoom Prio, Manual, Smart IR, Off							
Illuminator Number		6 (IR)							
Lens									
Focal Length		3.95mm ~ 177.75mm							
Max. Aperture		F1.6 ~ F4.95							
Field of View		Horizontal: 65.7° ~ 1.9° Vertical: 39.4° ~ 1.1° Diagonal: 73.1° ~ 2.1°							
Optical Zoom		45x							
Focus Control		Auto, Semi-Auto, Manual							
Close Focus Distance		0.1m ~ 1m (0.33ft ~ 3.28ft)							
Iris Control		Auto, Manual							
DORI Distance	Detect	Observe	Recognize	Identify					
	2451.7m (8043.64ft)	972.9m (3191.93ft)	490.3m (1608.60ft)	245.2m (804.46ft)					

**PTZ**

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: -20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s ~ 260°/s Tilt: 0.1°/s ~ 120°/s
Preset Speed	Pan: 300°/s Tilt: 200°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern, Preset, Scan, Tour
PTZ Protocol	Pelco-P/D (Auto Recognition)

Intelligence

Video Metadata	Detects motor and non-motor vehicles, faces and human bodies. It also performs tracking, takes snapshots, uploads high-quality face images and optimizes images. It extracts attributes from motor vehicles, detecting up to 10 attributes for them.
IVS (Perimeter Protection)	Tripwire, Intrusion, climbing fences, loitering detection, abandoned/missing objects, fast moving, parking detection, people gathering, human/vehicle alarm classification, linkage tracking
Face Detection	Supports face detection, optimization, tracking, capturing pictures, uploading high-quality face snapshots and face enhancement. Supports attributes extraction. 6 attributes and 8 expressions: Gender, age, glasses, expressions (angry, sad, hate, scary, surprise, calm, happy and confused), mask, mustache. Supports face cutout: Face, one-inch photo. Capturing strategies include real-time capturing, optimization and quality first.
Construction Detection	Detects 6 helmet colors: Red, Orange, Yellow, Blue, White & Black. An alarm will be triggered when a person is not wearing a helmet or when the color of the helmet that they are wearing does not match the configured color. It also supports compliance detection for work uniforms. Up to 5 work uniform sample libraries can be uploaded, which together can contain up to 1,000 images (the images must be 1080p and in the JPG format). An alarm will be triggered when the similarity between the detected work uniform and the samples in the library is below the set threshold (that is, below the min. compliance standard for work uniforms). The system supports detecting the attributes of work uniforms such as the color of the uniform, and whether or not the person is wearing a mask and wearing shoe covers. An alarm will be triggered when the target is detected as not meeting the set requirements. It also detects and triggers alarms when only one person is in the construction site, and when no one is present in the detection area such as when a worker leaves their post or an area is left unmanned.



Auto Tracking	Yes
SMD	SMD 4.0
AcuPick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets.
Auto Patrol	It triggers the IVS rule when a target is detected and makes the camera link with the PTZ to rotate to the position of the target and patrol based on its presets
Video	
Video Compression	H.264H, H.264B, Smart H.265+, H.264, H.265, MJPEG (Sub Stream), Smart H.264+
Streaming Capability	3 streams
Resolution	1080p (1920 x 1080), 960p (1280 x 960), 720p (1280 x 720), D1 (704 x 576), VGA (640 x 480), CIF (352 x 288)
Video Frame Rate	Main Stream: 1080p, 1.3M, 720p@1-50/60fps Sub Stream 1: D1, VGA, CIF@1-25/30fps Sub Stream 2: 1080p, 1.3M, 720p@1-25/30fps
Bit Rate Control	CBR, VBR
Video Bit Rate	H264: 64 Kbps ~ 10496 Kbps H265: 25 Kbps ~ 6400 Kbps
Day/Night	Auto (ICR), Color, B/W
BLC	Yes
WDR	120dB
HLC	Yes
White Balance	Auto, Indoor, Outdoor, Tracking, Manual, Sodium Lamp, Natural Light, Street Lamp
Gain Control	Auto, Manual
Noise Reduction	2D, 3D
Motion Detection	Yes
Region of Interest (ROI)	Yes
Image Stabilization	Electronic (EIS)
Defog	Electronic
Digital Zoom	16x
Image Rotation	180°



Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view
S/N Ratio	≥55dB
Audio	
Audio Compression	PCM, G.711a, G.711mu, G.726, MPEG2-Layer2, G722.1, G729, G723
Network	
Network Port	1 x RJ-45 (10/100 Base-T)
Network Protocol	FTP, RTMP, IPv6/IPv4, Bonjour, DNS, RTCP, PPPoE, NTP, RTP, 802.1x, HTTPS, SNMP, TCP/IP, DDNS, UPnP, NFS, ICMP, UDP, IGMP, HTTP, SSL, DHCP, SMTP, QoS, RTSP, ARP
Interoperability	CGI, SDK, ONVIF (Profile S, Profile G, Profile T), P2P
Streaming Method	Unicast, Multicast
User/Host	20 (Total bandwidth: 64m)
Storage	Micro SD card (up to 512 GB), FTP, NAS
Browser	IE: 9 and later, Chrome: 41 and later versions, Firefox: 50 and later versions, iOS: 10 and later versions
Management Software	DSS, DMSS
Mobile Client	iOS & Android
Certification	
Certifications	CE: EN55032, EN55024, EN50130-4 FCC: Part 15 Subpart B, ANSI C63.4-2014
Port	
Analog Output	1-Channel (CVBS output, BNC)
RS-485	1 (Bit Range: 1200 Bps ~ 9600 Bps)
Audio Input	1-Channel
Audio Output	1-Channel
Alarm Linkage	Capture, recording, send email, preset, tour, pattern, alarm digital output
Alarm Event	Motion/Tampering Detection, Audio Detection, Network Disconnection Detection, IP Conflict Detection, Memory Card state detection, memory space detection
Alarm I/O	7/2
Audio I/O	1/1



Power

Power Supply	24 VDC, 2.5A $\pm$ 25%, PoE+ (802.3at)
Power Consumption	Basic: 13W Max.: 25W

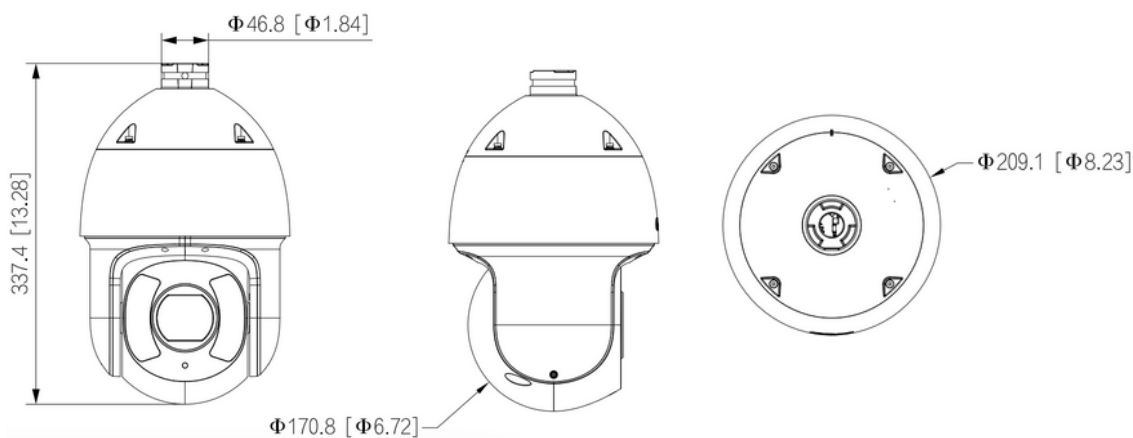
Environment

Operating Temperature	-40°C ~ +70°C (-40°F ~ +158°F)
Operating Humidity	$\leq$ 95% (RH)
Protection	IP67, IK10, TVS 6000V lightning proof, surge protection, voltage transient protection

Structure

Product Dimensions	337.4mm x Φ 209mm (13.28" x Φ 8.23")
Net Weight	5.9 kg (13.00lb)
Gross Weight	9.6 kg (21.16lb)

Dimensions



Accessories

Included:



PFB305W
Wall Mount
Bracket

Not Included:



PFA111
Mount Adapter



PFA120
Water-Proof
Junction Box



PFA150
Pole Mount
Bracket



PFA151
Corner Mount
Bracket



PFB300C
Ceiling Mount
Bracket



PFB301C
Ceiling Mount
Bracket



PFB301S-E
Plane Mount
Bracket



PFB303S
Parapet Mount
Bracket