

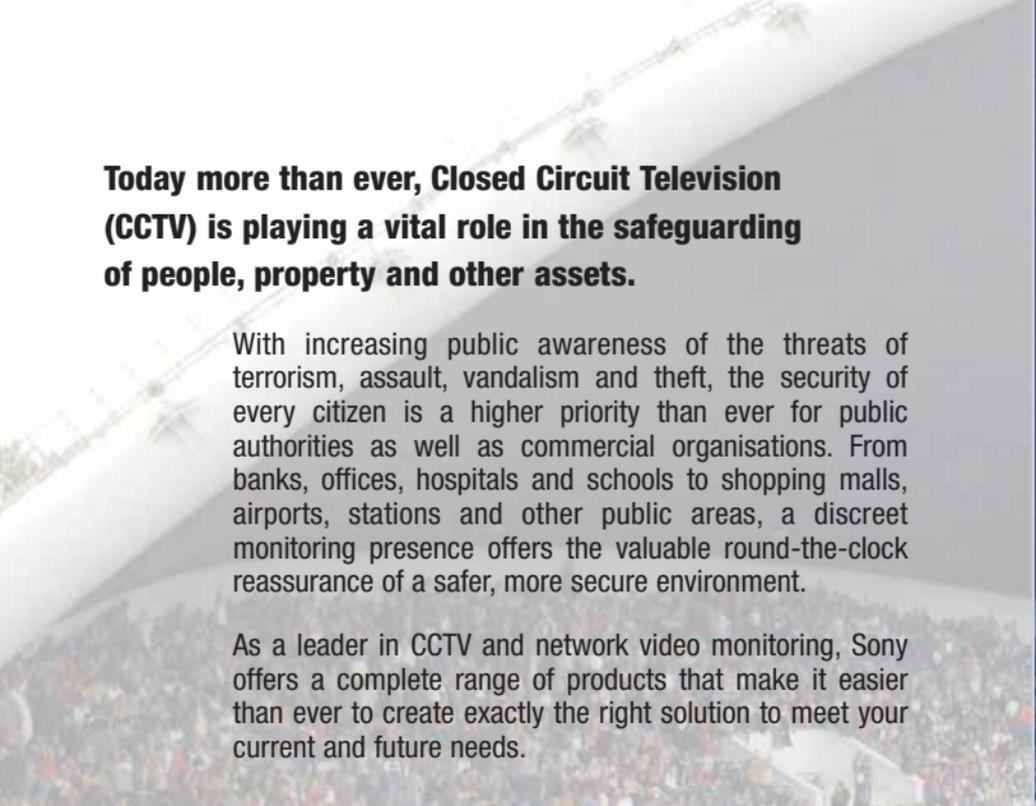
SONY



Network Video Monitoring
& CCTV Product Guide 2006

www.sonybiz.net/nvm





Today more than ever, Closed Circuit Television (CCTV) is playing a vital role in the safeguarding of people, property and other assets.

With increasing public awareness of the threats of terrorism, assault, vandalism and theft, the security of every citizen is a higher priority than ever for public authorities as well as commercial organisations. From banks, offices, hospitals and schools to shopping malls, airports, stations and other public areas, a discreet monitoring presence offers the valuable round-the-clock reassurance of a safer, more secure environment.

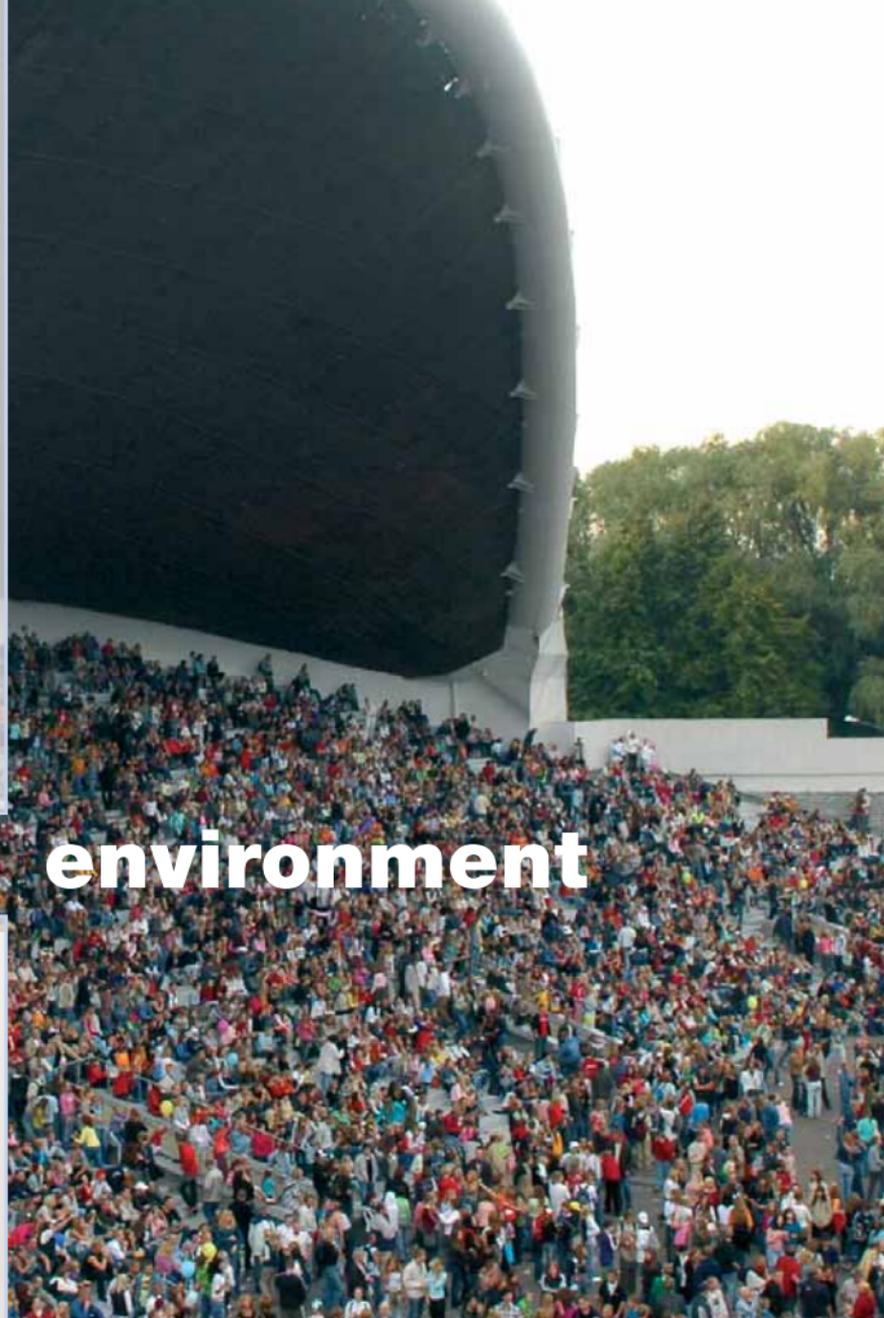
As a leader in CCTV and network video monitoring, Sony offers a complete range of products that make it easier than ever to create exactly the right solution to meet your current and future needs.

Create a safer, more secure

From latest-generation network cameras, file servers, network video recorders and RealShot management software to monitors, printers and accessories, you'll find that every Sony CCTV product has been designed with performance, reliability and ease of integration in mind.

Whether you're looking to expand your existing CCTV installation or create an all-new network-based monitoring solution with powerful image distribution and control capabilities, Sony products can enhance the value of your current investments while delivering flexible new monitoring possibilities. Best of all, every CCTV product comes with the back-up and peace of mind that you'd expect from Sony.

Visit us at www.sonybiz.net/nvm for more information on our complete range of CCTV and video surveillance monitoring products as well as case studies, white papers, special offers and more. Alternatively, talk to your local Sony office or security systems specialist. They'll be delighted to tell you more about the capabilities of Sony CCTV products and help you create a video monitoring solution that's flexible, reliable and remarkably cost-effective.



environment

NETWORK VIDEO MONITORING

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CCTV SOLUTIONS

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SNC-CS3P

NETWORK VIDEO CAMERA



Connector Panel

- IP network colour video camera with auto iris vari-focal lens (focal length: 3.5 to 8.0 mm)
- 1/3 type CCD sensor with ExwaveHAD™ technology offers extremely high sensitivity of 0.5 lux at F1.0
- Full motion video – up to 25 fps at VGA resolution (640 x 480) thanks to M-JPEG picture compression
- Embedded IP server and web page for simple set-up and control
- Embedded activity detection and alarm trigger functions
- PAL composite video output for local analogue viewing or recording

SNC-CS50P

NETWORK VIDEO CAMERA

IPELA



Connector Panel

- IP network colour video camera with auto iris vari-focal lens (focal length: 2.9 to 8.0 mm)
- 1/3 type CCD sensor with SuperExwave™ technology offers extremely high sensitivity (0.4 lux at F 0.95)
- Selectable JPEG, MPEG-4 and H.264 compression formats
- Dual Encoding Capability allows JPEG and MPEG-4 images to be streamed simultaneously
- Day/Night function
- Added functionality provided through alarm trigger functions
- PAL composite video output for local analogue viewing or recording
- Intelligent Object Detection and Intelligent Motion Detection
- Dynamic Frame Integration for higher image quality with retained sensitivity
- Public Key Infrastructure allows users to verify the origin of images and ensure the integrity of images against tampering
- AC 24 V, DC 12 V, or PoE Operation

SNC-DF40P

IPELA

NETWORK MINI-FIXED DOME CAMERA



Connector Panel

- JPEG/MPEG-4 network colour video camera with integral dome enclosure
- Power-over-Ethernet allows power to be supplied via an Ethernet CAT5 cable
- Built-in CS Mount auto iris vari-focal lens (f=3 to 8 mm from F1.0) for optimised coverage of any viewing area
- Multicasting capability supported and Adaptive Rate Control for stable image transmission
- Half duplex audio through built-in or external microphone input and audio line out
- Built-in motion vector activity detection permits unattended operation
- PAL composite video output for local analogue viewing or recording
- AC 24 V, DC 12 V, or PoE Operation

SNC-DF70P

IPELA

RUGGED DAY/NIGHT NETWORK MINI-FIXED DOME CAMERA



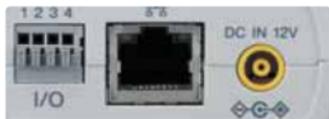
Connector Panel

- JPEG/MPEG-4 network colour video camera with integral rugged dome enclosure
- IP66 compliant rugged aluminium cast housing and polycarbonate cover for protection against rain and vandalism
- Power-over-Ethernet allows power to be supplied via an Ethernet CAT5 cable
- Removable infrared filter delivers clear Black & White pictures at night or under IR illumination
- Multicasting capability supported and Adaptive Rate Control for stable image transmission
- Half duplex audio through built-in or external microphone input and audio line out
- Built-in motion vector activity detection permits unattended operation
- Analogue composite video output
- AC 24 V, DC 12 V, or PoE Operation

SNC-P1

IPELA

MPEG-4 NETWORK VIDEO CAMERA



Connector Panel

- All-in-one JPEG/MPEG-4 network colour video camera with embedded IP server and web page for simple set-up and control
- High quality image transmission even over limited bandwidth network connection (e.g. only 500 kbps needed for 25 images per second)
- 1/4 type, 330K pixels progressive scan CCD for superb picture detail
- Two-way audio communication enhances appeal for remote monitoring applications
- Motion detection enables unattended operation
- External sensor input, alarm output and E-mail alarm notification function

SNC-P5

IPELA

NETWORK MPEG-4 VIDEO PAN-TILT CAMERA



Connector Panel

- All-in-one JPEG/MPEG-4 network colour video camera with integrated Pan-Tilt control capability (Pan: -70 to +70 degrees / Tilt: -70 to 0 degrees and 3x optical zoom)
- Wireless transmission through optional Sony wireless LAN card (SNCA-CFW1)
- High quality image transmission even over limited bandwidth network connection (e.g. only 500 kbps needed for 25 images per second)
- 1/4 type, 330K pixels progressive scan CCD for superb picture detail
- Two-way audio communication enhances appeal for remote monitoring applications
- Motion detection permits unattended operation
- External sensor input, alarm output and E-mail alarm notification function

