Network Mini Dome Cameras

SNC-DF Series

SNC-DF40N
SNC-DF40P
SNC-DF70N
SNC-DF70P

Connect Your Vision

IPELA™
Sony introduces new additions to its line of surveillance mini dome cameras – SNC-DF40*1 and SNC-DF70*2 Network Cameras. The compact dome design of the SNC-DF Series preserves a discreet appearance and is ideal for use in building entrances, schools, offices, retail stores and shopping malls.

The SNC-DF Series incorporates a built-in web server and network interface, which enables users to control the cameras and monitor images over a Network. These cameras utilize both MPEG-4 and JPEG compression formats, allowing for both smooth video/audio streaming and providing high-quality still images over a wide range of network bandwidths.

What’s more, this series of cameras incorporate an external microphone input, and an audio line output for active speakers, allowing for audio monitoring and audible warnings at the monitoring site.

To meet a wide range of monitoring needs, the SNC-DF70 features a Day/Night capability in a durable aluminum diecast construction with an IP-66 rating, ideal for 24-hour outdoor surveillance applications.

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*1 The “SNC-DF40” refers to both the SNC-DF40N (NTSC model) and the SNC-DF40P (PAL model).

*2 The “SNC-DF70” refers to both the SNC-DF70N (NTSC model) and the SNC-DF70P (PAL model).
Easy Mounting and Flexible Installation

The SNC-DF Series can be wall-mounted or ceiling-mounted with the supplied ceiling-mount bracket. What’s more, the 2.7x vari-focal lens incorporated into these cameras can be freely rotated, allowing for easy adjustment of the camera’s viewing angle after installation.

MPEG-4 and JPEG Compression Formats

The SNC-DF Series supports both the MPEG-4 and JPEG compression formats. The high compression ratio of MPEG-4 provides smooth moving images over networks even when bandwidth is limited. If higher quality still images are preferred, then the industry standard JPEG compression format is selectable from the setup menu. The SNC-DF Series also supports variable bit rates up to 2Mb/s.

Image size can be selected from six modes: 640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, and 160 x 120.

High Frame Rate

The SNC-DF Series produces images at a maximum frame rate of 30fps (NTSC) /25fps (PAL)\(^1\) when the image size is 320 x 240 in both MPEG-4 and JPEG modes, producing clear and smooth-moving images.

\(^1\) In order to view images at the maximum frame rate, adequate PC processing power and network bandwidth are required.

Audio Monitoring

Incorporating an external microphone input, the SNC-DF Series is capable of picking up sound from camera site clearly. The unit is also equipped with an audio line output for active speakers; allowing users to communicate with the remote site, expanding the capability of remote monitoring applications.

Day/Night Function (SNC-DF70)

The SNC-DF70 features a “Day/Night” capability, which provides optimized sensitivity in both day and night shooting applications. As the scene darkens, an infrared filter is automatically replaced with a clear filter and the camera switches to B&W mode, allowing for operation at a minimum illumination of 0.2 lx at F1.0, or 0 lx\(^2\) using an IR Illuminator from 3rd party vendors\(^3\).

\(^2\) 0 lx means absence of visible light to the naked eye.

\(^3\) Please contact your local Sony dealers for 3rd-party item.

Adjustment range of lens angle

- (Panning): ±150°
- (Tilting): ±75°
- (Rotating): ±150°

Audio Monitoring

Ceiling Surface Mount (SNC-DF40)

Ceiling Flush Mount (SNC-DF40)

*Optional YT-ICB40 Ceiling-mount bracket is required.
Ruggedized Design (SNC-DF70)

The SNC-DF70 is specially designed to be used for outdoor surveillance or indoors for vandal resistant applications. The cameras are housed in a heavy-duty aluminum die cast enclosure with a durable polycarbonate viewing window. These cameras comply with the IP66*6 standard for protection against water and dust.

*6 Ingress Protection (IP) standard is a system for numerically classifying the degree of protection provided by enclosures of electrical equipment against solid objects and liquids. IP66 means there is no ingress of dust and the equipment is protected against powerful water jets.

