## 6" 2MP 30x Network IR Speed Dome



SM-IPTZ-2MP-30X/HWS

- 1/2.8" 2MP SONY CMOS
- True WDR
- STARVIS
- Powerful 30x optical zoom
- Max. 25/30fps @2M
- 300 m IR distance
- **IP66**











Smart IR

CE FC Onvie

#### System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, the camera provides a wide monitoring range and great detail. The camera delivers 2MP full high definition resolution at 25/30fps. The camera is equipped with smooth control, high quality image, and good protection, meeting compact size demands of video surveillance applications.

#### **Features**

#### High Efficiency Video Coding (H.265)

The H.265 video compression standard offers double the data compression ratio at the same level of video quality and substantially improved video quality at the same bit rate, compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and different coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

#### **Smart IR (2.0)**

The product updates its IR lighting sub-system to Smart IR 2.0. The Infrared illumination lens adopts new freedom surface design pattern, and improves the uniformity of illumination above 0.5, compared to 0.3 of the older TIR fashion. And the new hardware is able to accurately adjust the IR driving current, step by step. Mixing the auto-exposure algorithm and IR control algorithm together makes the IR brightness control self-adaptive and no more over-exposured for most conditions.

## Smart TM 1.0 (Thermal Management)

The camera has built-in temperature sensor, industrial level turbofan. as well as high power heater. The system uses PID control algorithm to adjust the turbofan's speed and heater's power to make the camera working in a suitable temperature chamber.

#### **Superior Image Quality**

The product adopts high MTF 20x zoom lens and Sony latest STARVIS image sensor so that it can capture vivid color image at low light conditions, avoid Smear for very bright objects, such as street road lamp, car's bright lamp, and output high-quality image. Besides, when WDR is selected, the camera will combine long exposure frame and short exposure frame into one frame-the so called physcial WDR (true WDR).

## Working Environment and Interoperability

This product is rated for use in temperatures from -30 °C to + 60 °C, under 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating, makes it work well outdoor. This product allows for 6KV lightning rating, which provides effective protection against lightning.

The camera conforms to the ONVIF specifications, ensuring interoperability between network video products regardless of manufacturer.

## **SPECIFICATION**

Camera Module	
Image Sensor	1 / 2.8 "progressive scan (SONY) CMOS
Min. Illumination	Color: 0.006 lux @F1.6, AGC ON B/W: 0.003lux @F1.6, AGC ON 0 lux with IR
White Balance	Auto/Manual//Indoor/Outdoor
S/N ratio	More than 50dB
Gain	Auto/Manual
Shutter Time	50Hz: 1/1s~1/25,000s; 60Hz: 1/1s~1/30,000s
Day&Night	IR Cut Filter
Privacy Mask	4 programmable privacy masks
Focus Mode	Auto/Manual
WDR	True WDR, 2 frames in one
Lens	
Focal Length	4.5-135mm, 30x optical zoom
Zoom Speed	Approx. 4s (optical lens, Wide-TELE)
Field of View	Horizontal field of view: 62° to 2.3° (Wide-TELE)  Vertical field of view: 35° to 1.3° (Wide-TELE)  Diagonal field of view: 71° to 2.6° (Wide-TELE)
Working Distance	Wide:1.0m~INF Tele: 1.5m~INF
Aperture Range	F1.6 (Wide) to F4.4 (TELE)
IR	
IR Distance	300m: 6 LED lights+4 VCSEL (laser)
Smart IR	Support
PTZ	
Pan Range	360° endless
Pan Speed	Configurable, from 0.1°/s to 80°/s; Preset speed: 150°/s
Tilt Range	From 0° to 93° (auto-flip)
Tilt Speed	Configurable, from 0.1°/s to 70°/s; Preset speed: 150°/s
Proportional Zoom	Support
Preset	360
Cruise	8 cruises, up to 16 presets for each cruises
Trace	4 traces, record time over 3 minutes for each trace
Power-off Memory	Support
Action Mode	Preset/Cruise/Trace/Auto Scan/Random Scan
3D Postioning	Support
PTZ Position Display	Support
Scheduled Task	Preset/Cruise/Trace/Random Scan/Boundary Scanning/Dome Reboot
Compression Stand	lard
Video Compression	H.265 / H.264 / MJPEG
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
Video Bit Rate	128Kbps~6Mbps
SVC	Support
Audio Compression	G.711A/U
Smart Features	
Basic Event	Motion Detection, Video Tampering Detection, Exception
Smart Event	Object Removal Detection, Intrusion Detection, Line Crossing Detection, People Intrusion and People Counting
Alarm Linkage	Alarm actions, such as preset, cruise, track, SD card record, trigger recording, notify surveillance center, upload to FTP/SD card/NAS, send Email, etc.

Smart Record	ANR (Automatic Network Replenishment)
Image	
Max. Resolution	1920×1080
Main Stream	50Hz:25fps(1920×1080, 1280×720) 60Hz:30fps(1920×1080, 1280×720)
Sub Stream	50Hz:25fps(1280×720, D1, CIF) 60Hz:30fps(1280×720, D1, CIF)
Third Stream	50Hz:25fps(D1, 480×240, CIF) 60Hz:30fps(D1, 480×240, CIF)
Image Enhancement	WDR/HLC/BLC/3D DNR/Defog
Network	
Network Storage	Built-in micro SD card slot, up to 128GB
Protocols	HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE
API	ONVIF
Simultaneous Live View	Up to 6 channels
User/Host	Up to 16 users, 3 levels: Administrator, Advanced User and Normal User
Security Measures	User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption, IEEE802.1x port-based network access control; IP address filtering
Client	VMS-9000 Client
Web Browser	IE8-11, Chrome 31.0 to 44, Firefox 30.0 to 51
Interface	
Network Interface	1 RJ45 10M/100M Ethernet
Audio	1CH audio input (applicable microphone, plug-in power type) 2 to 2.4v[p-p] 1k $\Omega$ ±10%; 1CH audio output (line out), impedance: $600\Omega$
Video Output	1CH video output (1.0V [p-p] / 75Ω, PAL or NTSC, BNC)
Alarm	7CH alarm input; 1CH alarm output
RS485	Pelco-D / P protocol, custom protocols available
General	
Power	AC24V3A, Max.60W(IR ON)
Working Environment	-30°C~60°C(-22°F~140°F), ≤ 95% RH
Protection Level	IP 66 Standard, TVS6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Material	ADC12
Dimensions	Φ 215.9mm × 348.5mm (Φ8.5" × 13.7")
Weight(net)	Approx. 5.36KG (11.82lb)

# DIMENSIONS