SNC-Z20P

NETWORK VIDEO CAMERA



Connector Panel

- IP network colour video camera with integrated 18x optical zoom lens for excellent resolution of fine detail
- 1/4 type CCD sensor with ExwaveHAD™ technology offers extremely high sensitivity: 0.7 lux in colour mode, 0.01 lx (F1.4, 50 IRE, Slow Shutter OFF) in B/W mode
- Power-over-Ethernet allows power to be supplied via the Ethernet CAT5 cable
- Added functionality via on-board PC card slot for onboard event storage or optional Wireless LAN for greater installation flexibility
- Day/Night function switches to black & white mode in low light conditions for greater sensitivity
- PAL composite video output for local analogue viewing or recording

SNC-RZ25P

IP E L A

JPEG/MPEG-4 NETWORK VIDEO PAN-TILT-ZOOM CAMERA



Connector Panel

- Precise, high-speed pan/tilt/zoom mechanism with integral 18x auto-focus zoom lens
- High quality and high sensitivity (0.7 lux, F1.4) with ExwaveHAD™ technology
- Day/Night function
- Added functionality provided through Compact Flash slot and Memory Stick slot for image storage or Wireless LAN (IEEE802.11b) through optional Sony wireless LAN card (SNCA-CF1) for greater installation flexibility
- Half duplex audio through built-in or external microphone input and audio line out
- Motion detection permits unattended operation

SNC-RZ30P

NETWORK VIDEO PAN-TILT-ZOOM CAMERA



Connector Panel

- IP network colour video camera with integrated Direct Drive pan/tilt/zoom mechanism and autofocus lens with 25x optical zoom
- High quality full motion colour video – up to 25 fps at VGA resolution (640 x 480) thanks to M-JPEG picture compression
- PC card slot for onboard event storage
- Embedded web server and web page for simple set-up and control
- Day/Night function switches to black & white mode in low light conditions for greater sensitivity
- Activity detection and automatic picture store/send for unattended operation

SNC-RZ50P

IPELA

NETWORK VIDEO PAN-TILT-ZOOM CAMERA



Connector Panel

- Precise, high-speed pan/tilt/zoom mechanism with integral 26x autofocus zoom lens
- 1/4-type Super HAD CCD™ technology offers extremely high sensitivity (2.2 lx at F 1.6)
- Selectable JPEG, MPEG-4 and H.264 compression formats
- Dual Encoding Capability allows JPEG and MPEG-4 images to be streamed simultaneously
- Day/Night function
- Added functionality provided through Voice Alert, Image Transfer Using FTP/SMTP, Built-in Compact Flash™ and PC Card Slot
- Bi-Directional Audio capability
- Intelligent Object Detection and Intelligent Motion Detection
- Dynamic Frame Integration for higher image quality with retained sensitivity
- Public Key Infrastructure allows users to verify the origin of images and ensure the integrity of images against tampering

SNC-RX550P

IPELA

NETWORK SPEED DOME



Connector Panel

- High-performance network camera with 360 degree endless rotation and a 26x Optical Zoom (312x with digital zoom)
- 1/4-type Exwave HAD™ CCD technology offers extremely high sensitivity (1.0 lx at F 1.6)
- Advanced image processing technology provides three compression formats; JPEG, MPEG-4, and H.264 with built-in multicasting capability for MPEG-4 and H.264 video
- Dual Encoding Capability allows JPEG and MPEG-4 images to be streamed simultaneously
- Day/Night function
- Added functionality provided through advanced features, such as Intelligent Motion Detection, Intelligent Object Detection and Image Transfer Using FTP/SMTP
- Maximum frame rate of 30 fps when the image size is VGA (640 x 480) in both MPEG-4 and JPEG modes
- Bi-Directional Audio capability
- Intelligent Object Detection and Intelligent Motion Detection
- Dynamic Frame Integration for higher image quality with retained sensitivity
- Public Key Infrastructure allows users to verify the origin of images and ensure the integrity of images against tampering

SNT-V501

SINGLE-CHANNEL VIDEO NETWORK STATION



Connector Panel

- Converts analogue video signal to M-JPEG digital format for IP transmission
- Simple integration of analogue video cameras into IP networks
- Onboard picture storage reduces network bandwidth overheads
- Supports wireless transmission (optional) for areas where cabled network coverage is difficult or non-existent
- Built-in activity detection enables unattended operation
- Can be used as a standalone event recorder
- High refresh rates provide full motion video (25 fps) at VGA resolution

SNT-V704

FOUR CHANNEL VIDEO NETWORK STATION

IPELA



Connector Panel

- Embedded web server and web page for simple set-up and control
- Accepts up to four analogue video inputs providing outstanding flexibility
- Supports both MPEG-4 video and JPEG compressed images
- Added functionality provided through advanced features, such as Dynamic Masking Function, Image Transfer and Network Security Functions
- Bi-Directional Audio capability
- High refresh rates provide full motion video (25 fps) at VGA resolution
- 3rd Party Pan/Tilt/Zoom (PTZ) Camera Control

NSR-50

IPELA

NETWORK SURVEILLANCE RECORDER



Connector Panel

- Large-capacity HDD (500 GB)
- Can support up to 32 IP cameras
- High frame rate recording, 240 fps (eg 8 cameras x 30 fps)
- Supports both MPEG-4 video and JPEG compressed images
- Flexible recording and playback capability
- Optional intuitive remote control unit
- User-friendly GUI (Graphical User Interface)
- Intelligent Motion Detection
- Privacy Masking Function
- Pan/Tilt/Zoom (PTZ) camera control

NSR-100

IPELA

NETWORK SURVEILLANCE RECORDER



Connector Panel

- Large-capacity HDD (1000 GB)
- Can support up to 64 IP cameras
- High frame rate recording, 480 fps (eg 16 cameras x 30 fps)
- Supports both MPEG-4 video and JPEG compressed images
- Flexible recording and playback capability
- Optional intuitive remote control unit
- User-friendly GUI (Graphical User Interface)
- Intelligent Motion Detection
- Privacy Masking Function
- Pan/Tilt/Zoom (PTZ) camera control
- HDD Hot-Swap Capability

SSC-DC80P*/DC83P/DC88P

COLOUR VIDEO CAMERA



Connector Panel

- 1/2 type CCD with Exwave HAD technology offers extremely high sensitivity (0.8 lux at F1.2, 50 IRE) and low smear level (-120 dB)
- 480 lines of horizontal resolution
- Turbo Auto Gain Control (AGC)
- Wide Auto Tracing White (ATW) Range
- Variable Gamma Curve
- Activity Detection Function
- Privacy Zone Masking
- User-friendly Operation

* The SSC-DC80P features an internal sync and a VS (Video and Sync) /VD for external synchronisations with the optional YS-W170P/W270P camera adaptor

YS-W170P/YS-W270P

CAMERA ADAPTOR

YS-W170P



Connector Panel

YS-W270P



Connector Panel

- Used with SSC-DC80P
- Transmits DC power and video/sync signal between the adaptor and camera over a single coaxial cable
- Up to four cameras can be connected (one camera for YS-W170P)

- Internal or external synchronisation with MPX-VS or MPX-VD
- Maximum cable length: 600 m with RG-11A/U (7C-2V) coaxial cable

SSC-DC593P/SSC-DC598P

DAY/NIGHT VIDEO CAMERA



SSC-DC593P
Connector Panel



SSC-DC598P
Connector Panel

- 1/3 type IT CCD offering 480 lines of horizontal resolution
- Wide dynamic range with DynaView technology - ideal for obtaining clear colour images under severe lighting conditions
- Day/Night mode - increases camera sensitivity allowing images to be viewed even in low light conditions
- White balance: ATW PRO/ATW/3200K/5600K/MANUAL/DUAL WB switchable - Dual white balance mode gives high quality colour reproduction of indoor and outdoor scenes under different colour temperatures
- Built-in activity detection and alarm trigger functions
- On-screen set up menu supports Privacy Zone Masking function and two preset memories for camera setting

SSC-E473P/SSC-E478P

HIGH RESOLUTION DAY/NIGHT CAMERA



SSC-E473P
Connector Panel



SSC-E478P
Connector Panel

- Day/Night camera providing optimised sensitivity in both day and night shooting scenarios with near-infrared sensitivity in night-mode
- State-of-the-Art SuperExwave™ CCD technology achieving extremely high sensitivity levels - minimum illumination of 0.55 lux at F1.2 in colour mode and 0.05 lux at F1.2 in B/W mode
- Newly-developed innovative DSP technology generating a horizontal resolution of 540 TV lines
- New slim and stylish design
- External Day/Night control input and Day/Night control output terminal
- Wide Auto Tracing White Range – ATW Pro & ATW

SSC-E453P/SSC-E458P

HIGH RESOLUTION COLOUR CAMERA



SSC-E453P
Connector Panel



SSC-E458P
Connector Panel

- State-of-the-Art SuperExwave™ CCD technology achieving extremely high sensitivity levels providing a minimum illumination of 0.55 lux at F1.2
- Newly-developed innovative DSP technology generating a horizontal resolution of 540 TV lines
- New slim and stylish design
- Wide Auto Tracing White Range – ATW Pro & ATW
- Backlight compensation and Turbo AGC: ON/OFF switchable
- Wide range CCD IRIS (ON/OFF switchable, 1/50 to 1/100,000s)

SSC-DC372P/SSC-DC378P

HIGH RESOLUTION COLOUR CAMERA



SSC-DC372P
Connector Panel



SSC-DC378P
Connector Panel

- 1/3 type IT CCD with SuperHAD technology offering 480 lines of horizontal resolution
- High sensitivity - 0.8 lux at F1.2 (50 IRE)
- Backlight compensation (ON/OFF switchable)
- Wide range CCD IRIS (ON/OFF switchable, 1/50 to 1/100,000)
- CCD IRIS function allows for the use of low cost manual iris lenses
- Auto Tracing White Balance (ATW) and Turbo AGC (ON/OFF switchable)

SSC-DC198P

STANDARD RESOLUTION COLOUR CAMERA

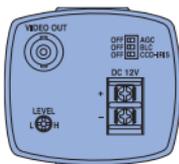


Connector Panel

- 1/3 type IT SuperHAD CCD offering 330 lines of horizontal resolution
- High sensitivity – 0.6 lux at F1.2 (50 IRE)
- Backlight compensation and ATW supported
- BLC and Turbo AGC (ON/OFF switchable)
- Wide range CCD IRIS (ON/OFF switchable, 1/50 to 1/100,000s)
- AC 220-240 V power operation

SSC-DC172P

STANDARD RESOLUTION COLOUR CAMERA



Connector Panel

- Low cost standard resolution colour camera – 330 lines of horizontal resolution
- High sensitivity – 0.6 lux at F1.2 (50 IRE)
- Backlight compensation and ATW supported
- BLC and Turbo AGC: ON/OFF switchable
- Wide range CCD IRIS (ON/OFF switchable, 1/50 to 1/100,000s)
- DC 12V power operation

SSC-M383CE/SSC-M388CE

BLACK AND WHITE CAMERA



SSC-M383CE
Connector Panel



SSC-M388CE
Connector Panel

- 1/3 type IT CCD with ExwaveHAD technology providing extremely high sensitivity - 0.07 lux at F1.2 (50 IRE)
- 570 lines of horizontal resolution
- Backlight compensation (ON/OFF switchable)
- Turbo AGC (up to 24 dB): ON/OFF switchable
- Wide range CCD IRIS (ON/OFF switchable, 1/50 to 1/100,000)
- CCD IRIS function allows for the use of low cost manual iris lenses

SSC-M183CE/SSC-M188CE

BLACK AND WHITE CAMERA



SSC-M183CE
Connector Panel



SSC-M188CE
Connector Panel

- 1/3 type IT SuperHAD CCD technology providing 380 lines of horizontal resolution
- High sensitivity - 0.06 lux at F1.2 (50 IRE)
- Backlight compensation (ON/OFF switchable)
- Turbo AGC (up to 24 dB): ON/OFF switchable
- Wide range CCD IRIS (ON/OFF switchable, 1/50 to 1/100,000)
- CCD IRIS function allows for the use of low cost manual iris lenses

SSC-CD73VP

RUGGED DAY/NIGHT MINI FIXED DOME CAMERA



- 1/4 type IT SuperHAD CCD offering 480 lines of horizontal resolution
- Rugged aluminum cast housing and polycarbonate cover
- Built-in CS Mount auto iris vari-focal lens (f=3 to 8 mm from F1.0)
- Day/Night function through removable IR filter to switch from colour to black and white mode with IR corrective lens for clear pictures under IR illumination
- High sensitivity of 0.9 lux (F1.0, 50 IRE, AGC ON) in colour and 0.2 lux (F1.0, 50 IRE, AGC ON) in B&W
- Rain-proof (IP66 compliant)