Network Features

Adaptive Rate Control

To meet Quality of Service (QoS) requirements over a network, the SNC-DF Series provides an adaptive rate control function. This function automatically varies the bit rate of audio and video data to meet changing network conditions and selects the most appropriate frame rates. This function helps prevent audio and video breakup.

Multicasting Capability

The SNC-DF Series has a built-in multicasting capability that enables efficient video and audio streaming to a large number of users.

Simultaneous Access

Up to 20 (JPEG mode)/10 (MPEG-4 mode) users can simultaneously access any of the SNC-DF Series cameras and monitor images separately.

Network Security Features

Access to the SNC-DF Series can be restricted to one or more groups of selected users. Up to ten different groups can be established by defining an IP address range for each group. In addition, user names and passwords can be assigned to allow three levels of access.

The administrator has complete access/control of the cameras; while the other two levels of access can be set to limit user privileges to functions such as viewing, trigger control, etc.

Alarm Functions

Motion Detection/Alarm Trigger

The SNC-DF Series is equipped with a built-in motion detection function that can generate an alarm through its alarm-output port or trigger another device to perform a variety of actions. The motion detection function uses vector information to detect motion so that unwanted noise components do not accidentally trigger the alarm. In addition to these features, the SNC-DF Series is equipped with a sensor-input port that can receive a trigger from an external sensor.

Pre-/Post-Alarm Image Storage

With a built-in buffer memory, the SNC-DF Series can store several seconds of pre-alarm and post-alarm still images when an alarm is triggered by the motion detection function, the alarm input, or both.

Image storage capacity

MPEG 4 image: Approx. 15 s* (pre-/post- 7.5 s)

*when the image size is 320 x 240 at a frame rate of 30fps and a bit rate of 512 kbps

JPEG image: Approx. 10 s* (pre-/post- 5 s)

*when the image size is 320 x 240 at a frame rate of 15fps and the image quality is set to Level 3

Image Transfer Using FTP/SMTTP*

All of the pre-/post-alarm images stored at the time of an alarm event can be transferred to an FTP server for later viewing. Also, the still image captured at the time of an alarm event can be sent to a designated e-mail address.

* All images transferred using SMTP are in JPEG format.

Analog Composite Video Output

The SNC-DF Series is equipped with an analog composite video output, allowing camera images to be directly recorded or monitored by connecting video equipment such as time-lapse recorders, hard disk recorders, and monitors.
SYSTEM CONFIGURATION

Network Mini Dome Cameras
SNC-DF Series

Sensor in
Sensor

Alarm out
Motion Detection/IR Cont Out

Microphone
Speaker

100Base-TX

LAN/WAN

Video out

PC

Video Cassette Recorder
or
Hard Disk Recorder

PC

Monitor

OPTIONAL ACCESSORIES

YT-ICB40
Ceiling mount bracket for
SNC-DF40N/SNC-DF40P

YT-ICB70
Ceiling mount bracket for
SNC-DF70N/SNC-DF70P

DIMENSIONS

SNC-DF40N/SNC-DF40P

Top View

Rear View

Front View

SNC-DF70N/SNC-DF70P

Top View

Rear View

Front View

Unit: mm (inches)

