Hikvision DS-2DF5220S-DE4/W smart PTZ Dome Cameras are able to capture high quality images in the indoor environment such as classroom, office and library. Embedded with 1/3” progressive scan CMOS chip and G-sensor makes DWDR and 2MP real-time resolution possible. With the 20X optical zoom Day/Night lens, the camera offers another choice for the indoor environment.

Hikvision DS-2DF5220S-DE4/W smart PTZ Dome Cameras also features a wide range of smart functions, including face detection, intrusion detection, line crossing detection and audio exception, benefitting users with great improvement on security efficiency, more importantly, with key events / objects being recorded for further forensic needs. These features, combined with smart tracking, which enables the camera to detect any progressively moving object and follow it within the camera’s area of coverage without fault. Smart Defog and EIS (Electronic Image Stabilization) are further supported to improve image quality in challenging conditions.

Key Features

- 1/3” HD CMOS sensor
- 1920*1080 Full HD, 20X Optical Zoom
- G-sensor for automatically mirror
- DWDR
- Smart Tracking
- Smart Detection
- EIS (Electronic Image Stabilization)
- Defog
- WiFi
- Heat mapping
- PoE+ / 12VDC power supply
- Support EZVIZ
Function Description

Basic function:
• High performance CMOS, up to 1920x1080 resolution
• Support linkage with fisheye camera
• Heat mapping
• HDMI output
• G-sensor for automatically mirror
• IR remote control
• ±0.1° Preset Accuracy
• ONVIF(Open Network Video Interface Forum), CGI(Common Gateway Interface), PSIA(Physical Security Interoperability Alliance), to ensure greater interoperability between different platforms and compatibility
• 3D intelligent positioning function
• 3D DNR
• Power-off memory function: restore PTZ & Lens status after reboot
• Scheduled PTZ movement
• Support WiFi
• Support HD-SDI output
• Support YPbPr
• Support PoE+

Smart function:
• Smart tracking modes: Manual/ Panorama/ Intrusion trigger/ Line crossing trigger/ Region entrance trigger/ Region exiting trigger, support smart tracking when patrol between multiple scenarios
• Smart detection: support Face detection, Intrusion detection, Line crossing detection, Audio exception detection, Region entrance detection, Region exiting detection
• Smart recording: support edge recording, support smart search in smart NVR
• Smart image processing: support defog, HLC, EIS
• Smart codec: low bit rate, ROI

Camera function:
• Auto iris, auto focus, auto white balance, backlight compensation and auto day & night switch
• Min. Illumination: 0.02Lux@[F1.6, AGC ON](Color), 0.002Lux@[F1.6, AGC ON](B/W)
• Support privacy mask with multiple colors and mosaics on polygonal areas

PTZ function:
• 360° endless pan range and -30° ~90° tilt range
• 270° /s Pan Preset Speed and 200° /s Tilt Preset Speed
• Manual pan speed of 0.1° ~150° /s and manual tilt speed of 0.1° ~120° /s
• 300 presets programmable; preset image freezing capability
• 8 patrols, up to 32 presets per patrol
• 4 patterns, with the recording time not less than 10 minutes per pattern
• Park action: auto call up of PTZ movement, after a defined time of inactivity
• 2 alarm inputs and 1 alarm outputs

