

ARCHITECT & ENGINEER SPECIFICATIONS
SECTION 16780
VIDEO SURVEILLANCE SYSTEMS

SNC-DF70P Ruggedized High Resolution Day/Night Minidome Color Camera

PART 2 PRODUCTS

2.01 CCTV / NETWORK CAMERA SPECIFICATIONS

A. GENERAL REQUIREMENTS:

1. The SNC-DF70P shall be a CS mount, network enabled, vandal resistant minidome color camera, utilizing a 1/4 type Super HAD™ interline transfer CCD. The camera shall have an analog video output producing 480 TV lines of horizontal resolution.
2. Network interface shall be via an 8-pin RJ-45 connector, 10 Base T /100 Base TX Ethernet.
3. The SNC-DF70P shall support JPEG and MPEG-4 compression. JPEG Compression levels are user selectable in 5 levels of compression ratios, based on an image of 24bits per picture element (8bits each for YUV).
4. The SNC- DF70P shall incorporate a built-in web server, such that standard web browser Internet Explorer can be used to view the camera view without need for special viewer software. The supported operating system is Windows® 2000 and Windows XP. Recommended PC requirements shall be 2 GHz, Pentium® IV Processor, with 512MB RAM or more supporting 1024X768 True Color display..
5. The SNC-DF70P shall be capable of supporting up to 20 users in the JPEG format or 10 users in the MPEG 4 format simultaneously over the network.
6. There shall be up to 3 user level/group settings. Access to functions shall be determined as follows:

a. User level 1	Viewing only
b. User level 2	Capture image
c. User level 3	Administrator

Administrator shall be able to assign manual FTP trigger to each user level.

7. Maximum frame rate capability of the SNC-DF70P over LAN is up to 18 frames per second on 640 X 480 capture size on JPEG and 15 frames per second on MPEG4.
8. The SNC-DF70P shall have a throughput of :

MPEG-4	JPEG
640 x 480 @ 15 fps,	640 x 480 @ 18 fps,
320 x 240 @ 30 fps,	320 x 240 @ 30 fps,
9. The SNC-DF70P shall be capable of supporting 6 selectable image capture sizes in either JPEG and MPEG4. The image sizes shall be:
640 x 480 (VGA); , 480 x 360; 384 x 288; 320 x 240; 256 x 192; and 160 x 120

10. The SNC-DF70P shall incorporate a CCD iris function, which varies the automatic shutter automatically between the ranges of 1/60 to 1/100,000 sec.
11. The minimum slow shutter setting is 1/60 second, and a maximum of 1/10,000
12. The SNC-DF70P shall be CS mount, and shall be pre-fitted with a 3 to 8mm (2.7X) IR compensated, vari-focal auto iris lens.
13. The SNC-DF70P shall have a 6 pin I/O pigtail interface located on rear of the base. There shall be an alarm input port, and 2 Alarm/relay output ports. The Alarm input port shall be opto-isolated.
11. The SNC- DF70P shall support the following Network protocols: TCP/IP, DNS, RTCP, UDP, RTP, ARP, HTTP, ICMP, SMTP, FTP, DHCP, NTP and SNMP (MIB2). Network security shall be via Password (basic authentication) and IP filtering.
12. The SNC-DF70P shall have both FTP client and server capabilities.
13. The SNC-DF70P shall have user configurable port settings.
14. The SNC-DF70P shall be capable of dynamic IP address change notification. It shall accomplish this via an email to a specified address when its IP address changes.
15. The SNC-DF70P shall be capable limiting the bandwidth from 64kbps to 2048 mbps in MPEG4 and 500 kbps to 4 mbps in JPEG.
16. The SNC-DF70P shall support multi-casting in MPEG4 mode, and shall allow the user to utilize TCP or UDP protocols.
17. The SNC-DF70P shall have an internal image memory size of 8MB for alarm buffering.
18. The SNC-DF70P shall be capable of pre and post alarm buffering.
19. The SNC-DF70P shall be capable of specifying up to 10 users/user groups, inclusive of administrator, and allow each user or group to have one of three levels of access, plus manual ftp for each.
20. The SNC-DF70P shall have built-in video motion detection on MPEG4, and shall be vector based.
21. Network LEDs in the camera shall be capable of being turned OFF via a manual switch.

B. CAMERA LENS SPECIFICATIONS:

1. The SNC-DF70P shall have a lens supplied as standard accessory .the lens shall be a 3.0 to 8mm IR compensated DC type auto iris lens, F=1.0

2. The SNC-DF70P shall have a minimum object distance shall be 0.2m (0.66ft).
3. The SNC-DF70P optical system shall permit the camera to cover a large angle of view from 66.6° to 26.9° Horizontal by 49.9° to 20.2° Vertical.
4. The SNC-DF70P lens Zoom and Focus levers shall have locking screws.