REAR PANEL LAYOUT

SNC-DF40N/SNC-DF40P
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Camera</th>
<th>SNC-DF40N</th>
<th>SNC-DF40P</th>
<th>SNC-DF70N</th>
<th>SNC-DF70P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image device</td>
<td>1/4-type Super HAD CCD</td>
<td>1/4-type Super HAD CCD</td>
<td>1/4-type Super HAD CCD</td>
<td>1/4-type Super HAD CCD</td>
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<tr>
<td>Number of effective pixels (H x V)</td>
<td>380,000 (768 x 494)</td>
<td>440,000 (768 x 494)</td>
<td>380,000 (768 x 494)</td>
<td>440,000 (768 x 494)</td>
</tr>
<tr>
<td>Electronic shutter</td>
<td>1/60 to 1/100,000 s</td>
<td>1/60 to 1/100,000 s</td>
<td>1/60 to 1/100,000 s</td>
<td>1/60 to 1/100,000 s</td>
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<tr>
<td>Gain control</td>
<td>AUTO, MANUAL</td>
<td>AUTO, MANUAL</td>
<td>AUTO, MANUAL</td>
<td>AUTO, MANUAL</td>
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<tr>
<td>White balance mode</td>
<td>AWB</td>
<td>AWB</td>
<td>AWB</td>
<td>AWB</td>
</tr>
<tr>
<td>Lens mount</td>
<td>CS mount</td>
<td>CS mount</td>
<td>CS mount</td>
<td>CS mount</td>
</tr>
<tr>
<td>F number</td>
<td>F=1.4 (Tele), F=1.4 (Tele)</td>
<td>F=1.4 (Tele), F=1.4 (Tele)</td>
<td>F=1.4 (Tele), F=1.4 (Tele)</td>
<td>F=1.4 (Tele), F=1.4 (Tele)</td>
</tr>
<tr>
<td>Other functions</td>
<td>Motion detection</td>
<td>Motion detection</td>
<td>Camera control, Day/Night</td>
<td>Camera control, Day/Night</td>
</tr>
<tr>
<td>Compression format</td>
<td>MPEG-4, H.264 selectable</td>
<td>MPEG-4, H.264 selectable</td>
<td>MPEG-4, H.264 selectable</td>
<td>MPEG-4, H.264 selectable</td>
</tr>
<tr>
<td>Maximum frame rate (MPEG-4 mode)</td>
<td>Max. 30 fps (320 x 240)</td>
<td>Max. 30 fps (320 x 240)</td>
<td>Max. 25 fps (320 x 240)</td>
<td>Max. 25 fps (320 x 240)</td>
</tr>
<tr>
<td>Focal length</td>
<td>f=3.0 to 8.0 mm</td>
<td>f=3.0 to 8.0 mm</td>
<td>f=3.0 to 8.0 mm</td>
<td>f=3.0 to 8.0 mm</td>
</tr>
<tr>
<td>White balance mode</td>
<td>ATW</td>
<td>ATW</td>
<td>ATW</td>
<td>ATW</td>
</tr>
<tr>
<td>Lens mount</td>
<td>CS mount</td>
<td>CS mount</td>
<td>CS mount</td>
<td>CS mount</td>
</tr>
<tr>
<td>Lens type</td>
<td>x2.7 Vari-focal auto iris lens</td>
<td>x2.7 Vari-focal auto iris lens</td>
<td>x2.7 Vari-focal auto iris lens</td>
<td>x2.7 Vari-focal auto iris lens</td>
</tr>
<tr>
<td>Horizontal viewing angle</td>
<td>66.6 to 26.9 degrees</td>
<td>66.6 to 26.9 degrees</td>
<td>66.6 to 26.9 degrees</td>
<td>66.6 to 26.9 degrees</td>
</tr>
<tr>
<td>Audio</td>
<td>Compression format</td>
<td>G.711 (64 Kbps) / G.726 (32 Kbps)</td>
<td>G.711 (64 Kbps) / G.726 (32 Kbps)</td>
<td>G.711 (64 Kbps) / G.726 (32 Kbps)</td>
</tr>
<tr>
<td>Number of clients</td>
<td>JPEG: 20 users, MPEG-4: 10 users</td>
<td>JPEG: 20 users, MPEG-4: 10 users</td>
<td>JPEG: 20 users, MPEG-4: 10 users</td>