Network function:
• H.264/MJPEG/MPEG4 video compression and the latest Davinci processing chip and platform
• Support H.264 encoding with Baseline/Main/High profile
• ROI(Region of Interest) encoding(support 24 areas with adjustable levels)
• Built-in Web server
• Micro SD/SDHC/SDXC card local storage
• Support up to 8 NAS storage; Edge recording(transmit the videos from SD card to the NAS after network resumed)
• HTTPS encryption and IEEE 802.1X port-based network access control
• Support three-stream; Basic and advanced video configuration; Real time video at 1080P/960P/720P
• Multiple network protocols supported: IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
• 1 audio input and 1 audio output
**Camera Module**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>DS-2DF5220S-DE4/W</td>
</tr>
<tr>
<td>Image Sensor</td>
<td>1/3” Progressive Scan CMOS</td>
</tr>
<tr>
<td>Min. Illumination</td>
<td>F1.6, 1/1 sec, 50 IRE, AGC On: Color: 0.02 lux, B/W : 0.002 lux</td>
</tr>
<tr>
<td>Max. Illumination</td>
<td>F1.6, 1/30 sec, 50 IRE, AGC On: Color:0.3 lux, B/W : 0.02 lux</td>
</tr>
<tr>
<td>Focal Length</td>
<td>4.7-94mm, 20x</td>
</tr>
<tr>
<td>Digital Zoom</td>
<td>16X</td>
</tr>
<tr>
<td>Zoom Speed</td>
<td>Approx.2.7x(Optical Wide-Tele)</td>
</tr>
<tr>
<td>Angle of View</td>
<td>58.3-3.2 degree (Wide-Tele)</td>
</tr>
<tr>
<td>Min. Working Distance</td>
<td>10-1500mm(Wide-Tele)</td>
</tr>
<tr>
<td>Aperture Range</td>
<td>F1.6-F3.5</td>
</tr>
<tr>
<td>Focus Mode</td>
<td>Auto / Semi-automatic / Manual</td>
</tr>
<tr>
<td>WDR</td>
<td>Digital WDR</td>
</tr>
<tr>
<td>S / N Ratio</td>
<td>≥ 55dB</td>
</tr>
<tr>
<td>Shutter Time</td>
<td>50Hz: 1/1/30,000s; 60Hz: 1/1/30,000s</td>
</tr>
<tr>
<td>AGC</td>
<td>Auto / Manual</td>
</tr>
<tr>
<td>White Balance</td>
<td>Auto / Manual /ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp</td>
</tr>
<tr>
<td>Day &amp; Night</td>
<td>IR Cut Filter</td>
</tr>
<tr>
<td>Privacy Mask</td>
<td>24 privacy masks programmable; optional multiple colors and mosaics</td>
</tr>
<tr>
<td>Enhancement</td>
<td>3D DNR, EIS, Defog, HLC/BLC, SVC</td>
</tr>
<tr>
<td><strong>Pan and Tilt</strong></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>Pan:360° endless; Tilt: -30°~90°(Auto Flip)</td>
</tr>
<tr>
<td>Speed</td>
<td>Pan Manual Speed: 0.1°~150°/s; Pan Preset Speed: 270°/s</td>
</tr>
<tr>
<td>Number of Preset</td>
<td>300</td>
</tr>
<tr>
<td>Patrol</td>
<td>8 patrols, up to 32 presets per patrol</td>
</tr>
<tr>
<td>Pattern</td>
<td>4 patterns, with the recording time not less than 10 minutes per pattern</td>
</tr>
<tr>
<td>Park Action</td>
<td>Preset / Patrol / Pattern / Auto scan / Tilt scan / Random scan / Frame scan / Panorama scan</td>
</tr>
<tr>
<td>Scheduled Task</td>
<td>Preset / Patrol / Pattern / Auto scan / Tilt scan / Random scan / Frame scan / Panorama scan/Dome reboot/Dome adjust/Aux output</td>
</tr>
<tr>
<td><strong>Smart Features</strong></td>
<td></td>
</tr>
<tr>
<td>Smart tracking</td>
<td>Manual/ Panorama/ Intrusion trigger/ Region crossing trigger/ Region exiting trigger Smart tracking when patrol between multiple scenarios</td>
</tr>
<tr>
<td>Smart detection</td>
<td>Face detection, Intrusion detection, Line crossing detection, Audio exception detection, Region entrance detection, Region exiting detection</td>
</tr>
<tr>
<td>ROI encoding</td>
<td>Support 24 areas with adjustable levels</td>
</tr>
<tr>
<td><strong>Alarm</strong></td>
<td></td>
</tr>
<tr>
<td>Alarm I/O</td>
<td>2/1</td>
</tr>
<tr>
<td>Alarm Trigger</td>
<td>Face detection, Intrusion detection, Line crossing detection, Region entrance detection, Region exiting detection, Audio exception detection, Dynamic analysis, Tampering alarm, Network disconnect, IP address conflict, Storage exception</td>
</tr>
<tr>
<td>Alarm Action</td>
<td>Preset, Patrol, Pattern, Micro SD/SDHC card recording, Relay output, Notification on Client, Send Email, Upload to FTP, Trigger Channel</td>
</tr>
<tr>
<td><strong>Input/Output</strong></td>
<td></td>
</tr>
<tr>
<td>Monitor Output</td>
<td>1.0V[p-p] / 75Ω, NTSC (or PAL) composite, BNC</td>
</tr>
<tr>
<td>Audio Input</td>
<td>1 Mic in/Line in interface, line input: 2-2.4V[p-p]; output impedance: 1KΩ, ±10%</td>
</tr>
<tr>
<td>Audio Output</td>
<td>1 Audio output interface, line level, impedance: 600Ω</td>
</tr>
<tr>
<td>HD-SDI Output</td>
<td>1 HD-SDI interface</td>
</tr>
<tr>
<td>YPbPr Output</td>
<td>DVI-D interface, DVI-D to YPbPr adapter (not included) required</td>
</tr>
<tr>
<td>HDMI Output</td>
<td>DVI-D interface, DVI-D to HDMI adapter (not included) required</td>
</tr>
<tr>
<td><strong>Wifi</strong></td>
<td></td>
</tr>
<tr>
<td>Wireless Standards</td>
<td>IEEE802.11b, 802.11g, 802.11n</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>2.4 GHz ÷ 2.4835 GHz</td>
</tr>
<tr>
<td>Channel Bandwidth</td>
<td>20/40MHz Support</td>
</tr>
<tr>
<td>Protocols</td>
<td>B02.11b: CCK, QPSK, BPSK</td>
</tr>
<tr>
<td></td>
<td>B02.11g/n: OFDM</td>
</tr>
</tbody>
</table>
DS-2DF5220S-DE4/W
2MP 20X Network PTZ Dome Camera

