



**Speed Dome**  
**Technical Manual**

## Notices

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Please send any comments regarding the documentation to:

[overseabusiness@hikvision.com](mailto:overseabusiness@hikvision.com)

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## DS-2AF1-5XY Series (Released)



### Key feature

#### System function:

- 1/4" SONY high performance CCD
- $\pm 0.1^\circ$  Preset Accuracy
- Self-adaptive to HIKVISION, Pelco-P/D protocol
- 3D intelligent positioning function
- Power-off memory function: restore PTZ & Lens status after reboot
- Fiber optical interface optional
- Built-in temperature sensor, with display of internal temperature
- RS-485 communication diagnosis capability
- Manchester code communication diagnosis capability
- Scheduled PTZ movement
- Password protection
- Camera title programmable
- Zone Scanning

#### Camera function:

- Auto iris, auto focus, auto white balance, backlight compensation and auto/manual day & night switch

#### PTZ function:

- 360° endless pan range and  $-5^\circ$ - $185^\circ$  tilt range
- 540°/s Pan Preset Speed and 400°/s Tilt Preset Speed
- 0.1°-300°/s Manual Pan Speed and 0.1°-240°/s Manual Tilt Speed
- 256 presets programmable; preset image freezing capability
- 8 patrols, up to 32 presets per patrol
- 4 patterns, with the recording time not less than 10 min
- Proportional zoom function
- Park action: auto callup of PTZ movement, after a defined time of inactivity
- 2 alarm inputs and 2 alarm outputs ( 7 alarm inputs and 2 alarm outputs optional )

## Application Scenarios

It can be widely applied to places requiring wide-area monitoring display, such as rivers, forests, highways, railways, airports, ports, sentries, squares, parks, scenic sites, streets, stations, large venues, outside of residential areas, etc