SSC-CD43VP

COLOUR MINI FIXED DOME CAMERA



- 1/4 type IT SuperHAD CCD offering 480 lines of horizontal resolution
- Built-in CS Mount auto iris vari-focal lens (f=3 to 8 mm from F1.0)
- High sensitivity of 0.9 lux (F1.0, 50 IRE, AGC ON)
- Turbo AGC (6 dB more gain than conventional gain): TURBO/NORMAL/OFF switchable
- Backlight compensation (ON/OFF switchable)
- ATW (2,200 to 10,000K)

HSR-J2009P

DIGITAL VIDEO RECORDER



Connector Panel

- Up to 9 cameras can be connected to the unit
- 500 GB HDD capacity (2x 250GB)
- High-Quality Images with JPEG 2000 Compression
- 100Base-TX Ethernet interface
- Programmed Recording
- Alarm Recording
- Activity Detection
- Intelligent Search
- Built-in Compact Flash™ (CF) card slot
- Region-of-Interest (ROI) Function
- Two-Channel Audio Recording and Playback

HSR-J2016P

DIGITAL VIDEO RECORDER



Connector Panel

- Up to 16 cameras can be connected to the unit
- 500 GB HDD capacity (2x 250GB)
- High-Quality Images with JPEG 2000 Compression
- 100Base-TX Ethernet interface
- Programmed Recording
- Alarm Recording
- Activity Detection
- Intelligent Search
- Built-in Compact Flash™ (CF) card slot
- Region-of-Interest (ROI) Function
- Two-Channel Audio Recording and Playback

HSR-DCT

VIDEO AND TELEMETRY VIRTUAL CONTROL PANEL



- Graphic, back-lit, 320 x 240 pixel touch panel display
- Allows customisation of up to 30 site maps
- Three-axel joystick allows simple manual Pan-Tilt-Zoom control
- Two independent RS-485 telemetry control ports to interface with the most common high speed domes

LMD-1410SC

LCD MONITOR



Connector Panel

- 14-inch colour video monitor (viewable area, measured diagonally)
- VGA-type LCD panel with 640 x 480 pixel resolution
- Wide viewing angle of 170 degrees, both vertically and horizontally, with minimal reduction in picture contrast
- Three selectable video inputs, including analogue composite, Y/C (S-Video) and RGB/component
- Colour temperatures can be selected from high, low or users' preset data (adjustable between 5,000K and 10,000K)
- Parallel remote control capability via Parallel/F
- 4:3/16:9 Switchable Aspect Ratio

UP-970AD

BLACK & WHITE DIGITAL GRAPHIC PRINTER



Connector Panel

- Photo-quality A-4 monochrome prints in just 8 seconds (in standard mode)
- Accepts both Analogue and Digital signal input
- Direct thermal-printing technology provides high resolution of approximately 325 dpi and 256 steps of grey level
- 2 , 4 or 6 split prints mode
- Automatic detection of paper or film
- Compact, space-saving design

UP-897MD/UP-D897

BLACK & WHITE DIGITAL GRAPHIC PRINTER



- A6 monochrome prints in approximately 2 seconds
- USB (version. 2.0) interface
- Resize-to-fit feature to enlarge images for printing
- Resolution of 325 dpi and 256 steps of grey level for high picture quality
- Multiple print modes available for a variety of applications
- 8 MB picture memory for panoramic-size prints
- Worldwide AC power supply
- Compact, space-saving design

PRINTERS

UP-DR150

DIGITAL PHOTO PRINTER



- Superb print quality in a choice of four print sizes
- High volume capacity can hold a roll of 550 10 x 15 cm (4 x 6 inch) prints
- Front-loading operation with auto loading for easy replacement of paper and ribbon
- Supplied with Microsoft® Windows™ 2000 and XP Pro for flexible PC compatibility
- Offers real-time monitoring of the remaining number of prints for ease of use
- Equipped with USB 2.0 interface as standard for faster image data transfer
- Grey balance adjustment capability
- Compact, space-saving design

UP-CR10LI

DIGITAL PHOTO PRINTER



Connector Panel

- Resolution of 403 dpi for high picture quality
- Photo-quality prints with Sony dye sublimation printing technology
- High-speed printing :
 - 9 x 13 cm (3.5 x 5 inches) in approx.13 seconds*
 - 10 x 15 cm (4 x 6 inches) in approx.17 seconds*
 - 13 x 18 cm (5 x 7 inches) in approx.18 seconds*
- 8-inch touch-sensitive LCD screen with intuitive graphical user interface
- Accepts MemoryStick (STD, DUO & PRO), CompactFlash, xD-Picture Card, SD/MMC and SmartMedia
- Supplied Windows® printer drivers enhance flexibility
- Compact, space-saving design

* Excluding image-processing time

SPECIFICATIONS

NETWORK VIDEO CAMERAS

	SNC-CS3P	SNC-CS50P
GENERAL		
Mass	Approx. 650 g (1 lb. 7 oz)	750g (1 lb 10 oz) excl. cover equipment 880g (1 lb 15 oz) incl. cover equipment
Dimensions (W x H x D)	57 x 70 x 159 mm (2 1/4" x 2 3/4" x 6 1/4")	84 x 69 x 196 mm (3 3/8" x 2 3/4" x 7 3/4") excl. cover equipment 84 x 69 x 265 mm (3 3/8" x 2 3/4" x 10 1/2") incl. cover equipment
Power requirements	AC 24 V / DC 12 V	AC 24 V, DC 12 V, PoE
Power consumption	7 W max.	9 W max. (AC 24V)
Operating temperature	-10 °C to 50 °C (14 °F to 122 °F)	0 °C to 50 °C (32 °F to 122 °F)
Storage temperature	-40 °C to 60 °C (-40 °F to 140 °F)	
Operating humidity	20% to 80%, Non-condensing	
Storage humidity	20% to 95%, Non-condensing	
IMAGE DATA		
Compression	M-JPEG	JPEG, MPEG-4, H.264
Image Resolution	736 x 544 (Auto), 736 x 544 (Frame), 736 x 544 (Field), 640 x 480 (Auto), 640 x 480 (Frame), 640 x 480 (Field), 320 x 240, 160 x 120	640 x 480 (VGA), 320 x 240 (QVGA), 160 x 120 (QQVGA)
Frame rate	Max. 25 fps (640 x 480)	JPEG/MPEG-4: Max. 25 fps H.264: Max. 8 fps
CAMERA		
Imager	1/3 type ExwaveHAD CCD	1/3-type SuperExwave CCD
Pixels	440,000 (752 x 582)	440,000 pixels
Electronic shutter	1/50 to 1/10,000 s	
Iris	ATW	ATW, ATW PRO, ONE PUSH
LENS		
Zoom Ratio	—	
Horizontal viewing angle	W 73.9 ° x 56.3 ° T 33.8 ° x 25.8 °	94 ° to 35 °
Focal length	Vari-focal (focal length: 3.5 to 8.0 mm)	f=2.9 to 8.0 mm
F-number	F1.0	F0.95 to F1.6
Minimum object distance	500 mm	300 mm
INTERFACES		
Ethernet	10Base-T/100Base-TX (RJ45)	
PC card slot	—	PC card x1 (Type II)
Sensor and I/O	Sensor input: make contact (photo coupler input electrically isolated from the camera) Alarm output 1 and 2: 24 V DC or less, 1 A (mechanical relay outputs electrically isolated from the camera)	Sensor input x 2 Alarm output x 2
Video Output	VIDEO OUT: BNC, 1.0 Vp-p, 75 Ω, unbalanced, sync negative	Analogue video output BNC x1, 1.0 Vp-p, 75 Ω
Serial I/F	RS-232C transparent port	RS-232C (Transparency function)
ANALOGUE VIDEO OUTPUT		
Signal system	PAL	PAL (Composite)
Sync system	Internal	
Horizontal resolution	480 TV lines	540 TV lines
S/N ratio	More than 50 dB	50 dB or more
Minimum illumination	0.5 lux at F1.0	Colour: 0.4 lx (F 0.95, 50 IRE, AGC ON) B/W: 0.04 lx (F 0.95, 50 IRE, AGC ON)
SYSTEM/NETWORK		
Browser	MS Internet Explorer® v 5.5 and 6.0 (Windows98/98SE/ME/NT4.0/2000/XP) Pocket PC Internet Explorer (Pocket PC 2002)	MS Internet Explorer® Ver.6.0 or later
Security	IP-filtering, Password protection	IP-Filtering, Password Protection + PKI Chip
Protocols supported	TCP/IP, HTTP, ARP, ICMP, DHCP, FTP, DNC, NTP and SNMP (MIB-2)	
Supplied accessories	CD-ROM (setup program and User guide), Installation Manual	CD-ROM (setup program and user's guide), Wire rope, Shoulder screw M4, Cable cover, Front cover, Lens cable cover, Screw for front cover
Optional accessories	—	SNCA-CFW1 Wireless LAN card, SNC1-AN1 Wireless LAN Antenna (optional accessory for the SNCA-CFW1 Wireless LAN card)

SPECIFICATIONS

NETWORK VIDEO CAMERAS

	SNC-DF40P	SNC-DF70P
GENERAL		
Mass	Approx. 750 g (1 lb 10 oz)	Approx. 1,500 g (3 lb 5 oz)
Dimensions (W x H x D)	124 x 132 x 126 mm (5" x 5 1/4" x 5") without projection ports	165 x 135 x 166 mm (6 1/2" x 5 3/8" x 6 5/8") without projection ports
Power requirements	AC24 V 50/60 Hz, DC12 V, POE	
Power consumption	7.5 W	8 W
Operating temperature	-10 to +50 °C (14 to 122 °F)	
Storage temperature	-20 to +60 °C (-4 to +140 °F)	
Operating humidity	20% to 80%, non-condensing	
Storage humidity	20% to 95%, Non-condensing	
CAMERA		
Image device	1/4-type SuperHAD CCD	
Number of effective pixels	752 x 582 (H x V)	
Electronic shutter	1/50 to 1/10000 s	
Gain control	Auto: ON/OFF switchable (up to 18 dB)	
Exposure control	Auto, Back-Light-Compensation(BLC)	
White balance mode	ATW	
Lens mount	CS mount	
Lens type	x2.7 Vari-focal auto iris lens	
Horizontal viewing angle	66.6 to 26.9 degrees	
Focal length	f=3.0 to 8.0 mm	
F number	F=1.0	
Iris	CCD iris	
Minimum object distance	200 mm	
Other functions	Motion detection	Motion detection Day/Night function
IMAGE		
Image size (H x V)	640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120	
Compression format	MPEG-4/JPEG selectable	
Maximum frame rate (MPEG-4 mode) (JPEG mode)	Max. 25 fps (320 x 240) Max. 25 fps (320 x 240)	
AUDIO		
Compression format	G.711 (64 Kbps) / G.726 (40, 32, 24, 16 Kbps)	
NETWORK		
Protocols	TCP/IP, UDP, RTP, RTCP, ARP, ICMP, DHCP, DNS, HTTP, FTP, SMTP	
Number of clients	JPEG: 20 users, MPEG-4: 10 users	
INTERFACES		
Ethernet	100Base-TX/10Base-T (RJ-45)	
Analogue video output	Composite video (1.0 Vp-p)	
Monitor output	2-Pin connector	
I/O port	Sensor in (1), Alarm out (2)	
External microphone input	Mini-jack, 2.4 VDC plug-in power, 4.7 kΩ	
Audio line output	Mini-jack (Monoaural), max output level: 1 Vrms	
ANALOGUE VIDEO OUTPUT		
Signal system	PAL (Composite)	
Horizontal resolution	480 TV lines	
S/N ratio	50 dB	
Minimum illumination	0.8 lx (AGC On, F1.0, 50IRE)	
Colour	—	
Black and White	0.9 lx (AGC On, F1.0, 50IRE) 0.2 lx (AGC On, F1.0)	
SUPPLIED ACCESSORIES		
	CD-ROM (setup program, users guide), Monitor cables (2), AC power code, Wire rope, Screws (2), Dome cover screw, Installation manual	CD-ROM (setup program, users guide), Monitor cables (2), AC power code, Wire rope, Screws (2), Installation manual
SYSTEM REQUIREMENTS		
Operating system	Microsoft® Windows® 2000/XP	
Processor	Intel® Pentium® III, 1 GHz or higher (Recommendation: Pentium IV, 2GHz or higher)	
Memory	256 MB RAM minimum	
Web browser	Microsoft Internet Explorer® version 5.5 or 6.0	

