

ACP-O0016

30x Hi-Speed Dome Series

Features

- 2 Megapixel Sony 30X Zoom Camera
- IP-67 Dome Housing(Anti-Salt Fog)
- Support DIS and T-WDR Function
- True Day/Night Function – IR Cut Filter
- 360° Continuous Pan and 180° Tilt
- Power over Ethernet (802.3at)
- H.265/H.264/ M-JPEG Compression
- -20°C - 60°C Temperature Range
- N Type IR LED Built in 150M Available for Long Distance 【ACP-O0016-N】
- W Type IR LED Built in 60M Available for Wide Angle 【ACP-O0016-W】
- Micro SD Card Backup (Optional)
- Support iPhone/Android/Mac

Appearance





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Revision Table

Date	Revision	Content	By
2025/10/14	0.1	First Draft	Mark

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Specification

Hardware	
CPU	Multimedia SoC
RAM	512MB
Image Sensor	1/2.8" 2M Sony True WDR Starvis CMOS Sensor
Sensitivity	0.005 lux (B/W) , 0.01 lux (Color)
Lens Type	30x Auto Iris Optical Zoom, 12x Digital Zoom
Focal Length	F = 4.7mm (WIDE) to 141 mm (TELE)
Maximum Aperture	F1.5 - F5.0
View Angle	3.9°- 60°(H), 1.8°- 34°(V)
Pan / Tilt Range	Pan: 360° / Tilt: 0°-180° Auto Flip
Preset (Patrol) Speed	200°/s
Preset Accuracy	< 0.05°
Preset Points	256
Preset Focus Mode	Auto / Manual
Patrol	8 Groups with 24 Points
Auto Pan	Yes
Auto Recovery	Pending Time, Action
Cruise	8 Groups
Home Position	Yes
Brightness	Low-4 – High-4
Contrast	Low-4 – High-4
WDR	Off /Low1 - High8

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Specification

Hardware	
Day & Night Mode	Auto / Light Sensor/ Color / B/W / Time Mode with Auto ICR
DNR Mode	Off / Low / Middle / High
Video Orientation	Off / Flip / Mirror / Rotate
White Balance	Auto / Indoor lamp / Sunlight / Cloudy / Manual
R-Gain / B-Gain	-5 - +5
OSD	Off / On
Network Control	Brightness, Contrast, Color, Sharpness
Visible Spectrum	240nm - 1200nm
Defog	Off / Low / Middle / High
Privacy Mask	Yes, 6 Different Areas
I/O	4 DI / 1 DO
Audio	G.711(64K) and G.726(32K,24K) Audio Compression Support 2-Way Input : External Audio in Output: External Line out
Power Source	DC56V / PoE++
Weatherproof	Meet IP67 Standard
Shockproof	Meet NSS-II Shock Grade
Dimension	Ø 253mm
Operating Temperature	-20°C - +60°C without Heater

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Specification

Network	
Ethernet	10 / 100 Base-T
Network Protocol	IPv6, IPv4, HTTP, HTTPS, SNMP, QoS/DSCP, SSL, IEEE802.1X, RTP,RTSP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP, SAMBA
ONVIF	Supported
System	
Video Resolution	1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps, 176x144@30fps
Video Adjust	Auto Electronic Shutter, Day & Night Mode, Day & Night Level, DNR Mode, WDR Mode, Video Orientation, White Balance, R-Gain, B-Gain, Sharpness, Exposure, Defog, OSD, Privacy Mask, ROI, Smart Stream
Triple Streaming	Yes
Image Snapshot	Yes
Image Transmission Rate	32Kbps - 8Mbps
Compression Format	H.264 / H.265 / M-JPEG
Video Bitrate Adjust	CBR, CVBR
Motion Detection	ON / OFF
Triggered Action	Mail, FTP, Google driver, Dropbox, Samba
Pre/ Post Alarm	Yes, Configurable
Security	Password Protection, IP Address Filtering, HTTPS Encrypted Data Transmission, 802.1X Port-Based Authentication for Network Protection, QoS/DSCP
Firmware Upgrade	HTTP Mode, Can Be Upgraded Remotely