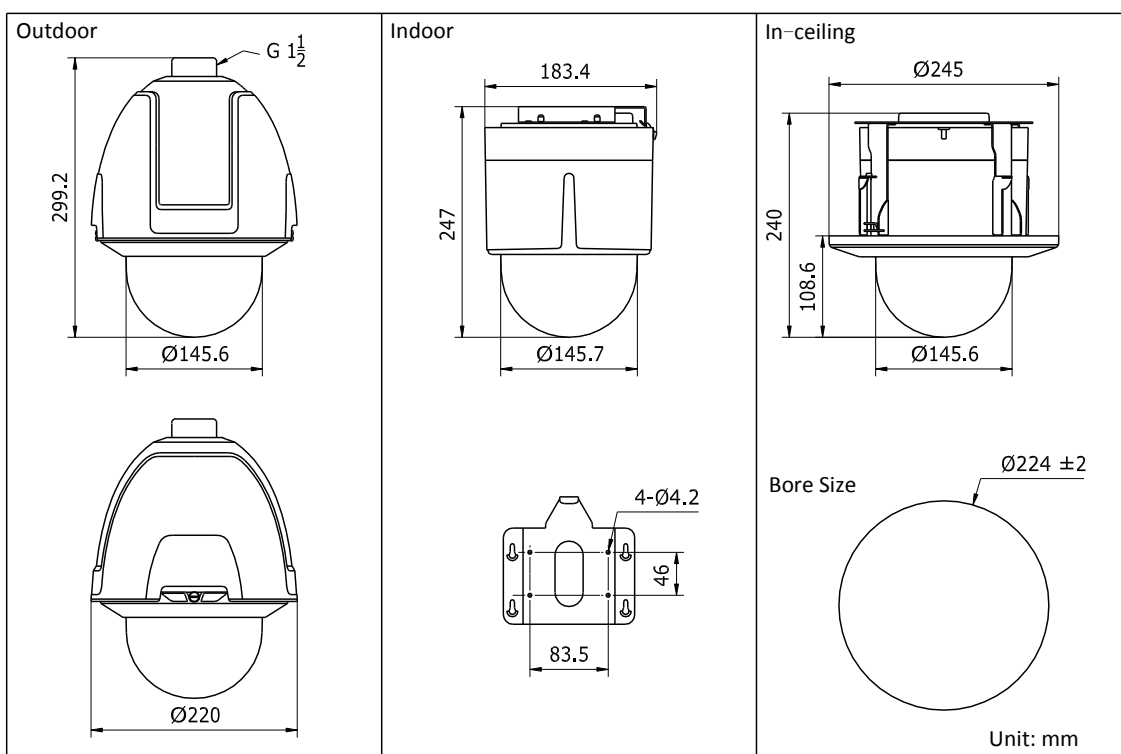
## Specifications

Parameter		Model	DS-2AF1-512(Outdoor) DS-2AF1-502(Indoor) DS-2AF1-532(In-ceiling)	DS-2AF1-514(Outdoor) DS-2AF1-504(Indoor) DS-2AF1-534(In-ceiling)	DS-2AF1-516(Outdoor) DS-2AF1-506(Indoor) DS-2AF1-536(In-ceiling)	DS-2AF1-518(Outdoor) DS-2AF1-508(Indoor) DS-2AF1-538(In-ceiling)
		5 Inch High Speed Dome				
Camera	Image Sensor	1/4" Sony Super HAD CCD				
	Effective Pixel	PAL:752(H)×582(V) NTSC:768(H)×494(V)				
	Horizontal Resolution	540 TVL	Color: 540 TVL B/W: 570 TVL			
	Signal System	PAL /NTSC				
	Min.Illumination	0.1Lux/F1.6	Color: 0.2Lux/F1.6 B/W: 0.02Lux/F1.6	Color: 0.2Lux/F1.4 B/W: 0.02Lux/F1.4	Color: 0.2Lux/F1.6 B/W: 0.02Lux/F1.6	
	White Balance	Auto / Manual / ATW / Indoor / Outdoor				
	AGC	Auto / Manual				
	S / N Ratio	≥ 50dB				
	BLC	On / Off				
	Shutter Time	PAL:1/50-1/10,000s NTSC:1/60-1/10,000s		PAL:1-1/10,000s NTSC:1-1/10,000s		
	Day & Night	Electronic	IR Cut Filter			
	Digital Zoom	16x				
	Focus Model	Auto / Semiautomatic / Manual				
Lens	Focal Length	3.9-85.8mm, 22X	3.84-88.4 mm, 23X	3.5-105mm, 30X	3.4-122.4mm,36X	
	Zoom Speed	Approx.4.3s(Optical Wide-Tele)	Approx.5.1s(Optical Wide-Tele)	Approx.5.4s(Optical Wide-Tele)		
	Angle of View	58.0-2.22degree (Wide-Tele)	52.2-2.36degree(Wide-Tele)	56.4-2.0degree(Wide-Tele)	57.8-1.7degree (Wide-Tele)	
	Min. Working Distance	10-1,000mm(Wide-Tele)	10-1,200mm(Wide-Tele)	10-1,000mm(Wide-Tele)		
	Aperture Range	F1.6-F3.7	F1.6-F4.5	F1.4-F3.7	F1.6-F4.5	
Pan and Tilt	Pan Range	360°endless				
	Pan Speed	Pan Manual Speed: 0.1° -300%/s,				

		Pan Preset Speed: 540°/s	
Tilt Range	-5°-90°(Auto Flip)	-5°-185°(Auto Mirror)	
Tilt Speed	Tilt Manual Speed: 0.1°-240°/s, Tilt Preset Speed: 400°/s		
Proportional Zoom	Rotation speed can be adjusted automatically according to zoom multiples		
Number of Preset	256		
Patrol	8 patrols, up to 32 presets per patrol		
Pattern	4 patterns, with the total recording time not less than 10 min		
Power-off Memory	Support		
Park Action	Preset / Patrol / Pattern / Pan scan / Tilt scan / Random scan / Frame scan / Panorama scan		
PTZ Position Display	On / Off		
Freeze Frame	—	Support	
Password Protection	Support		
Zone Scanning/Display	Scanning within programmed zone, display zone title		
Camera Title	Programmable title display		
Compass	Support , the north can be set		
Scheduled Task	Preset / Patrol / Pattern / Pan scan / Tilt scan / Random scan / Frame scan / Panorama scan		
RS-485 communication diagnosis	Including failure information, e.g., wrong address, baud rate errors, et., displayed on the video screen in text		
Manchester code communication diagnosis	Including failure information, e.g., wrong address, baud rate errors s displayed on the video screen in special characters		
Alarm	Alarm Input	2 ( 7 alarm inputs optional )	
	Alarm Output	2 relay outputs, alarm response actions configurable	
	Alarm Action	Preset / Patrol / Pattern / Pan scan / Tilt scan / Random scan / Frame scan / Panorama scan / Relay output	
Input/ Output	Monitor Output	1.0V[p-p] / 75Ω, NTSC (or PAL) composite, BNC	
Fiber Interface (available for fiber dome)	Data Mode	1-channel analog video and 1-channel reverse RS-485 data	
	Physical Interface	FC(SC optional)	
	Fiber Wavelength	TX1310/RX1550nm	

only)	Fiber Type	Single Fiber/Singlemode
	Transmission Distance	20Km, 40Km / 60Km/ 80Km optional
General	Menu Language	English, Chinese
	RS-485 Protocols	HIKVISION, Pelco-P, Pelco-D, self-adaptive
	Power Supply	24VAC (12V DC optional)
	Power Consumption	15W max(45W max with heater, outdoor dome)
	Working Temperature / Humidity	-30 °C -65°C (-22°F -149°F)(outdoor dome) / -10°C -50°C (14°F -122°F)(indoor dome ) 90% or less
	Protection Level	IP66 standard (outdoor dome) TVS 3,000V lightning protection, surge protection and voltage transient protection
	Mounting	Various mounting modes optional
	Dimension	Φ220×299.2mm (Φ8.66"×11.78")(Outdoor) Φ183.4×247mm(Φ7.22"×9.72") (Indoor) Φ245×240mm(Φ9.65"×9.45") (In-ceiling)
	Weight (approx.)	5Kg (11.02lbs)
	Mount Option	Long-arm wall mount: DS-1614ZJ; Indoor short-arm wall mount: DS-1615ZJ Corner mount: DS-1633ZJ; Pole Mount: DS-1622ZJ; Power box mount:DS-1634ZJ

## Dimension



**Accessories**

DS-1614ZJ Long-arm Wall Mount Bracket