SPECIFICATIONS

NETWORK VIDEO CAMERAS

	SNC-P1	SNC-P5
GENERAL		
Mass	Approx. 225 g (8 oz)	Camera: approx. 380 g (13 oz) Stand: approx. 360 g (13 oz)
Dimensions (W x H x D)	99.5 x 35 x 138.5 mm (4 x 1 7/16 x 5 1/2 inches) without projection	Camera: 130 x 130 x 110 mm (5 1/8 x 5 1/8 x 4 3/8 inches) Stand: 130 x 178 x 142 mm (5 1/8 x 7 1/8 x 5 5/8 inches)
Power requirements	DC 12 V	DC 12 V
Power consumption	3.5 W	6.2 W
Operating temperature	0 to +35 °C (32 to 95 °F)	0 to +35 °C (32 to 95 °F)
Storage temperature	-20 to 60 °C (-4 to +140 °F)	
Operating humidity	20 to 80 %, Non-condensing	
Storage humidity	20 to 95 %, Non-condensing	
CAMERA		
Image device	1/4-type progressive scan CCD	1/4-type progressive scan CCD
Number of effective pixels	659 x 494 (330K)	659 x 494 (H x V)
Electronic shutter	1 to 1/10000 s	1 to 1/10000 s
Exposure mode	Auto, Shutter priority, Manual	Auto, Shutter priority, Manual
White balance	Auto, Indoor, Outdoor, One-push, Manual	Auto, Indoor, Outdoor, One-push, Manual
Minimum illumination	3.0 lx	3.5 lx (AGC ON, F2.8, 30IRE)
LENS		
Focal length	f=3.8 mm	f=3.4 mm, to 10.2 mm
Viewing angle	Horizontal: 53.4°, Vertical: 40.0°	Horizontal: 20 to 55.8°, Vertical: 15.1 to 43.3°
F-number	F2.0	F2.8 (wide) to 3.9 (Tele)
Minimum object distance	50 cm	0.4m (wide end), 1.4m (Tele end)
SYSTEM/NETWORK		
Compression format	MPEG-4/JPEG selectable	MPEG-4/JPEG selectable
Image size (H x V)		
MPEG-4 mode	640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120	640 x 480, 480x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120
JPEG mode	640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120	640 x 480, 480x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120
Maximum frame rate		
MPEG-4 mode	Max. 30 f/s (320x240) Max. 15 fps, 640 x 480	Max. 30 fps, 320 x 240,
JPEG mode	Max. 30 f/s (320x240) Max. 18 fps, 640 x 480	Max. 30 fps, 320 x 240,
Audio compression	G.711 (64 Kbps)/G.726 (40, 32, 24, 16 Kbps)	G.711 (64 Kbps)/G.726 (40, 32, 24, 16 Kbps)
Number of clients		
MPEG-4 mode	10 clients	10 clients
JPEG mode	20 clients	20 clients
Protocols	TCP/IP, UDP, RTP, RTCP, ARP, ICMP, HTTP, FTP, SMTP, DHCP, DNS, NTP and PPPoE, SNMP	TCP/IP, ARP, ICMP, DHCP, DSN, HTTP, FTP, SMTP, NTP, SNMP (MIB-2), RTP/RTCP, PPPoE
INTERFACES		
Ethernet	100Base-TX/10Base-T (RJ-45)	100Base-TX/10Base-T (RJ-45)
PC card slot	—	Compact Flash for storage or wireless
Video output	Mini-jack	Mini-jack (1.0 V p-p, 75 Ω, Sync negative)
Built-in microphone	Electret condenser microphone	Electret condenser microphone (omni-directional)
External microphone input	Mini-jack, Plug-in power, 2.2 kΩ, Unbalanced	Mini-jack, 2.2 kΩ, Unbalanced (RCA), 2.5 V plug-in power
Line output	Mini-jack	Mini-jack, (mono), max output level: 1 Vms
Sensor in	1	2
Alarm out	1	1
Supplied accessories	AC adaptor (x1) CD-ROM (x1, setup program and user guide) Stand (x1)	AC power adaptor MPA-AC1 (Sony) (x1) Power cord (x1) Stand (x1) Wall-mount (x1)

SPECIFICATIONS

NETWORK VIDEO CAMERAS

	SNC-RZ20P	SNC-RZ25P
GENERAL		
Mass	Approx. 800 g (2 lb. 10 oz)	Approx. 1.3 kg (2 lb. 14 oz)
Dimensions (W x H x D)	57 x 70 x 159 mm (2 1/4" x 2 3/4" x 6 1/4")	84 x 69 x 196 mm (3 3/8" x 2 3/4" x 7 3/4") excl. cover equipment 84 x 69 x 265 mm (3 3/8" x 2 3/4" x 10 1/2") incl. cover equipment
Power requirements	DC 24 V AC 50/60 Hz, 12 V DC, PoE	AC 24 V, DC 12 V
Power consumption	9 W max.	17 W max.
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)	
Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F)	
Operating humidity	20% to 80%, Non-condensing	
Storage humidity	20% to 95%, Non-condensing	
IMAGE DATA		
Compression	M-JPEG	MPEG-4/JPEG (selectable)
Image Resolution	736 x 544 (Auto), 736 x 544 (Frame), 736 x 544 (Field), 640 x 480 (Auto), 640 x 480 (Frame), 640 x 480 (Field), 320 x 240, 160 x 120	640 x 480, 480 x 360, 384 x 288 320 x 240, 256 x 192, 160 x 120 (both JPEG and MPEG-4)
Frame rate	Max. 25 fps (640 x 480)	JPEG: 25 fps (320 x 240) 18 fps (640 x 480)
CAMERA		
Imager	1/4 type ExwaveHAD CCD	1/4 type CCD ExwaveHAD CCD
Pixels	444,000	444,000 (752 x 582)
Electronic shutter	Auto/Manual (1 to 1/10,000 sec)	1/1 to 1/10,000 sec
Iris	Auto/Manual (F1.4 to Close)	Auto (Manual (F1.4 close))
Gain	Auto/Manual (-3 dB to 28 dB)	
Focus Mode	Auto/Manual (Near, Far, One Push Auto Focus)	
LENS		
Zoom Ratio	x 18 (infinite)	18x optical zoom (216x with digital zoom)
Focal length	f = 4.1 mm to 73.8 mm	f=4.1 mm to 73.8 mm
F-number	F1.4 (Wide), F3.0 (Tele)	F1.4 (wide), F3.0 (tele)
Minimum object distance	Tele: 800 mm, Wide: 10 mm (factory preset is 290 mm)	300 mm (wide), 800 mm (tele)
PAN/TILT		
Pan angle	—	-170 to +170 degrees
Pan speed	—	100° rotation/second
Tilt angle	—	-90 to +30 degrees
Tilt speed	—	90° rotation/second
INTERFACES		
Ethernet	10 Base-T/100 Base-TX (RJ-45)	10Base-T/100Base-TX (RJ-45)
PCMCIA	Type II x1	Compact Flash for storage or wireless
Sensor and I/O	Sensor input: make contact (photo coupler input electrically isolated from the camera) 1 A (mechanical relay outputs electrically isolated from the camera)	Sensor in x 2, Alarm out x 2
Video Output	VIDEO OUT: BNC, 1.0 Vp-p, 75 Ω, unbalanced, sync negative	BNC x1, composite video 1.0 Vp-p, 75 Ω
Serial I/F	RS-232C transparent port	RS-232C (R x D, T x D)
ANALOGUE VIDEO OUTPUT		
Signal system	PAL	PAL (Composite)
Sync system	Internal	
Horizontal resolution	460 TV lines	More than 470 TV lines
S/N ratio	50 dB	More than 50 dB
Minimum illumination	Colour: 0.7 lux or less (AE mode, slow shutter off) B&W: 0.01 lux (F1.4, 50IRE, Slow shutter OFF)	Colour: 0.7 lx (50IRE, F1.4: AGC on)
SYSTEM/NETWORK		
Browser	MS Internet Explorer v 5.5 and 6.0 (Windows98/98SE/ME/NT4.0/2000/XP) Pocket PC Internet Explorer. (Pocket PC 2002)	MS Internet Explorer v 5.5 and 6.0
Security	IP-filtering, Password protection	IP-filtering, Password protection
Protocols supported	TCP/IP, HTTP, ARP, ICMP, DHCP, FTP, DNC, NTP and SNMP (MIB-2)	IP(IPv4), ICMP, ARP, TCP/UDP, RTP/RTCP, SNMP (MIB-2) DHCP client, NTP client, DNS client, HTTP, FTP, SMTP client
Supplied accessories	CD-ROM (setup program and User guide), Wire rope, Shoulder screw M4, Installation Manual	Ceiling mount kit, CD-ROM (user guide, set up and SNC panorama creator software), Installation manual
Optional accessories	Memory Stick MSA-128 A (128 MB) Memory Stick PC card adaptor MSAC-PC3 Wide conversation lens VCL-0637H	SNCA-CFW1 Wireless Card, SNCA-AN1 Wireless LAN Antenna (for use with SNCA-CFW1 Wireless Card)

SPECIFICATIONS

NETWORK VIDEO CAMERAS

	SNC-RZ30P	SNC-RZ50P
GENERAL		
Mass	1.2 kg (2 lb 10 oz)	
Dimensions (W x H x D)	140 x 175 x 144 mm (5 5/8" x 7" x 5 3/4")	140 x 166 x 142 mm (5 5/8" x 6 5/8" x 5 5/8")
Power requirements	DC 12 V via AC adaptor (100 to 240 V)	DC 12 V
Power consumption	21.6 W	20 W max.
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)	0 °C to 40 °C (32 °F to 104 °F)
Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F)	-20 °C to 60 °C (-4 °F to 140 °F)
Operating humidity	20% to 80% Non-condensing	
Storage humidity	20% to 95% Non-condensing	
IMAGE DATA		
Compression	M-JPEG	JPEG, MPEG-4, H.264
Compression ratio	1/5 ~ 1/60 (10 steps)	???
Image Resolution	736 x 544 (Auto), 736 x 544 (Frame), 736 x 544 (Field), 640 x 480 (Auto), 640 x 480 (Frame), 640 x 480 (Field), 320 x 240, 160 x 120	640 x 480, 320 x 240, 160 x 120 (JPEG, MPEG-4, H.264)
Frame rate	Max. 25 fps (640 x 480)	JPEG/MPEG-4 25 fps (640 x 480) H.264 8 fps (640 x 480)
CAMERA		
Imager	1/6 type Interline Transfer SuperHAD CCD	1/4-type Super HAD CCD
Pixels	800,000	740,000 pixels (total), 400,000 (702X575) (effective)
Electronic shutter	1/3 to 1/10,000 sec	1 to 1/10,000 s
Exposure	Auto [Full Auto (including backlight compensation), Shutter-priority, iris-priority] and manual	Auto (Full auto, Shutter-priority, Iris-priority), Manual, EV compensation, Backlight compensation
White balance	Auto, ATW, Indoor, Outdoor, One-push (trigger command), Manual	Auto, Indoor, Outdoor, One-push WB, ATW, Manual
Iris	Auto/Manual (F1.6 to close)	
Gain	Auto/Manual (-3 dB to 28 dB)	
Focus mode	Auto/Manual (Near, Far, One-push Auto Focus)	Auto-focus zoom
LENS		
Zoom Ratio	25x optical zoom, 300x with digital zoom	26x optical zoom (312x with digital zoom)
Horizontal viewing angle	2.0° to 45°	1.7° to 42.0°
Focal length	f = 2.4 mm to 60 mm	f=3.5 to 91.0 mm
F-number	F1.6 (wide), F2.7 (tele)	F1.6 (wide), F3.8 (tele)
Minimum object distance	Tele: 800 mm, Wide: 30 mm	320 mm (wide), 1,500 mm (tele)
PAN/TILT		
Pan angle	-170° to +170°	-170° to +170°
Pan speed	2 sec./340°	300 degrees/s (max.)
Tilt angle	-25° to +90°	-90 to +25 degrees
Tilt speed	1.5 sec./115°	300 degrees/s (max.)
INTERFACES		
Ethernet	10Base-T / 100Base-Tx (RJ-45)	10Base-T/100Base-TX (RJ-45)
PCMCIA	Type II x 2	PC card x1, CF card x1
Sensor and I/O	Sensor input x 3, Sensor output x 2	Sensor in x 2, Alarm out x 2
Video Output	Analogue composite (BNC x 1)	BNC x1, 1.0 Vp-p, 75 Ω
Serial I/F	RS-232C/RS-485 transparent port	RS-232C (Transparency function or VISCA protocol)
ANALOGUE VIDEO OUTPUT		
Signal system	PAL	PAL (Composite)
Sync system	Internal	
Horizontal resolution	480 TV lines	450 TV lines
S/N ratio	More than 48 dB	more than 50 dB
Minimum illumination	Colour: 3 lux at F1.6 (50 IRE), B&W: 0.18 lux at F1.6 (50 IRE)	Colour: 2.2 lx (50 IRE, F1.6, AGC ON), B/W: 0.3 lx (50 IRE, F1.6, AGC ON)
SYSTEM/NETWORK		
CPU	32 bit RISC Embedded processor	Intel® Pentium® IV 1.5 GHz or higher
RAM	32 MB (includes 8 MB alarm buffer)	256 MB or more
Browser	MS Internet Explorer v 5.5 and 6.0 (Windows98/ME/NT4.0/2000)	Microsoft Internet Explorer® Ver.6.0
Security	IP-filtering, Password protection	IP-filtering, Password protection + PKI Chip
Protocols supported	TCP/IP, HTTP, ARP, ICMP, DHCP, FTP, SMTP and SNMP (Standard MIB)	
Supplied accessories	Ceiling mount kit, AC power adaptor, AC power cable, CD-Rom (Set up	Ceiling-mount bracket(A), Ceiling-mount bracket(B), Screws x6, Wire rope, AC Adaptor, AC Cable, CD-ROM (setup software, operation manual), Installation manual Mount bracket cover, programme and User's guide), I/O receptacle, Shoulder screw, Plug retainer, Rubber feet x4
Optional accessories	Installation manual, Ferrite core MSA-64A Memory Stick (64 MB) MSAC-PC2 Memory Stick/PC Card Adaptor	SNCA-CFW1 Wireless LAN Card, SNCA-AN1 Wireless LAN Antenna (Optional accessory for the SNCA-CFW1 Wireless LAN Card) YT-ICB550/T In-ceiling Mount Kit (tinted dome), YT-ICB550/C In-ceiling Mount Kit (clear dome), YT-MA550 Adaptor for the YT-ICB550