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Environment Compliance

SL No	Specification Requirement	Required Value	Compliance (Met / Deviation)	Remarks / Explanation
1	Infrared LED Range	up to 50M	Met	Exceeds
2	Horizontal Resolution	530TVL	Met	Exceeds 2MP parameter. Not applicable to digital cameras; however, for comparison, a 720TVL camera is roughly equivalent to 976×494 (NTSC) and 976×582 (PAL), which is close to 0.5MP.
3	Active pixel	752H*582V	Met	Exceeds
4	Working Temperature	-35°C to 55°C	Met	-20 to +60°C without heater -35 to 60°C with heater
5	IP rating	IP67	Met	
6	PTZ Functionality and IP Based Digital Interface	-	Met	
7	Colour Brightness	0.3 lux at 30 IRE	Met	Exceeds 0.01 lux(Color) F1.5 @ 30 IRE
8	B/W	0.005 lux at 30 IRE	Met	Exceeds 0.005 lux(B/W) F1.5 @ 30 IRE
9	Shock Grade	NSS Grade II	Met	
10	Image Sensor	1/3"	Met	Exceeds 1/2.8" - technically it is slightly bigger than 1/3" sensor. However, sensor size is matched to other parameters sensor type, lens zoom level, aperture, angle of view and other electronics to achieve the right image under different lighting condition.

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Environment Compliance

SL No	Specification Requirement	Required Value	Compliance (Met / Deviation)	Remarks / Explanation
11	Sensor Type	IL CCD	Deviation	Deviation – Sensor type chosen is CMOS Over the years CMOS technology sensors have gone through extensive improvements that helps higher resolution, excellent color, faster frame rate and low power consumption and are compared equal or better than CCD sensors when matched with correct zoom lens and other IR illuminators, aperture and shutter speed.
12	Auto Iris, 30:1 Zoom with Motorised Zoom and Auto Focus with Manual Override		Met	
13	Video Output Scanning Camera / Lens Video Output should include IP (Digital) in addition to NTSC/PAL.		Met	Requirement of NTSC/PAL is only applicable to analog CCTV cameras.
14	Zoom in Range	30 x (Optical), 12 x Digital	Met	

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SL No	Specification Requirement	Required Value	Compliance (Met / Deviation)	Remarks / Explanation
15	Angle of View	55° to 1.9° Horizontal	Partially Met	The angle of view on the wider side exceeds the 550° requirement (600). On the shorter side, it is fractionally lower by about 20°, which will not affect the overall video quality except for the ability to focus on very small objects located beyond a 50 m range. Furthermore, the angle of view should be matched with other parameters such as image sensor type, sensor size, zoom level, and aperture.
16	Aperture	F1 .4 to 3.0	Partially Met	On the high aperture opening side, there is a minor deviation F1.5. This is offset by the lens and image sensor, resolution, contrast achieved at low light conditions by IR illuminator.
17	Pre-set Positions	32	Met	Exceeds 256
18	Pre-set Tours	16	Met	Exceeds, 24 swipe tour per group, total 8 tour groups
19	Pre-set Accuracy	0.1 Degree	Met	< 0.05° per
20	Sensitivity	0.7 Lux Colour, 0.01 Lux Mono	Met	0.005 lux(B/W) , 0.01 lux(Color)

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SL No	Specification Requirement	Required Value	Compliance (Met / Deviation)	Remarks / Explanation
21	Range Minimum	25-50 m	Yes	F=4.7mm (WIDE) to 141 mm (TELE)
22	Material	Electro Polished 316L Stainless Steel	Deviation	Aluminum-alloy die casting with anti- salt fog coating
23	Windows	Toughened Glass Window with Thermostatically Operated Demister	Met	Heater option available
24	PAN Operation	360 Degree Rotation @ 0° to 9° / sec	Met	
25	Tilt Operation	180° Rotation@ 0° to 45° / sec	Met	
26	Mechanical Limits	Programmable Soft Stops: Pre-Set Positioning	Met	

Environmental performance may vary according to the integration method or final integration scenario.



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Deliverables

1	30x Hi-Speed Dome Series
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Ordering Information

Model Name	Description	Unit
ACP-O0016-N	30x Hi-Speed Dome with IR LED Built in 150M for Long Distance	1
ACP-O0016-W	30x Hi-Speed Dome with IR LED Built in 60M for Wide Angle	1

Disclaimer

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