



Speed Dome
Technical Manual

Notices

The information in this documentation is subject to change without notice and does not represent any commitment on behalf of HIKVISION. HIKVISION disclaims any liability whatsoever for incorrect data that may appear in this documentation. The product(s) described in this documentation are furnished subject to a license and may only be used in accordance with the terms and conditions of such license.

Copyright © 2006-2012 by HIKVISION. All rights reserved.

This documentation is issued in strict confidence and is to be used only for the purposes for which it is supplied. It may not be reproduced in whole or in part, in any form, or by any means or be used for any other purpose without prior written consent of HIKVISION and then only on the condition that this notice is included in any such reproduction. No information as to the contents or subject matter of this documentation, or any part thereof, or arising directly or indirectly therefrom, shall be given orally or in writing or shall be communicated in any manner whatsoever to any third party being an individual, firm, or company or any employee thereof without the prior written consent of HIKVISION. Use of this product is subject to acceptance of the HIKVISION agreement required to use this product. HIKVISION reserves the right to make changes to its products as circumstances may warrant, without notice.

This documentation is provided “as-is,” without warranty of any kind.

Please send any comments regarding the documentation to:

overseabusiness@hikvision.com

Find out more about HIKVISION at www.hikvision.com

DS-2AF1-4XYZ



Key feature

System function:

- 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
- 3D DNR
- 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
- Privacy masks programmable

PTZ function:

- 360° endless pan range and -2° - 90° tilt range
- 200%/s Pan Preset Speed and 120%/s Tilt Preset Speed
- 0.1° -200%/s Manual Pan Speed and 0.1° -120%/s Manual Tilt Speed
- 255 presets programmable; preset image freezing capability
- 8 patrols, up to 32 presets per patrol
- 4 patterns, with the total recording time not less than 10 minutes
- Proportional zoom function
- Park action: auto call up of PTZ movement, after a defined time of inactivity
- 2 alarm inputs and 1 alarm outputs

Application Scenarios

It can be widely applied to places requiring wide-area monitoring display, such as streets, stations, large venues, outside of residential areas, etc.

Specifications

Parameter		Model	DS-2AF1-412 DS-2AF1-402 DS-2AF1-432
		4 Inch High Speed Dome	
Camera	Image Sensor	1/4" SONY Interline Transfer Super HAD- II CCD	
	Effective Pixel	PAL:752(H)×582(V) NTSC:768(H)×494(V)	
	Horizontal Resolution	Color: 540 TVL B/W: 600 TVL	
	Signal System	PAL /NTSC	
	Min. Illumination	Color: 0.2Lux/ (F1.6 AGC ON) B/W: 0.02Lux/(F1.6 AGC ON)	
	White Balance	Auto/ATW/Indoor/Outdoor/One push	
	AGC	Auto / Manual	
	S / N Ratio	≥ 50dB	
	DNR	High/Medium/Low/off	
	BLC	On / Off	
	DWDR	128x(On/Off/Auto)	
	Shutter Time	PAL: 1/50-1/10,000s NTSC: 1/60-1/10,000s	
	Day & Night	IR Cut Filter	
	Digital Zoom	16x	
	Privacy Mask	8 privacy masks programmable; a maximum of 8 zones can be masked simultaneously on the same video screen	
Focus Model	Auto / Semiautomatic / Manual		
Lens	Focal Length	3.8-45.6mm,12x	
	Zoom Speed	Approx.2s(Optical Wide-Tele)	
	Angle of View	50.69-4.5degree(Wide-Tele)	
	Min. Working Distance	10-1500mm(Wide-Tele)	
	Aperture Range	F1.6-F2.7	
Pan and Tilt	Pan Range	360° endless	
	Pan Speed	Pan Manual Speed: 0.1° -200°/s, Pan Preset Speed: 200°/s	
	Tilt Range	-2°-90°(Auto Mirror)	

	Tilt Speed	Tilt Manual Speed: 0.1°-120°/s, Tilt Preset Speed: 120°/s
	Proportional Zoom	Rotation speed can be adjusted automatically according to zoom multiples
	Number of Preset	255
	Patrol	8 patrols, up to 32 presets per patrol
	Pattern	4 patterns, with the total recording time not less than 10 minutes
	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
	Alarm Output	1 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
General	Menu Language	English, Chinese
	RS-485 Protocols	HIKVISION, Pelco-P, Pelco-D, self-adaptive
	Power Supply	24VAC/2A (12VDC/2A optional)
	Power Consumption	Max.18 W
	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 4,000V lightning protection, surge protection and voltage transient protection

Mounting	Various mounting modes optional
Dimension	$\Phi 180 \times 239.5 \text{mm}$ ($\Phi 7.08'' \times 9.43''$) (Outdoor) $\Phi 165 \times 172.5 \text{mm}$ ($\Phi 6.50'' \times 6.79''$) (Indoor) $\Phi 165 \times 167 \text{mm}$ ($\Phi 6.50'' \times 6.57''$) (In-ceiling)
Weight (approx.)	4Kg (8.82lbs) (Outdoor) 3Kg (6.61lbs) (Indoor/In-ceiling)
Mount Option	Long-arm wall mount: DS-1618ZJ; Long-arm pendant mount: DS-1662ZJ; Short-arm pendant mount: DS-1661ZJ;

Dimensions