<td>JPEG: 20 users, MPEG-4: 10 users</td>
</tr>
<tr>
<td>Interface</td>
<td>Ethernet</td>
<td>100Base-TX/10Base-T (RJ-45)</td>
<td>100Base-TX/10Base-T (RJ-45)</td>
<td>100Base-TX/10Base-T (RJ-45)</td>
</tr>
<tr>
<td>Video output</td>
<td>BNC, 1.0 Vp-p, 75 Ω, unbalanced, sync negative</td>
<td>BNC, 1.0 Vp-p, 75 Ω, unbalanced, sync negative</td>
<td>BNC, 1.0 Vp-p, 75 Ω, unbalanced, sync negative</td>
<td>BNC, 1.0 Vp-p, 75 Ω, unbalanced, sync negative</td>
</tr>
<tr>
<td>Audio line output</td>
<td>Mini-jack (Monoaural), max output level: 2 Vrms</td>
<td>Mini-jack (Monoaural), max output level: 2 Vrms</td>
<td>Mini-jack (Monoaural), max output level: 2 Vrms</td>
<td>Mini-jack (Monoaural), max output level: 2 Vrms</td>
</tr>
<tr>
<td>Hor. resolution</td>
<td>480 TV lines</td>
<td>480 TV lines</td>
<td>480 TV lines</td>
<td>480 TV lines</td>
</tr>
<tr>
<td>Min. illumination</td>
<td>(Color) 0.8 lx (AGC On, F1.0, 50IRE)</td>
<td>0.8 lx (AGC On, F1.0, 50IRE)</td>
<td>0.8 lx (AGC On, F1.0, 50IRE)</td>
<td>0.8 lx (AGC On, F1.0, 50IRE)</td>
</tr>
<tr>
<td>(Black and White)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>General</td>
<td>Mass</td>
<td>Approx. 750 g (1 lb 10 oz)</td>
<td>Approx. 1,500 g (3 lb 5 oz)</td>
<td>Approx. 750 g (1 lb 10 oz)</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>124 x 132 x 126 mm (5 x 5 1/4 x 5 inches)</td>
<td>165 x 135 x 166 mm (6 1/2 x 5 3/8 x 6 5/8 inches)</td>
<td>124 x 132 x 126 mm (5 x 5 1/4 x 5 inches)</td>
<td>165 x 135 x 166 mm (6 1/2 x 5 3/8 x 6 5/8 inches)</td>
</tr>
<tr>
<td>Power consumption</td>
<td>7.5 W</td>
<td>8.0 W</td>
<td>7.5 W</td>
<td>8.0 W</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>–10 to +50 ºC (14 to 122 ºF)</td>
<td>–10 to +50 ºC (14 to 122 ºF)</td>
<td>–10 to +50 ºC (14 to 122 ºF)</td>
<td>–10 to +50 ºC (14 to 122 ºF)</td>
</tr>
<tr>
<td>Storage humidity</td>
<td>20 to 80%, non-condensing</td>
<td>20 to 80%, non-condensing</td>
<td>20 to 80%, non-condensing</td>
<td>20 to 80%, non-condensing</td>
</tr>
<tr>
<td>Processor</td>
<td>Intel® Pentium® II, 1 GHz or higher (Recommended: Pentium IV, 2GHz or higher)</td>
<td>Intel® Pentium® II, 1 GHz or higher (Recommended: Pentium IV, 2GHz or higher)</td>
<td>Intel® Pentium® II, 1 GHz or higher (Recommended: Pentium IV, 2GHz or higher)</td>
<td>Intel® Pentium® II, 1 GHz or higher (Recommended: Pentium IV, 2GHz or higher)</td>
</tr>
<tr>
<td>Memory</td>
<td>256 MB RAM minimum</td>
<td>256 MB RAM minimum</td>
<td>256 MB RAM minimum</td>
<td>256 MB RAM minimum</td>
</tr>
<tr>
<td>Web browser</td>
<td>Microsoft Internet Explorer® version 5.0 or 6.0</td>
<td>Microsoft Internet Explorer® version 5.0 or 6.0</td>
<td>Microsoft Internet Explorer® version 5.0 or 6.0</td>
<td>Microsoft Internet Explorer® version 5.0 or 6.0</td>
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