SPECIFICATIONS

NETWORK VIDEO CAMERAS

SNC-RX550P	
CAMERA	
Image device	1/4-type Exwave HAD CCD
Number of effective pixels	440,000 (752 x 582)
Electronic shutter	1 to 1/10,000 s
Gain control	Auto/Manual (-3 dB to +28 dB)
Exposure control	Auto (Full auto, Shutter-priority, Iris-priority), Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push auto, ATW/Manual
Lens type	Auto-focus zoom lens
Zoom ratio	26x optical zoom (312x with digital zoom) vignetting may occur at wide viewing angles under low light conditions
Horizontal viewing angle	2.2 to 54.2 degrees
Focal length	f=3.5 to 91.0 mm
F-number	F1.6 (wide), F3.8 (tele)
Minimum object distance	320 mm (wide), 1,500 mm (tele)
Pan angle	360 degrees endless rotation
Pan speed	300 degrees/s (max.)
Tilt angle	-90 to 0 degrees
Tilt speed	300 degrees/s (max.)
Other functions	Day/Night, Advanced Video Motion Detection, Unattended Object Detection, Anti-tampering, Image stabiliser, Position preset
IMAGE	
Image size (H x V)	640 x 480, 320 x 240, 160 x 120 (JPEG, MPEG-4, H.264)
Compression format	JPEG, MPEG-4, H.264
Maximum frame rate JPEG/MPEG-4 H.264	25 fps (640 x 480) 8 fps (640 x 480)
AUDIO	
Audio compression	G.726/G.711 (40, 32, 24, 16 Kb/s)
NETWORK	
Protocols	TCP/IP, HTTP, ARP, ICMP, FTP, SMTP, DHCP, SNMP, DNS, NTP
Number of clients	20
INTERFACES	
Ethernet	10Base-T/100Base-TX (RJ-45)
Serial interface	RS-232C (Transparency function or VSCA protocol)
Card slots	PC card x1, Memory Stick x1
Analogue video output	BNC x1, 1.0 Vp-p, 75 Ω
External microphone input	Mini-jack (monaural, 2.2 KΩ 2.5 V plug-in power)
Audio line output	Mini-jack (monaural), max output level: 1 Vrms
ANALOGUE VIDEO OUTPUT	
Signal system	PAL (Composite)
Horizontal resolution	460 TV lines
S/N ratio	50 dB
Min. illumination	Colour: 1 lx (50IRE, F1.6, AGC ON), B/W: 0.15 lx (50IRE, F1.6, AGC ON)
SUPPLIED ACCESSORIES	
Ceiling-mount bracket (A), Ceiling-mount bracket (B), Screws x6, Wire rope, CD-ROM (setup software), Operation manual, Installation manual	
SYSTEM REQUIREMENTS	
Operating system	Microsoft® Windows® 2000/XP
Processor	CPU: Intel® Pentium® IV 1.5 GHz or higher
Memory	RAM: 256 MB or more
Web browser	Microsoft Internet Explorer® Ver.5.5 or 6.0

SPECIFICATIONS

NETWORK VIDEO RECORDERS AND SERVERS

	SNT-V501	SNT-V704
GENERAL		
Mass	Approx. 650 g (1 lb 7 oz)	Approx. 1.2 kg (2 lb 10 oz)
Dimensions (W/H/D)	128 x 40 x 150 mm (5 1/8" x 1 5/8" x 6") excluding protruding parts	210 x 42 x 202 mm (8 3/8" x 1 11/16" x 8")
Power requirement	DC 12 V or AC 24 V	DC 12 V (AC adapter included)
Power consumption	10.0 W max.	18 W
Operating temperature	-10 to 50 °C (14 °F to 122 °F) When PC card is attached: -10°C to 40°C (14°F to 122°F)	-10 to 40 °C (14 to 104°F)
Storage temperature	-20 to 60 °C (-4 to 140 °F)	-20°C to 60°C (-4°F to 140°F)
Operating humidity	20 to 80 %, Non-condensing	20 to 80 %, Non-condensing
Storage humidity	20 to 95 %, Non-condensing	20 to 95 %, Non-condensing
ANALOGUE VIDEO INTERFACE		
Image device	1/4-type progressive scan CCD	1/4-type progressive scan CCD
Video input	(1) Analogue composite (BNC x 1), 1.0 Vp-p 75 Ω, unbalanced, sync negative Auto sensing	Analogue composite (BNC x 4), 1.0 Vp-p, 75 Ω, unbalanced, sync negative, Auto sensor for NTSC or PAL
Video output	Through video output: Analogue composite (BNC x 1), 1.0 Vp-p, 75 Ω, unbalanced, sync negative	Analogue composite (BNC x 4), 1.0 Vp-p, 75 Ω, unbalanced, sync negative (loop-through)
SYSTEM/NETWORK		
CPU	CPU 32-bit RISC processor RAM 32 MB (including 8 MB alarm buffer)	CPU 64-bit RISC processor
Flash memory	8 MB	128 MB (including 32 MB alarm buffer)
Image size	704 x 480, 640 x 480, 320 x 240, 160 x 120 pixels	720 x 576, 640 x 480, 320 x 240 pixels
Compression method	JPEG	JPEG/MPEG-4
Compression ratio	Approx. 1/5 to 1/60 (10 steps)	Variable in*
Frame rate	Max. 30 fps (640 x 480)	Max. 25 fps x 4ch (640 x 480) (JPEG/MPEG-4)
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP (server/client), SMTP, DHCP, DNS, NTP, SNMP (MIB-2)	TCP/IP, ARP, ICMP, HTTP, FTP (server/client), SMTP, DHCP, DNS, NTP, SNMP (MIB-2)
Number of clients	Max. 50	Max. 50
INTERFACES		
Ethernet	100BASE-TX / 10BASE-T (RJ-45)	100Base-TX/10Base-T (RJ-45)
Sensor input	(1) 3.3 to 24 V DC device supported, photo coupler inputs electrically isolated from this unit	4 (3.3 to 24 V device supported, photocoupler inputs are electrically isolated from this unit)
Alarm output	(2) 24 V DC or less, 1 A, mechanical relay outputs electrically isolated from the camera	4 (24 V DC or less, 1, 1 A, mechanical relay outputs electrically isolated from the camera)
Serial interface	RS-485/RS-232C (for camera control or transparency function)	RS-232C/485/422 (for camera control)
PC card slot	PCMCIA Type II (1)	—
USB Port	—	USB 2.0 (for use with USB mass storage class devices only)

*The compression ratio is based on an image of 24 bits/picture element (8 bits for each R, G and B)

SPECIFICATIONS

NETWORK VIDEO RECORDERS AND SERVERS

	NSR-50	NSR-100
GENERAL		
Mass	Approx. 12 kg (26 lb 7 oz)	Approx. 13 kg (28 lb 11 oz)
Dimensions (W x H x D)	430 x 87 x 417 mm (17 x 3 1/2 x 16 1/2) excluding protrusions	
Power requirement	100 to 127/200 to 240 V AC	
Power consumption	1.93 A / 0.99 A	2.77 A / 1.39 A
Operating temperature	5 to 40 °C (41 to 104 °F)	
Operating humidity	10 to 80% (non-condensing)	
VIDEO/RECORDING		
Number of IP Cameras Supported	32 Max.	
Video Compression	MPEG-4 or JPEG	
Maximum Recording Rate*1	240 fps	
HARD DISK DRIVES		
Physical Capacity	500 GB (250 G x 2)	
Interface	Serial ATA	
RAID Level/Recording	Software RAID	Hardware RAID (Hot Swappable when set to RAID 5 or RAID 1)
Capacity (approx.)	SPAN (Default): 460 GB RAID 1: 210 GB	RAID 5 (Default): 700 GB RAID 1: 460 GB RAID 0: 940 GB
Network File System (for NAS)	Supports NFS Version 3 protocol	Supports NFS Version 3 protocol
VIDEO INTERFACE		
Monitor OUT #1	RGB connector x2 (Front and Rear Panel, cannot be used simultaneously) RGB connector x1	
#2		
Video Output	S-Video x1	
Analogue Composite OUT	RCA-pin x2 (Front and Rear Panel, cannot be used simultaneously)	
AUDIO INTERFACE		
Mic IN	Mini jack x1(front), x 1(rear)	
Line OUT	RCA-pin, L/R x1 stereo pair, (front and rear panel)	
SENSOR/ALARM		
Sensor IN	8-channel photo-coupler (DC3.3-24V)	
Alarm OUT	8-channel relay (Max. 24V 1A)	
OTHER INTERFACES		
Ethernet	1000Base-T/100Base-TX/10Base-T x3 (automatic switching)	
USB	Front x2, Rear x2	
Serial interface	RS-232C x1 (for UPS)*2	
SUPPLIED ACCESSORIES		
Front panel key, Installation guide, Remote control unit operation card, Recovery CD, Manual/Tool/ Source codes CD, Rubber feet (4)		

*1 Recording frame rates shown in the table represents the total frame rate per recorder unit when recording images at JPEG, Level 5 using the SNC-RZ30, and without live image monitoring.

*2 Please contact your local Sony sales office for a list of recommended UPS systems.