C. VIDEO-ELECTRICAL REQUIREMENTS

1. The power connection shall be by means screw down mini terminals connector.
2. The SNC-DF70P scanning system shall be 525 lines, 60 fields/30 frames, and 2:1 interlace.
3. The video output of the SNC-DF70P shall meet the EIA/NTSC standard.
4. The SNC-DF70P color mini dome camera shall require a minimum scene illumination of: 0.9 lux at F1.0, @ 89.9% reflectance (50 IRE, AGC ON, Turbo On) in color mode; and 0.2 lux at F1.0, 89.9% reflectance (50 IRE, AGC ON, Turbo On) in B/W mode.
5. The SNC-DF70P Camera synchronization shall be Internal.
6. The SNC-DF70P shall have an ON/OFF selectable AGC, with a range of 18dB, through the settings menu.
7. The composite video output shall be 1.0 V peak to peak @ 75 ohms.
8. The video signal to noise ratio shall be 50dB (Normal AGC, Weight ON).
9. The SNC-DF70P shall employ a center weighted backlight compensation system..
10. The SNC-DF70P shall be capable of being externally triggered to change from color to b/w modes. The cameras shall also be capable of switching between color and b/w modes automatically, via cgi, command, or through the web interface.
12. The SNC-DF70P shall have a continuously variable shuttering capability, a feature called CCD Iris mode. CCD iris mode shall be from 1/60 to 1/100,000 sec, and shall be used only with manual iris, CS mount lenses.
14. The SNC-DF70P shall employ Auto Tracking White (ATW) balance.
15. The Auto tracking white (ATW) balance range shall be 2,000 degrees Kelvin to 10,000 degrees Kelvin.

D: AUDIO REQUIREMENTS:

1. The SNC-DF70P shall support audio. Audio compression standards supported shall be G.711 (64kbps) & G.726 (40, 32, 24, 16Kbps).
2. The SNC-DF70P shall also support an external microphone. External microphone connectivity shall be via a single channel stereo type mini- jack, supporting 2.4 VDC power at 4.7 ohm external microphone input.
3. The SNC-DF70P shall support an external active speaker via a mini-jack. Audio output shall be a maximum level of 1Vrms.
4. The SNC-DF70P shall be capable of bi-direction audio transmission.

E: MECHANICAL REQUIREMENTS:

1. SNC-DF70P camera lens mount shall be CS type.
2. The SNC-DF70P camera shall be a CS mount type, IP66 rated, impact resistant, in a MiniDome type configuration. It shall come equipped with a 3 – 8mm F1.0 DC auto iris, IR compensated lens.
3. The SNC-DF70P main body shall be constructed of aluminum diecast, and the lower clear dome shall be 3mm polycarbonate.
4. The SNC-DF70P body shall have 3/4” thread for direct connection with a conduit pipe, located on the rear of the camera, as well as on the side of the main body. A removable threaded cap shall be used to seal the unused conduit access.
5. The SNC-DF70P shall support 1 optically isolated Alarm or sensor input, and 2 relay outputs via a pin push type spring lock connector.
6. Relay outputs shall be rated at 1 Amp at less than 24V DC
7. Video output connector from the DF70P shall be a two (2) pin mini – jack screw down connector to a pigtail BNC type of connector.
8. A secondary analog monitor output shall be provided, accessible from the front after the SNC-DF70P is installed. Interface wiring to this secondary analog monitor output shall be provided by the manufacturer as a standard accessory
9. The SNC-DF70P dimensions shall be 6.5 (W) 5.3 (H) 6.5(D) inches, 164.5mm (W) x 135mm (H) x 166.1mm (D).
10. The SNC-DF70P shall weigh approximately 3lb .5oz (1500g).
11. The CCD/lens combination shall be user settable at ± 150 degrees Pan, and Tilt of ± 75 degrees, lens leveling rotation of ± 150 degrees.
12. A removeable black sleeve shall be incorporated such that only the lens viewing area is exposed via the lower clear dome cover. This should be secured by lockdown screws.

13. The angle of the CCD / lens assembly shall be fixed via a locking screw.
14. For safety, the removeable front dome cover shall be secured via a rubber based material secured through a strap to the main camera body.

F. POWER REQUIREMENTS

1. The SNC-DF70P power requirements shall be AC24 V 50/60 Hz or DC12V.
2. The SNC-DF70P shall support Power Over Ethernet (PoE) 802.3af standard.
3. Power consumption for the SNC-DF70P shall be 8.0 watts maximum.

G. ENVIRONMENTAL REQUIREMENTS

1. The operating temperature shall be 14°F to 122°F (-10°C to +50°C)
2. Storage temperature shall be within -4°F to 140°F (-20°C to +60°C)

H. SYSTEM REQUIREMENTS

1. Operating system requirements: Microsoft Windows 2000/XP.
2. Recommended processor requirements: Pentium IV, 2 GHz or higher.
3. Minimum memory requirements : 512MB RAM
4. Web browser requirements: shall be Internet Explorer version 5.5 or 6.0.

I. SUPPLIED ACCESSORIES

1. CD ROM containing User guide & setup program (1)
2. Installation manual (1)
3. Wire rope (1)
4. Installation screws (2)
5. Dome cover (1)
6. Mini power connector
7. Warranty card

