



**DS-2DF1-613X/603X IP 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 © 2006-2010 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

Contents

1. Key Features
2. Specifications
3. Dimension

1. Key Features

- Sony EXview CCD
- $\pm 0.1^\circ$ Preset Accuracy
- $400^\circ/\text{s}$ Pan Preset Speed and $150^\circ/\text{s}$ Tilt Preset Speed
- $0.3\text{-}300^\circ/\text{s}$ Manual Pan Speed and $0.5\text{-}90^\circ/\text{s}$ Manual Tilt Speed
- Park Action: Start to Call Preset / Patrol / Pattern / Auto Scan / Random Scan / Frame Scan, after a Defined Time of Inactivity
- Parameter Restore: PTZ & Lens Status after Reboot
- Patterns: Up to 4, On-Screen, User-defined Programmable Patterns; Including Pan, Tilt, Zoom and Preset Functions
- Proportional Pan / Tilt: Continually Decreases Pan / Tilt Speeds, in Proportion to Depth of Zoom
- Freeze Frame between Presets
- Programmable Zoom Speeds
- Variable Scan Speed: Scan Speed Can Be Programmable between 1 to $40^\circ/\text{sec}$
- Privacy Blank: Up to 24 Zones, 8 Zones Masked Simultaneously in One Image
- Programmable Limit Stops for Auto / Random Scan / Frame Scan / Manual Modes
- Built-in Menu System for Setup of Programmable Functions
- On-Screen Compass, Pan ,Tilt and Zoom Display
- Alarm I/O: 2 Channels input and 2 Channels Relay output
- Alarm Actions: 200 Presets, 8 Patrols, 4 Patterns, Auto Scan, Alarm output, SD Memory Recording and Notification on PC Client, Alarms can be Individually Programmed for 3 Priority Levels
- Resume after Alarm: Allow the Dome Return to Previous State after Alarm Acknowledgement
- Support Mouse Drag and Zoom
- **Fiber Connector Optional**
- Built-in Surge Protection and Limited Lightning Protection
- Water and Dust Resistance: IP66, for Outdoor Dome
- Working Temperature $-30^\circ\text{C} \sim 60^\circ\text{C}$ (Outdoor Models) or $-10^\circ\text{C} \sim 50^\circ\text{C}$ (Indoor Models)

2. Specifications

Parameter		DS-2DF1-613X DS-2DF1-603X
Camera	Image Sensor	1/4 Inch SONY EXVIEW CCD
	Effective Pixels	PAL: 752 (H)×582 (V) NTSC: 768 (H)×494 (V)
	Horizontal Resolution	480TVL
	Signal System	NTSC / PAL
	Min. Illumination	0.7Lux / F1.4 (Color) 0.01Lux / F1.4 (B/W)
	White Balance	ATW / Manual
	AGC	Auto / Manual
	S/N Ratio	Better than 50dB
	BLC	ON / OFF
	Electronic Shutter	1/1~1/10,000s (22 steps)
	Day & Night	ICR
	Digital Zoom	Up to 12x
	Privacy Blank	Up to 24 zones, while maximum 8 zones masked simultaneously in one image
	Auto Focus	Auto / Manual
Lens	Focal Length	4.1-73.8mm, 18x zoom
	Zoom Speed	Approx. 2.1sec (Optical WIDE-TELE)
	Angular of View	48 degree (WIDE end) to 2.8 degree (TELE end)
	Min. Working Distance	290mm (WIDE end), 800mm (TELE end)
	Aperture Range	F1.4-F3.0
Pan and Tilt	Pan Range	360° endless
	Pan Speed	Manual: approx. 0.3°/s-160°/s or 0.3°/s-220°/s, 0.3°/s-300°/s, Programmable in Menu Preset: up to approx. 400°/s
	Tilt Range	0°~90° (Auto flip)
	Tilt Speed	Manual: approx. 0.5°/s-40°/s or 0.5°/s-60°/s, 0.5°/s-90°/s, Programmable in Menu Preset: up to approx. 150°/s

	Proportional Pan/Tilt Control	YES
	Number of Presets	200
	Auto Modes	OFF / Preset / Patrol / Pattern / Auto Scan / Random Scan / Frame Scan
	Patrols	1 / 2 / 3 / 4 / 5 / 6 / 7 / 8
	Patterns	1 / 2 / 3 / 4
	Freeze Frame	Freeze Frame during Preset (Except DS-2DF1-611 / 601X)
	Auto Flip	YES
	Parameter Restore	Go to the speed dome last status after reboot
	Park Actions	Start to Call Preset / Patrol / Pattern / Auto Scan / Random Scan / Frame Scan, after a Defined Time of Inactivity
	PTZ Position Display	ON / OFF
Network	Ethernet	10Base-T / 100Base-TX, RJ45 connector (Fiber Connector Option)
	Image Resolution	PAL: 704×576, NTSC: 704×480
	Frame Rate	25fps (704×576), 30fps (704×480)
	Image Compression	H.264
	Audio Compression	OggVorbis / 16kbps
	Audio Mode	OFF / Audio input / Audio output
	Protocols	TCP/IP, HTTP, DHCP, DNS, RTP / RTCP, PPPoE (FTP, SMTP, NTP, SNMP addible)
	No. of Simultaneous Users	Up to 6 users
	Dual Streams	Support dual streams simultaneously
	Mini SD Memory Card	Manual REC / Alarm REC. Compatible SDHC Standard Cards
	User/Host Level	3 Levels: Administrator, Camera control, Live only
	Security Measures	User authentication (ID and PW), Host authentication (MAC address)
Client GUI	Camera Control	Pan / Tilt, Zoom, Focus, Click centering, Drag zoom, Iris, Preset position call and program, Auto mode.
	Camera Title	Up to 18 characters
	Clock Display	Time: Week: Date, 6 formats on the Client
Alarm	Alarm Input	2 channels inputs, priority is configurable
	Alarm Output	2 channels relay outputs, alarm linkage is configurable
	Alarm Actions	Preset 1 ~ 200, Patrol 1 ~ 8, Pattern 1 ~ 4, SD card recording, Terminal output, Notification on Client.
Input/ Output	Monitor Output	1.0V[p-p] / 75Ω, NTSC (or PAL) composite, BNC
	Microphone Input	Mic. In (Applicable microphone; Plug-in power type) 2-2.4V[p-p], Input impedance: 1KΩ±10%
	Audio Output	Audio out, Line level

General	Menu Language	English, Chinese
	RS-485 Protocols	HIKVISION, PELCO-P, PELCO-D (addible), self-adaptive
	Power Supply	24VAC (12VDC option)
	Power Consumption	30W max (Heater ON)
	Working Temperature / Humidity	-.30°C ~ 60°C (outdoor) / -10°C ~ 50°C (indoor) 90% or less (without condensation)
	Water and Dust Resistance	IP66 standard compatible (Just for Outdoor dome) TVS 3000Vlimited lightning protection
	Dimensions	6 inch, Φ243 (mm)×287 (mm)
	Weight (approx.)	5kg

3. Dimension