SPECIFICATIONS

VIDEO CAMERAS

	SSC-DC80P	SSC-DC83P	SSC-DC88P
GENERAL			
Mass	Approx. 560 g (1.4 oz)	Approx. 550 g (1.3 oz)	Approx. 600 g (1.5 oz)
Dimensions (W x H x D) (including front and rear covers)	70 x 57 x 260 mm (2 7/8" x 2 1/4" x 20 1/4")		
Power requirements	Multiplexing with the YS-W170P/W270P, or DC 12 V \pm 10%	AC 24 V \pm 10%, 50 Hz or DC 12 V \pm 10%	AC 24 V \pm 10%, 50 Hz
Power consumption	4.6 W	4.4 W	4.2 W
Operating temperature	-10 to 50 °C (14 to 122 °F)		
Storage temperature	-40 to 60 °C (-40 to 140 °F)		
CAMERA			
Image device	1/2-type CCD with Exwave HAD technology		
Number of effective pixels (H x V)	440,000 (768 x 494)		
Auto Gain Control	Turbo/Normal/Manual/Off		
White balance mode	ATW-pro/ATW/3200K/5600K/Manual		
Lens type	CS/C-mount (C-mount adaptor is supplied), DC/Video servo auto iris		
CCD iris	ON/OFF, 1/50 to 1/100,000 s switchable		
Back-Light Compensation (BLC)	SPOT/WEIGHT/OFF switchable		
Analogue video output	BNC x 1, 1.0 Vp-p, 75 Ω , Sync negative, S-Video x 1		
Signal system	PAL		
Sync system	Internal/VS/VD	Internal/AC Line lock/VS	Internal/AC Line lock/VS
Horizontal Resolution	4480 TV lines		
S/N ratio	More than 57 dB (AGC OFF, WEIGHT ON)		
Minimum illumination	0.4 lx (50 IRE, F1.2, Turbo AGC ON)		
SUPPLIED ACCESSORIES			
	Lens mount cap, Operating instructions, Front cover, Rear cover, Screws (2), C-mount adaptor		Lens mount cap, Operating instructions, Front cover, Rear cover, Screws (2), Power cable

CAMERA ADAPTORS

	YS-W170P	YS-W270P
Video output	BNC(2), composite video	
Signal system	PAL	
Video input	Camera in, BNC(1)	Camera in, BNC(4)
External sync	VS or VD-W	
Internal sync	MPX-VS or MPX-VD-W	
Max. cable length	300 m (984 ft) using RG-59B/U 500 m (1640 ft) using RG-6A/U 600 m (1968 ft) using RG-11A/U	
Cable compensation	3 positions	
Power requirements	AC 220 to 240 V, 50 Hz	
Power consumption	15 W	49.5 W
Operating temperature	-10 to 50°C (14 to 122°F)	-10 to 50°C (14 to 122°F)
Mass	1.9 kg (4 lb 3 oz)	3.8 kg (8 lb 6 oz)
Dimensions (W x H x D)	212 x 52 x 345 mm (8 3/8" x 2 1/8" x 13 5/8")	424 x 52 x 345 mm (16 3/4" x 2 1/8" x 13 5/8")

SPECIFICATIONS

VIDEO CAMERAS

	SSC-DC593P	SSC-DC598P
GENERAL		
Mass	500 g (1 lb. 2 oz)	
Dimensions (W x H x D)	70 x 57 x 129 mm (2 7/8" x 2 1/4" x 5 1/8")	
Power requirements	AC 24 V \pm 10%, 50 Hz or DC 12 V \pm 10%	AC 220 V to 240 V \pm 10%, 50 Hz
Power consumption	5.8 W	5.6 W
Operating temperature	-10 to 50 °C (-40 to 122 °F)	
Storage temperature	-40 to 60 °C (-40 to 140 °F)	
CAMERA		
Image device	1/3 type Interline Transfer CCD with DynaView technology	
Number of effective pixels (H x V)	752 x 582	
Auto Gain Control	OFF/MANUAL/NORMAL/TURBO selectable	
White balance mode	ATW PRO/ATW/3200K/5600K/MANUAL/DUAL WB	
Lens type	CS	
CCD iris	1/60 (1/50) to 1/10000 (8steps) OFF/MANUAL/ CCD IRIS selectable	
Back-Light Compensation (BLC)	DYNAVIEW/SPOT/WEIGHT/OFF switchable	
Video out	1.0 Vp-p, BNC (1)	
Day/Night mode	COLOUR/AUTO/EXTERNAL/B&W	
Activity detection	ON / OFF switchable	
Zone masking	ON / OFF switchable (with Area setting function)	
Variable Gamma	OFF /SCENE1 /SCENE2/SCENE3/SCENE4 selectable	
Camera Title	Up to 24 characters ON / OFF switchable	
Remote Control	RS-485	
Signal system	PAL	
Sync system	Internal/External	
Horizontal Resolution	480 TV lines	
S/N ratio	More than 50 dB (AGC OFF, Weight ON)	
Minimum illumination	Colour: 0.8 lux at F1.4(50 IRE) B/W: 0.07 lux at F1.4 (50 IRE)	
Auto iris lens	DC/video servo switchable	
SUPPLIED ACCESSORIES		
	Lens mount cap (x1) Menu operations (x1) Operation manual (x1)	Lens mount cap (x1) Menu operations (x1) Operation manual (x1) AC power cable (x1)

SPECIFICATIONS

VIDEO CAMERAS

	SSC-E473P	SSC-E478P
GENERAL		
Mass	380 g (13 oz)	400g (14 oz)
Mass including front & rear covers	460 g (1 lb 1 oz)	480g (1 lb 8 oz)
Dimensions (W x H x D)	60 x 53 x 124 mm (2 3/8" x 2 1/8" x 5")	
Dimensions including front and rear covers	60 x 53 x 246 mm (2 3/8" x 2 1/8" x 9 3/4")	
Power requirements	AC 24 V \pm 10%, 50 Hz or DC 12 V \pm 10%	AC 220 V to 240 V \pm 10%, 50 Hz
Power consumption	4.0 W	
Operating temperature	-10 °C to 50 °C (14 °F to 122 °F)	
Storage temperature	-40 °C to 60 °C (-40 °F to 140 °F)	
CAMERA		
Image device	1/3 type Interline Transfer CCD with SuperExwave	
Picture elements (H x V)	752 x 582	
Auto Gain Control	TURBO/OFF switchable	
White Balance (WB)	Auto White Balance Pro(ATW Pro) /Auto Wite Balance(ATW)	
Lens mount	CS	
CCD IRIS	ON/OFF switchable, 1/50 to 1/100,000 s	
Backlight Compensation (BLC)	ON/OFF switchable	
Video out	BNC, 1.0 Vp-p, 75 Ω , sync negative	
Sensing area	1/3 type format (4.8 x 3.6 mm)	
Signal system	PAL standard	
Sync system	INT/Line Lock	
Horizontal resolution	540 TV lines	
S/N ratio	More than 50 dB (AGC OFF, WEIGHT ON)	
Minimum illumination	Colour: 0.55 lx at F1.2 (50 IRE, AGC ON, Turbo mode) B&W: 0.05 lx at F1.2 (50 IRE, AGC ON, Turbo mode)	
Auto iris lens	DC servo	
SUPPLIED ACCESSORIES		
	Lens mount cap (1), Operating instructions (1), Front cover(1), Rear cover(1), Screws (2), Power cable (1)	

SPECIFICATIONS

VIDEO CAMERAS

	SSC-E453P	SSC-E458P
GENERAL		
Mass	360g (12 oz)	390 g (13 oz)
Mass including front & rear covers	440g (15oz)	470 g (1 lb)
Dimensions (W x H x D)	60 x 53 x 118 mm (2 3/8 x 2 1/8 x 4 3/4 inches)	60 x 53 x 124 mm (2 3/8 x 2 1/8 x 5 inches)
Dimensions including front and rear covers	60 x 53 x 240 mm (2 3/8 x 2 1/8 x 9 1/2 inches)	60 x 53 x 246 mm (2 3/8 x 2 1/8 x 9 3/4 inches)
Power requirements	AC 24 V ±10%, 50 Hz or DC 12 V ±10%	AC 220 V to 240 V ±10%, 50 Hz
Power consumption	3.5 W	
Operating temperature	-10 °C to 50 °C (14 °F to 122 °F)	
Storage temperature	-40 °C to 60 °C (-40 °F to 140 °F)	
CAMERA		
Image device	1/3 type Interline Transfer CCD with SuperExwave	
Picture elements (H x V)	752 x 582	
Auto Gain Control	TURBO/OFF switchable	
White Balance (WB)	Auto White Balance Pro(ATW Pro) /Auto Wite Balance(ATW)	
Lens mount	CS	
CCD IRIS	ON/OFF switchable, 1/50 to 1/100,000 s	
Backlight Compensation (BLC)	ON/OFF switchable	
Video out	BNC, 1.0 Vp-p, 75 Ω, sync negative	
Sensing area	1/3 type format (4.8 x 3.6 mm)	
Signal system	PAL standard	
Sync system	INT/Line Lock	
Horizontal resolution	540 TV lines	
S/N ratio	More than 50 dB (AGC OFF, WEIGHT ON)	
Minimum illumination	0.55 lux at F1.2 (50 IRE, AGC ON, Turbo mode)	
Auto iris lens	DC servo	
SUPPLIED ACCESSORIES		
Lens mount cap (1), Operating instructions (1), Front cover(1), Rear cover(1), Screws(2), Power cable (1)		

SPECIFICATIONS

VIDEO CAMERAS

	SSC-DC372P	SSC-DC378P
GENERAL		
Mass	355 g (13 oz)	385 g (14 oz)
Dimensions (W x H x D)	60 x 54 x 120 mm (2 3/8" x 2 1/4" x 4 3/4")	60 x 54 x 120 mm (2 3/8" x 2 1/4" x 4 3/4")
Power requirements	AC 24 V \pm 10%, 50 Hz or DC 12 V \pm 10%	AC 220 V to 240 V \pm 10%, 50 Hz
Power consumption	3.2 W	4.0 W
Operating temperature	-10 °C to 50 °C (14 °F to 122 °F)	
Storage temperature	-40 °C to 60 °C (-40 °F to 140 °F)	
CAMERA		
Image device	1/3 type SuperHAD CCD	
Picture elements (H x V)	752 x 582	
Auto Gain Control	ON (Turbo mode, up to 24 dB) or OFF switchable	
White Balance (WB)	Auto-Tracing White Balance	
Lens mount	CS mount	
CCD IRIS	1/50 to 1/100,000 s	
Back-Light Compensation (BLC)	ON or OFF switchable	
Video out	BNC, 1.0 Vp-p, 75 Ω , sync negative	
Sensing area	1/3 type format (4.8 x 3.6 mm)	
Signal system	PAL	
Sync system	Internal	
Horizontal resolution	480 TV lines	
S/N ratio	50 dB or more (AGC OFF, Weight ON)	
Minimum illumination	0.8 lx at F1.2 (50 IRE, Turbo mode) 0.3 lux at F1.2 (30 IRE, AGC ON, AGC ON, Turbo mode) 0.6 lux at F1.2 (50 IRE, AGC ON, Turbo mode) 3.0 lux at F1.2 (100 IRE, AGC ON, Turbo mode)	
Auto iris lens	DC servo	
SUPPLIED ACCESSORIES		
	Lens mount cap (x 1), Operating instructions (x 1)	Lens mount cap (x 1), Operating instructions (x 1) Power cable (x 1)

SPECIFICATIONS

VIDEO CAMERAS

	SSC-DC198P	SSC-DC172P
GENERAL		
Mass	390 g (14 oz)	355 g (12 oz)
Dimensions (W x H x D)	60 x 54 x 120 mm (2 3/8" x 2 1/4" x 4 3/4")	60 x 54 x 120 mm (2 3/8" x 2 1/4" x 4 3/4")
Power requirements	AC 220 to 240 V \pm 10%, 50 Hz	DC 12 V \pm 10%
Power consumption	3.7 W	3.0 W
Operating temperature	-10°C to 50°C (14°F to 122°F)	
Storage temperature	-40°C to 60°C (-40°F to 140°F)	
CAMERA		
Image device	1/3 type CCD	1/3 type Interline Transfer CCD
Picture elements (H x V)	500 x 582	
Auto Gain Control	ON/OFF switchable	TURBO/OFF switchable
White Balance (WB)	Auto White Balance (ATW)	
Lens mount	CS	
CCD IRIS	1/50 to 1/100,000 s	ON/OFF switchable (1/50 to 1/100,000 s)
Back-Light Compensation (BLC)	ON/OFF switchable	
Video out	BNC, 1.0 Vp-p, 75 Ω , sync negative	
Sensing area	1/3 type format (4.8 x 3.6 mm)	
Signal system	PAL standard	
Sync. System	Line Lock	Internal
Horizontal resolution	330 TV lines	
S/N ratio	50 dB or more (AGC OFF, Weight ON)	50 dB or more (AGC OFF, Weight ON)
Minimum illumination	0.8 lx at F1.2 (50 IRE, Turbo mode) 0.3 lux at F1.2 (30 IRE, AGC ON, AGC ON, Turbo mode) 0.6 lux at F1.2 (50 IRE, AGC ON, Turbo mode) 3.0 lux at F1.2 (100 IRE, AGC ON, Turbo mode)	0.6 lx at F1.2 (50 IRE, AGC ON, Turbo mode)
Auto iris lens	DC/video servo switchable	DC servo
SUPPLIED ACCESSORIES		
	Lens mount cap (x 1), Operating instructions (x 1)	