Security
64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS

Transfer Rates
11b: 11Mbps
11g: 54Mbps
11n: up to 150Mbps

Wireless Range
50m (*The performance varies depending on actual environment.)

Network
Ethernet
10Base-T / 100Base-TX, RJ45 connector

Main Stream
50Hz: 25fps(1920×1080, 1280×960, 1280×720); 60Hz: 30fps(1920×1080, 1280×960, 1280×720)

Sub Stream
50Hz: 25fps(704×576, 352×288, 176×144); 60Hz: 30fps(704×480, 352×240, 176×120)

Third Stream
50Hz: 25fps(1920×1080, 1280×960, 1280×720, 704×576, 352×288, 176×144)
60Hz: 30fps(1920×1080, 1280×960, 1280×720, 704×480, 352×240, 176×120)

Image Compression
H.264/MJPEG/MPEG4, H.264 encoding with Baseline/Main/High profile

Audio Compression

Protocols
IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE

Simultaneous Live View
Up to 20 users

Mini SD Memory Card
Support up to 128GB Micro SD/SDHC/SDXC card. Support Edge recording

User/Host Level
Up to 32 users, 3 Levels: Administrator, Operator and User

Security Measures
User authentication (ID and PW); Host authentication (MAC address); IP address filtering

System Integration
Application programming
Open-ended API, support ONVIF, PSIA, and Genetec

Web Browser
IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi-language

RS-485 Protocols
HIKVISION, Pelco-P, Pelco-D, self-adaptive

RS-232
Visca, Pelco-P, Pelco-D

Power
12VDC, PoE+, Max. 24W

Working Temperature
-10°C ~ 50°C (14°F ~ 122°F)

Humidity
90% or less

Certification
FCC, CE, UL, RoHS, IEC/EN61000, IEC/EN55022, IEC/EN55024, IEC/EN60950-1

Dimensions
Φ176.6(mm)×202.7(mm)

Weight
(approx.) 1.8kg

Mount Option
Pendent mount: DS-1691ZJ; Wall mount: DS-1692ZJ

DS-2DF5220S-DE4/W
2MP 20X Network PTZ Dome Camera

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Mount Option
Pendent mount: DS-1691ZJ; Wall mount: DS-1692ZJ

Accessories

DS-1691ZJ
Pendent Mount Bracket

DS-1692ZJ
Wall Mount Bracket

DS-1100KI
Network Keyboard

DS-1005KI
USB Joy-stick