network Dyna**Hawk**™ 720/820Z-N Series

3M Real-time Speed Dome IP Camera

720/820Z N series Speed Dome IP Camera, with latest encoding technology, is the very first 3M (2048x1536) @ 30fps real-time speed dome product in the surveillance market. It is also able to deliver crystal clear image with high quality 30x optical zoom lens in very long distance.
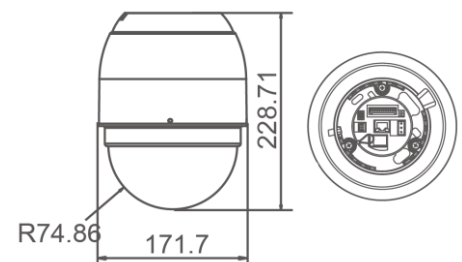
This model can offer simultaneous Quad Streams and Qual Codec, H.264 Baseline / Main / High Profile, MJPEG for various network applications via speeding or limited bandwidth. With software defog algorithm, image can still keep clear in foggy weather. Compliance with ONVIF Test tool 14.06 and Profile S, this model is able provide fully compatibiloity to any VMS around the world. It can seemlessly connect to the backend system with universal ONVIF protocol.

With built-in heater and 60W PoE power source support, this model is able to operate in extreme weather condition from -40°C to 50°C . IP66 International standard is also gurantee in this model for outdoor
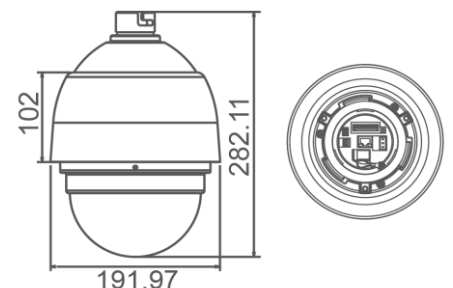

▌ Key Features

- Sony Progressive Scan CMOS Sensor
- Up to 30x Optical Zoom
- 10x Digital Zoom
- Wide Dynamic Range
- 3M @ 30fps + 1080P @ 30fps
- Supreme Frame Rate Support: 1080P @ 60fps + SXGA @ 60fps
- Quad Streams Support
- Quad Codec: H.264 Baseline / Main / Hight Profile +
- 2D Noise Reduction
- Defog function
- 802.3at 60W PoE+ Support for Heater Activation
- Weatherproof (IP66 International)*

720 (Indoor Model)

820 (Outdoor Model)

Camera

Camera		N4 (18x)	N5 (20x)	N6 (30x)
Image Sensor		1/2.8" Sony Progressive CMOS		
Optical Zoom		18x	20x	30x
Digital Zoom		10x		
Minimum Illumination		0.05 lux (Color), 0.01 lux (B/W) @ F1.6		
Wide Dynamic Range		Digital WDR		
Focus Mode		Auto / Manual		
White Balance		Auto / Indoor / Outdoor / ATW / Manual		
Iris Control		Auto / Manual		
Electronic Shutter		1/1 ~ 1/10000 sec.		
AGC Control		Auto / Manual		
Backlight Compensation		On / Off		

Lens

Lens	N4 (18x)	N5 (20x)	N6 (30x)
Focal Length	4.7 ~ 84.6 mm	4.7 ~ 94 mm	4.3 ~ 129 mm
Min. Focus Length	1 m (Wide); 1 m (Tele)	1 m (Wide); 1 m (Tele)	1 m (Wide); 1.2 m (Tele)
F Number	F 1.6 (Wide); F 2.8 (Tele)	F 1.6 (Wide); F 3.5 (Tele)	F 1.6 (Wide); F 4.7 (Tele)
FOV	55.2˚ (Wide); 3.2˚ (Tele)	55.8˚ (Wide); 4˚ (Tele)	66.5˚ (Wide); 3.25˚ (Tele)

Operation

Operation		
Pan Travel		360˚ endless
Tilt Travel		-10˚ ~ 190˚
Manual Speed		0.5˚ ~ 90˚/s
Presets		256
Preset Accuracy		0.225˚
Preset Speed		5˚ ~ 400˚/s
Sequence		8
Auto Pan		4
Cruise		8
Privacy Mask		16
Proportional Pan & Tilt		On / Off (Pan and tilt speed proportional to zoom ratio)
Resume after Power loss		Support
Home Function		Preset / Sequence / Auto pan / Cruise
Auto Flip		Image / Mechanical / Off
Motion Detection		Motion Detection Window x 4 sets
Day / Night: IR Cut Filter		On / Off
Image Rotation		Flip / Mirror / Inverse
Defog		On / Off
Noise Reduction	2D	On / Off

Network

Network		
Networking		RJ-45, 1Gbps Ethernet
Video Compression		MJPEG / H.264 (MPEG-4 Part 10/AVC) Baseline / Main Profile / High Profile
Video Stream	Single	H.264 3M (2048x1536) @ 30fps H.264/MJPEG 1080P @ 60fps
	Dual	H.264 3M (2048x1536) @ 30fps + H.264 SXGA @ 30fps H.264 1080P @ 60fps + H.264 D1 @ 30fps Note: One if the stream below 1080P can be MJPEG
	Multiple	H.264 3M (2048x1536) @ 30fps + H.264 720P @ 30fps + H.264 D1 @ 30fps + H.264 CIF @ 30fps H.264 1080P @ 60fps + H.264 CIF @ 60fps + H.264 CIF @ 30fps + H.264 CIF @ 30fps Note: One if the stream below 1080P can be MJPEG
Video Resolution		H.264 - 3M / Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF MJPEG - Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF
Audio Compression		G.711 / G.726
Audio Stream		Two-way Audio
Protocols		IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF, ARP
Security		HTTPS / IP Filter / IEEE 802.1x
Alarm	Input	4 Sets / 5V 10kΩ pull up
	Output	2 Set / Relay output, max. 2A DC 30V / 0.5A AC 125V
Alarm Reaction		Preset / Sequence / Auto Pan / Cruise
Micro SD		microSDXC 64GB Support
Supported Web Browser		Internet Explore (6.0+) / Chrome / Firefox / Safari
Password Levels		User and Administrator

General

General		
Environment		Indoor / Outdoor
Operating Temperature	Indoor	0˚C ~ 40˚C (32˚F ~ 104˚F)
	Outdoor	-40˚C ~ 50˚C (-40˚F ~ 122˚F)
Dimension	Indoor	Ø 171.7 x 228.7 mm (Ø 6.7 x 9 in.)
	Outdoor	Ø 191.9 x 282.1 mm (Ø 7.5 x 11.1 in.) w/ Sunshield
Weight	Indoor	1.6 kg (3.57 lb)
	Outdoor	2.3 kg (5.11 lb) w/ Sunshield
Power Source	Indoor	802.3at PoE+ (30W)/ AC 24V ± 10%
	Outdoor	802.3at PoE+ (60W)/ AC 24V ± 10%
Power Consumption	Indoor	24 W
	Outdoor	59.5 W (w/ Heater)
Regulatory		CE / FCC / RoHS / IP66 (Outdoor)

* mark for optional items
Product specification and availability are subject to change without notice.