SPECIFICATIONS

VIDEO CAMERAS

	SSC-M383CE	SSC-M388CE
GENERAL		
Mass	360 g (13 oz)	390 g (14 oz)
Dimensions (W x H x D)	60 x 54 x 120 mm (2 3/8" x 2 1/4" x 4 3/4")	
Power requirements	AC 24 V \pm 10%, 50 Hz or DC 12 V \pm 10%	AC 220 V to 240 V \pm 10%, 50 Hz
Power consumption	2.6 W	
Operating temperature	-10 to 50 °C (14 to 122 °F)	
Storage temperature	-40 to 60 °C (-40 to 140 °F)	
CAMERA		
Image device	1/3 type Interline Transfer CCD	
Picture elements (H x V)	752 x 582	
Auto Gain Control	ON/OFF (switchable)	
Lens mount	CS	
CCD IRIS	ON/OFF (switchable), 1/50 to 1/100,000 s	
Back-Light Compensation (BLC)	ON/OFF switchable	
Video out	1.0 Vp-p; 75 Ω , sync. negative	
Sensing area	1/3 type format (4.8 x 3.6 mm)	
Signal system	CCIR standard	
Sync. System	INT/LL	LL
Horizontal resolution	570 TV lines	
S/N ratio	More than 50 dB (AGC OFF, weight ON)	
Minimum illumination	0.04 lux at F1.2 (30 IRE, AGC ON, Turbo mode) 0.07 lux at F1.2 (50 IRE, AGC ON, Turbo mode) 0.3 lux at F1.2 (100 IRE, AGC ON, Turbo mode)	
Auto iris lens	DC/video servo switchable	
SUPPLIED ACCESSORIES		
	Lens mount cap (x 1), Operating instructions (x 1)	Lens mount cap (x 1), Operating instructions (x 1) Power cable (x 1)

SPECIFICATIONS

VIDEO CAMERAS

	SSC-M183CE	SSC-M188CE
GENERAL		
Mass	360 g (13 oz)	390 g (14 oz)
Dimensions (W x H x D)	60 x 54 x 120 mm (2 3/8" x 2 1/4" x 4 3/4")	
Power requirements	AC 24 V \pm 10%, 50 Hz or DC 12 V \pm 10%	AC 220 V to 240 V \pm 10%, 50 Hz
Power consumption	2.5 W	
Operating temperature	-10 to 50 °C (14 to 122 °F)	
Storage temperature	-40 to 60 °C (-40 to 140 °F)	
CAMERA		
Image device	1/3 type Interline Transfer CCD	
Picture elements (H x V)	500 x 582	
Auto Gain Control	ON/OFF (switchable)	
Lens mount	CS	
CCD IRIS	ON/OFF (switchable), 1/50 to 1/100,000 s	
Back-Light Compensation (BLC)	ON/OFF switchable	
Video out	1.0 Vp-p; 750hm, sync. negative	
Sensing area	1/3 type format (4.8 x 3.6 mm)	
Signal system	CCIR standard	
Sync. System	INT/LL	LL
Horizontal resolution	380 TV lines	
S/N ratio	More than 50 dB (AGC OFF, weight ON)	
Minimum illumination	0.03 lux at F1.2 (30 IRE, AGC ON, Turbo mode) 0.06 lux at F1.2 (50 IRE, AGC ON, Turbo mode) 0.25 lux at F1.2 (100 IRE, AGC ON, Turbo mode)	
Auto iris lens	DC/video servo switchable	
SUPPLIED ACCESSORIES		
	Lens mount cap (x1) Operation manual (x1)	

SPECIFICATIONS

VIDEO CAMERAS

	SSC-CD73VP	SSC-CD43VP
GENERAL		
Mass	Approx 870 g (1lb. 14 oz)	Approx 440 g (16 oz)
Dimensions (W x H x D)	Base: 147 x 111 x 148 mm (5 3/4" x 4 3/8" x 5 7/8") Bubble: 94 mm (3 3/4") (Ø)	Base: 121 x 123 x 106 mm (4 3/4" x 4 7/8" x 4 1/8") Bubble: 91 mm (3 5/8") (Ø)
Input voltage	AC 24 V/DC 12 V	AC 24 V/DC 12 V
Power consumption	3.5 W	3.3 W
Operating temperature	-20° C to +50 °C (-4° F to +122° F)	
Operating humidity	20 % to 80 % (non condensing)	
Weather proof	IP66	—
CAMERA		
Image device	1/4 type Interline Transfer SuperHAD CCD	
Picture Elements (H x V)	752 x 582	
Built-in lens	f = 3.0 to 8.0 mm, F1.0 Auto iris	
Auto Gain Control	ON (Turbo mode)/OFF switchable	
Lens mount	CS Mount	
View angle (D, H, V)	(H): 66.6 ° (wide), 26.9 ° (tele) (V): 49.3° (wide), 20.1° (tele)	
Focus length	Minimum object distance: 0.2 m	
White Balance	ATW	
Signal system/ scanning system	PAL color system	
Sync. system	Internal (DC 12 V/AC 24 V) /Line lock (AC 24 V only) switchable	
External sync.	AC line lock (for AC 24 V)	
V-phase control	±90 °	
Horizontal resolution	480 TV lines	
S/N ratio	More than 50 dB (AGC OFF, weight ON)	
Min. illumination	Colour: 0.9 lux	0.9 lux (AGC ON)
(Turbo AGC ON)	(F1.0, 50 IRE, AGC ON) B&W: 0.2 lux (F1.0, 50 IRE, AGC ON)	
OPTIONAL ACCESSORIES		
	YT-ICB73V In-ceiling bracket	YT-ICB43V In-ceiling bracket

SPECIFICATIONS

VIDEO RECORDERS

	HSR-J2009P	HSR-J2016P
GENERAL		
Mass	7.1 kg (15 lb 10 oz)	7.2 kg (15 lb 14 oz)
Dimensions	420 (W) x 96 (H) x 376 (D) mm (16 5/8" x 3 7/8" x 14 7/8")	
Power requirements	AC 220 V, 50/60 Hz	
Power consumption	40 W	48 W
Operating temperature	5 to 40 °C (41 to 104°F)	
Operating humidity	Less than 80%	
Built-in HDD capacity	500 GB (250 GB x 2)	
Card slot	Compact Flash type II	
VIDEO		
Input	9 channels, VBS, VS (BNC type) 1.0 Vp-p, 75 Ω, unbalanced	16 channels, VBS, VS (BNC type) 1.0 Vp-p, 75 Ω, unbalanced
Output	9 channels, VBS, VS (BNC type) 1.0 Vp-p, 75 Ω, unbalanced	16 channels, VBS, VS (BNC type) 1.0 Vp-p, 75 Ω, unbalanced
Monitor output	VBS, VS 1.0 Vp-p, 75 Ω, unbalanced (BNC type x 2), S-VIDEO (Mini DIN 4-pin x 1)	
Video output	RCA x 1	
Video compression	JPEG 2000	
Picture quality mode	Hyper : 42 KB/picture* Super : 34 KB/picture* High : 26 KB/picture* Mid : 16 KB/picture* Low : 10 KB/picture*	
Picture resolution	720 x 288 pixels (field mode)	
Horizontal resolution	More than 500 TV lines (Hyper mode)	
Signal-to-noise ratio	48 dB (typical, Hyper mode)	
AUDIO		
Mic input	1 channel Monaural (Mini jack), -60 dBs, 10 kΩ, unbalanced	
Line input	2 channels Monaural (Phono jack), -8 dBs, 27 kΩ, unbalanced	
Line output	1 channel Monaural (Phono jack), -8 dBs, 600 Ω, unbalanced	
Signal-to-noise ratio	38 dB (typical)	
Distortion	Less than 4% at 1 kHz	
NETWORK INTERFACE		
Ethernet	100Base-TX/10Base-T	
Network protocol	TCP/IP, HTTP, DHCP, SMTP, PPP, NTP	
ALARM AND CONTROL INPUT/OUTPUT		
SCSI	68-pin half pitch D-sub	
USB	Version 2.0, x 2	
RS-485 (A, B)	RJ-11	
Alarm in	Normal open (Low active), x 16	
Sensor alarm out	5 V, 5.7 kΩ (Low active), x 16	
Remote1/Remote2	Push-lock terminal	
Clock set in	Normal open (Low active)	
Clock set out	DC 5 V, 5.7 kΩ (Low active)	
External timer in	Normal open (Low active)	
Alarm out	DC 5 V, 5.7 kΩ (Low active)	
Alarm reset out	Normal open (Low active)	
Non rec out	DC 5 V, 5.7 kΩ (Low active)	
Warning out	DC 5 V, 5.7 kΩ (Low active)	
Disk full out	DC 5 V, 5.7 kΩ (Low active)	
SUPPLIED ACCESSORIES		
	AC power cord, AC power cord tie, Rack mount kit, Installation manual, Operation manual (CD-R)	

*Each image includes header information of 2 KB.

SPECIFICATIONS

VIDEO RECORDERS

HSR-DCT	
GENERAL	
Power requirements	12 V DC 1A
Power consumption	15 W
Operating temperature	0° to 45 °C (32° to 113°F)
PTZ control	Joystick, 3 axis proportional
Display	320 x 240 pixels back-lit by white LED
Languages	Italian, English, French and German Expandable to 12
Security	Three passwords (Connection, Set-up, Alarm reset)
Customisation	Up to 30 user maps
Macro function keys	Max. 20
INTERFACES	
Serial I/F	3x RS-485 (RJ11 connectors): up to 999 telemetry receivers 1x RS-232C for PC connection (layout creation, keyboard set-up and firmware update)
SUPPORTED PROTOCOLS	
Speed Dome control	Dome Elmo D7720B Dome Ermitec Saturn Dome JVC TK-C675, TK-C676 Dome Panasonic 600 and 850 Dome Pelco Spectra and Lite (Protocol D) Dome Samsung SCC64-1P Dome Sensormatic Delta Dome II Dome Star Dome VCL VC5S-ORBIM
SUPPLIED ACCESSORIES	
	Instruction Manual, wide range power supply, 3 power cables, 6 telephone cables, 6 shunt boxes RJ jack

SPECIFICATIONS

VIDEO MONITORS

LMD-1410SC	
GENERAL	
Mass (Panel & Stand)	Approx. 6.5 Kg (14 lb 5 oz)
Panel only	Approx. 4.8 kg (10 lb 9 oz)
Dimensions (W x H x D)	Approx. 343 x 354 x 264 mm (13 5/8" x 14" x 10 1/2")
Dimensions without stand	Approx. 343 x 304 x 87mm (13 5/8" x 12" x 3 1/2")
Power Requirements	AC 100 to 240 V, 50/60 Hz
Power Consumption	Approx. 48 W
Storage & Transport Temperature	-10 to 40 °C
Operating Temperature	0 to 35 °C
Storage & Transport Humidity	0 to 90 %
Operating Humidity	30 to 85% (Non-condensing)
Operating/Storage/Trans. Pressure	700 to 1060 hPa
PICTURE PERFORMANCE	
Type	A-Si TFT Active Matrix LCD
Resolution	640 x 480 dots
Pixel efficiency	99.99%
Dot pitch	0.443 x 0.443 mm
Picture Size (H x W) (Viewable area) (Diagonal)	Approx. 283 x 212 mm (Approx. 11 1/4" x 8 3/8") 354 mm (14-inch)
Aspect	4:3/16:9 switchable
Colours	Approx. 16,200,000 colours
Viewing Angle	85°/85°/85°/85° (typical) (up/down/left/right contrast>10:1)
INPUT	
Line A Composite Y/C	BNC x 1, 1.0 Vp-p ±3 dB 75 Ω termination, sync 0.3 Vp-p negative DIN 4 pin x 1 Y: 1.0 Vp-p ±3 dB, 75 Ohm termination C: 0.286 Vp-p ±3 dB (NTSC), 0.3 Vp-p ±3 dB (PAL), 75 Ohm termination, sync 0.3 Vp-p negative RCA pin x 1, -5 dBu 47 Ω or higher
Audio in	
Line B Composite Audio in	BNC x 1, 1.0 Vp-p ±3 dB 75 Ohm termination, sync 0.3 Vp-p negative RCA pin x 1, -5 dBu 47 Ω or higher
RGB/Component RGB/Component Audio in	BNC x 3, 0.7 Vp-p ±3 dB 75 Ohm termination, sync on Green 0.3 Vp-p, negative RCA pin x 1, -5 dBu 47 Ω or higher
Remote Parallel remote	Modular 8-pin (Assignable)
OUTPUT	
Line A Composite Y/C Audio out	BNC x 1, Loop-through, with 75 Ω automatic termination DIN 4 pin x 1, Loop-through, with 75 Ω automatic termination RCA pin x 1
Line B Composite Audio out	BNC x 1, Loop-through, with 75 Ω automatic termination RCA pin x 1, Loop-through
RGB/Component RGB/Component Audio out	BNC x 3, Loop-through, with 75 Ω automatic termination RCA pin x 1, Loop-through

SPECIFICATIONS

PRINTERS

	UP-970AD	UP-D897	UP-897MD
Thermal head	Direct thermal printing	Thin-film thermal head, 1280 dots	Thin-film thermal head, 1280 dots
Gradation	256 levels processing	8-bit (256 levels) processing	8-bit (256 levels) processing
Resolution	325 dpi	325 dpi	325 dpi
Picture elements	Digital 3414 x 2560 dots NTSC 1280 x 508 dots PAL 1280 x 616 dots	4096 x 1280 dots (max.)	(when "SC:WD1" is selected from "SCAN") EIA: 1210 x 490 dots CCIR: 1210 x 582 dots
Picture size	Digital 200 x 150 mm (7 7/8 x 6 inches) NTSC 188 x 143 mm (7 1/2 x 5 3/4 inches) PAL 188 x 140 mm (7 1/2 x 5 5/8 inches)	320 x 100 mm (max.)	(when "SC:WD1" or "SC:NOR" is selected from "SCAN") When "S:STD" is selected from "SIDE" EIA: 94 x 73 mm CCIR: 94 x 71 mm When "S:SIDE" is selected from "SIDE" EIA: 124 x 96 mm CCIR: 127 x 96 mm
Printing speed	Approx. 8 seconds/image (at standard mode printing)	Approx. 2 seconds/image (960 x 1280 dots) (printing at high speed) Approx. 3.3 seconds/image (960 x 1280 dots)	Approx. 2 seconds/image (at standard setting) (when "SP:HI" is selected from "SPEED")
3.3 seconds/image		(printing at normal speed)	(at standard setting) (when "SP:NOR" is selected from "SPEED")
Interface	Digital: Hi-Speed USB Analogue: Video	Hi-Speed USB (USB 2.0)	Input connector: VIDEO IN (BNC type) EIA or CCIR composite video signals 1.0 Vp-p, 75 Ω/high impedance (EIA/CCIR automatically discriminated) Output connector: VIDEO OUT (BNC type) EIA or CCIR composite video signals 1.0 Vp-p, 75 Ω loop-through/EE switchable REMOTE connector: stereo mini jack
Power requirement	100 to 120 V AC: 2.4 A 220 to 240 V AC: 1.3 A	100 to 240 V AC, 50/60 Hz	100 to 240 V AC, 50/60 Hz
Input current	2.4 A to 1.3 A max	1.5 A to 0.8 A	1.5 A to 0.8 A
Operating temperature	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 176°F)	5°C to 35°C (41°F to 176°F)
Operating humidity		20% to 80%	
Storage and transport temperature		-20°C to 60°C (-4°F to 140°F)	
Storage and transport humidity	20% to 80%	20% to 90%	20% to 90%
Dimensions (W x H x D)	316 x 132.5 x 305 mm (12 1/2" x 5 1/4" x 12 1/8")	154 x 88 x 240 mm (6 1/8" x 3 1/2" x 9 1/2")	154 x 88 x 240 mm (6 1/8" x 3 1/2" x 9 1/2")
Mass	Approx. 8 kg (17 lb 10 oz)	2.6 kg (5 lb 11 oz) (printer only)	2.6 kg (5 lb 11 oz) (printer only)
Safety standards	UL60950-1, CSA C22.2 No.60950-1, UL60601-1, CSA C22.2 No.601.1, EN60950, EN60601-1, IEC60950-1, IEC60601-1	UL60950-1+CSA C22.2No.60950.1 + UL60601-1+ CSA No.60601-1, FCC/IC Class A Digital Device, EN60950-1+EN60601-1, EN55024+EN55022: Class B + EN60601-1-2, IEC60950-1+60601-1, C-Tick AS4252.1 +AS3548 ; Class B, GB4943(IEC 950)+ GB9254(CISPR 22), VCCI Class A +mains harmonic current regulation	VCCI Class A +mains harmonic current regulation
Supplied accessories	Head cleaning sheets (1), UPP-210HD High density printing paper (1), BNC cable (1), USB cable (1), Operation guide (Getting Started) (1), CD-ROM (Instruction for use, driver software) (1), Media label (1) Software License Agreement (1)	VCCI Class A +mains harmonic current regulation Thermal head cleaning sheet (1) CD-ROM (including multi-lingual operating instructions, Readme and printer driver) (1), USB cable (1)	VCCI Class A +mains harmonic current regulation Thermal head cleaning sheet (1) Operating instructions

SPECIFICATIONS

PRINTERS

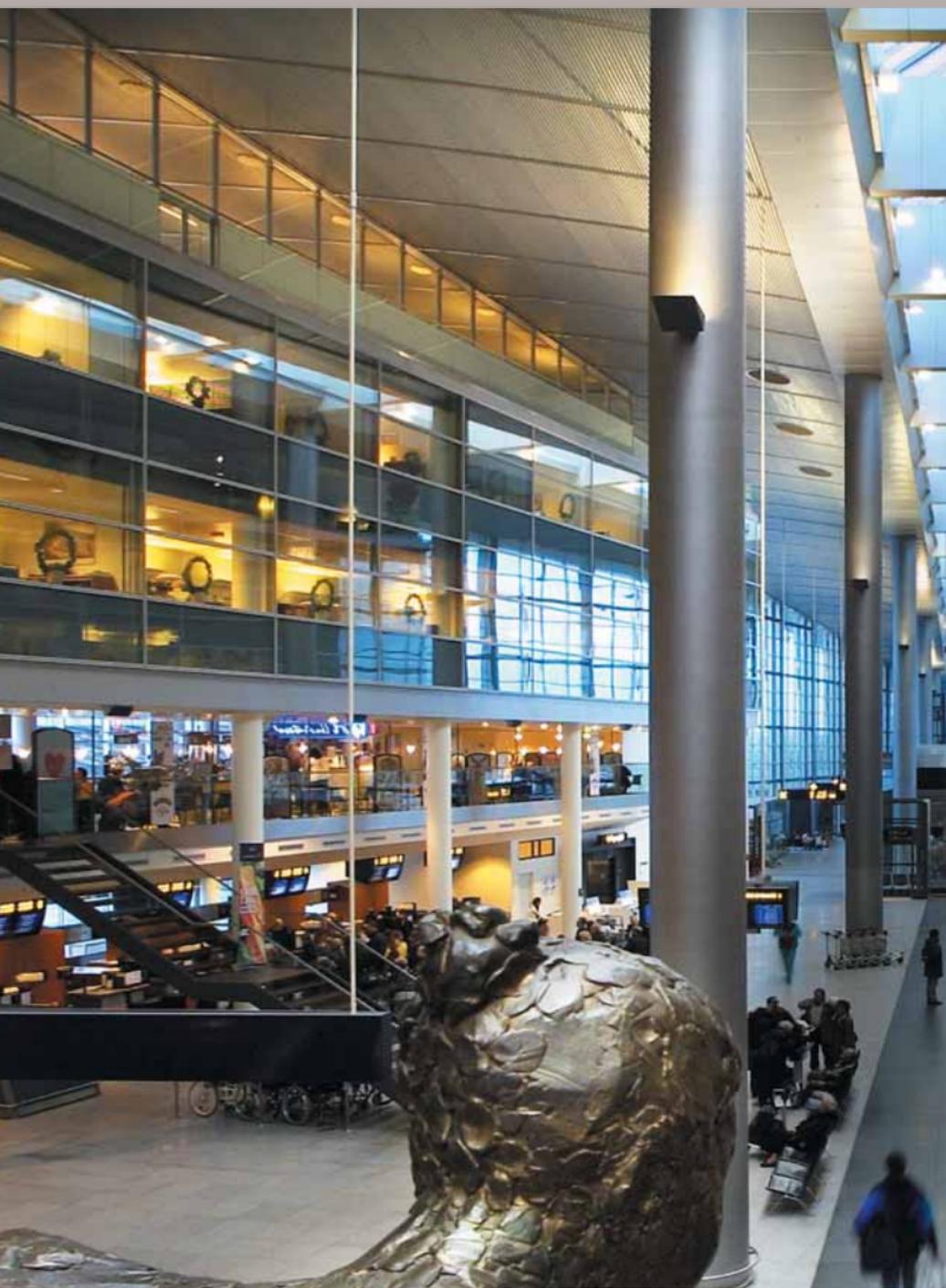
	UP-DR150	UP-CR10LI
Mass	20 kg (44lb 2 oz)	—
Dimensions	280 (W) x 356 (H) x 462 (D) mm	275 (W) x 300 (H) x 380 (D) mm
Operating Temperature	5 to 35 °C	—
Operating Humidity	20 to 80%	—
Printing Method	Dye Sublimation Printing	Dye sublimation Printing (Y/M/C/O)
Resolution	334 dpi	300 dpi
Gradation	8 bits per colour	—
Print Size	2UPC-R153: 89 x 127mm (3.5 x 5") 2UPC-R154: 102 x 152mm (4 x 6") 2UPC-R155: 127 x 178mm (5 x 7") 2UPC-R156: 152 x 204mm (6 x 8")	13 x 18cm (5 x 7") 10 x 15cm (4 x 6") 9 x 13cm (3.5 x 5")
Print Speed (excluding image processing)	2UPC-R153: approx. 8 seconds 2UPC-R154: approx. 8 seconds 2UPC-R155: approx. 15 seconds 2UPC-R156: approx. 18 seconds	13 x 18cm (5 x 7"): 18 seconds 10 x 15cm (4 x 6"): 17 seconds 9 x 13cm (3.5 x 5"): 13 seconds
Media Capacity per print cartridge/roll	13 x 18cm (5 x 7"): 335 10 x 15cm (4 x 6"): 550 9 x 13cm (3.5 x 5"): 610	13 x 18cm (5 x 7"): 172 10 x 15cm (4 x 6"): 200 9 x 13cm (3.5 x 5"): 300
Paper Feed Method	—	Roll paper, Automatic loading
Interface	High speed USB 2.0	Memory Card Direct Slots: MS (Duo, Pro, PRO Duo) SD MMC CF MD xD xM SM USB Host: USB (A) x 1 for USB Mass Storage Class Device PC Connection: USB (B) x1 for PC Expansion Terminal: RS-232C (D-sub 9pin) x 1 for future peripheral support
Expansion Slot	—	Compact Flash type x1
Compatible Image File Format	—	JPEG: JFIF, Exif 2.2 Compatible, DCF 1.0 Compatible BMP: 24bit Windows format TIFF: Exif 2.2 Compatible
LCD Display	—	8-inch touch sensitive colour LCD
Spool Memory	For additional one picture	—
Print Order when print from memory cards	—	Selected image, All image, Index, Border Composition*, Split Image
Image Adjustment	—	Crop, Colour adjust, Monochrome/Sepia, Red eye Reduction
Printer Driver Support OS	—	Win: 2000/XP Professional/XP Home Edition
Export module to create border data	—	Windows Adobe Photoshop 5.0 or higher, Photoshop Elements
Power Requirement	AC 100-240 V, 50/60 Hz	100-240 V AC, 50/60 Hz
Power Consumption	5-2.5 A	—
Safety Standards	UL60950-1, CSA C22.2 No. 60950 (cUL) (UC), EN60950-1 (CE)	—
Supplied Accessories	AC Power Cord, Ferrite core, Paper tray (1) and paper holders (2) CD-ROM (inc. printer drivers, on-line manual), Operation Manual Software License Agreement, Warranty Card, Service and Customer Support Info	Paper holder x1 Operating instructions x1 CD-ROM (incl. Printer driver software) x1, AC power cord x1
Optional Accessories	3.5x5 inch (9x13cm) Self-laminating Colour Printing Pack (610 sheets of print x2 rolls) 4x6 inch (10x15cm) Self-laminating Colour Printing Pack (550 sheets of print x2 rolls) 5x7 inch (13x18cm) Self-laminating Colour Printing Pack (335 sheets of print x2 rolls) 6x8 inch (15x20cm) Self-laminating Colour Printing Pack (295 sheets of print x2 rolls) Print stacker for UP-DR150	2UPC-C15 Self-Laminating Colour Printing Pack 127 x 178 mm (5 x 7") 2UPC-C14 Self-Laminating Colour Printing Pack 102 x 152 mm (4 x 6") 2UPC-C13 Self-Laminating Colour Printing Pack 89 x 127 mm (3.5 x 5")

* Need MicroDrive or CompactFlash on the market. Image or format data needs to be saved when using these functions

NOTES

A series of horizontal dotted lines for writing notes.

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