

PCS-XG77

High Definition Videoconferencing System



Overview

This powerful yet easy-to-use HD videoconferencing system offers superb picture and sound quality, plus versatile collaboration tools and flexible configuration.

Smoothly detailed HD (720p) images at up to 60 fps make the PCS-XG77 ideal for a wide range of virtual meeting and distance learning applications.

Crystal-clear pictures from the PTZ camera (not included with PCS-XG77S) are complemented by clear, natural sounding audio. 'Dual stream' video and PC presentations can be shared seamlessly with remote locations at 30 fps.

See camera images plus PC presentations on one or two connected video monitors with a generous choice of screen layout options.

The optional integrated MCU allows multi-point conferences over IP & ISDN between up to six sites via a simple software option installation. What's more, two PCS-XG77 systems can be cascaded without additional hardware to link 10 sites simultaneously.

HD conferences can be recorded to USB memory for easy sharing and review.

Set-up is refreshingly straightforward, with quick booting so you're ready for business even faster. Operation is easy, too: just select a contact using the supplied remote commander to launch your conference at a touch.

Also available as PCS-XG77S 'codec only' version (without PTZ camera).

Features

Express yourself with clear HD images

Communicate more clearly and effectively with smooth, detail-packed video conferences at HD (720p) resolution. You'll even enjoy superior picture quality at low bitrates when network bandwidth is limited. Video quality can be upgraded to Full HD 1080p by adding the optional PCSA-RXG77

Smooth 30fps dual streaming

Send dual video streams simultaneously (camera image and PC presentation) at a smooth 30 frames per second (SXGA) in accordance with H.239 standards. The other conference party can see both images simultaneously on two connected monitors.

Instantly recall up to 100 camera positions

The PCS-XG77 allows instant recall of up to 100 pre-programmed positions from a connected PTZ camera, permitting quick transition from one camera set-up to another.

See everything with dual monitor mode

Support for up to two video monitors (HDMI and DVI-I) allows full-size simultaneous views of video and shared PC presentations.

Versatile display options

See video and shared PC views with choice of screen layout options: Full Screen, PinP, PandP, Side by Side or PandP.

High quality audio

The supplied PCS-A1 microphone enables more natural, lifelike conferences with crisp, clear sound. The codec supports up to 6 microphones. The built-in stereo echo canceller makes speech even more natural-sounding and easier to follow.

Easy multi-point conferences

The in-built Multipoint Control Unit (MCU) allows simultaneous connection between up to six videoconferencing sites. Adding optional PCSA-MCG106 software expands multi-point capabilities to link six sites via IP connection. Two PCS-XG77 units can also be cascaded to support a maximum of 10 sites, with no additional hardware needed.

Continuous Presence mode with Voice Activation Switching

See everyone clearly with support for three-, four- or six-screen continuous-presence modes. Voice Activated Switching automatically displays the active speaker on the largest sub screen alongside other participants, or can display the current speaker in full-screen mode.

Easy usability with Video Annotation

Add an optional tablet/pen interface to sketch notes and highlight your point clearly on shared data presentations.

Stable, consistent conferencing

Enjoy stable transmission of HD video, voice and data with Enhanced Intelligent QoS™ (Quality of Service) Functions that ensure fast, consistent data throughput that adapts transmission to take account of changing network conditions.

USB recording

Record HD video (720p), voice and PC presentations direct to USB memory for easy storing and sharing.

Second camera support

Adding an optional second PTZ camera (Sony BRC/EVI series models) gives greater freedom to ensure every meeting participant is adequately covered – for example when seated around a boardroom table.

Highly secure

Keep your business private, just the way it should be. Support for 128-bit AES encryption ensures safe, highly secure voice/video/data conferences with other compliant systems.

Easy operation and quick start-up

Enjoy simple operation with the attractive, intuitive on-screen interface. Quick start-up from initial switch-on has you ready to start conferencing in less than a minute – far faster than many other systems.

One-touch Dialling

Enjoy the speed and convenience of one-touch dialling with the newly designed RFZ Remote Commander unit that does not have to be pointed directly towards the system. Just browse and select from the thumbnail image any of up to 1000 stored contacts: up to four regularly-accessed contacts can be shown on the home screen.

Specifications

Camera (SRG-120DH packaged camera)

Image Sensor	1/2.8 Exmor CMOS
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Image Sensor (Number of Effective Pixels)	Approx. 2.1 Megapixels
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Signal System	1080/59.94p,50p,29.97p,25p
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	1080/59.94i,50i 720/59.94p,50p,29.97p,25p
Minimum Illumination (50IRE)	1.8 lx (50IRE, F1.8, 30fps)
S/N Ratio	50 dB
Gain	Auto/Manual (0 to +43 dB)
Shutter Speed	1/1 to 1/10000 sec(59.94 Hz system) 1/1 to 1/10000 sec(50Hz system)
Exposure Control	Auto, Manual, Priority AE(Shutter,Iris), Exposure compensation, Blight
White Balance	Auto, Indoor, Outdoor, One-push auto, ATW, Manual
Optical Zoom	12x
Digital Zoom	12x
Focusing System	Auto/Manual
Horizontal Viewing Angle	71 degree(Wide)
Focal Length	f=3.9mm(wide) to 46.8 mm(Tele) F1.8 to 2.0
Minimum Object	10 mm(Wide)~

Distance	1500 mm(Tele)
Pan/Tilt Angle	Pan: $\pm 100^\circ$ Tilt: $\pm 25^\circ$
Pan/Tilt Speed (Max.)	Pan 300°/sec Tilt 126°/sec
Preset Position	100 (saved in codec unit)

Camera features (SRG-120DH packaged camera)

Auto ICR	No
Wide-D	Yes
Image Stabilization	No
Image Flip	No
Auto Power Off	No
Night Power Off	No

Key Features

Multipoint Capability	<p>Up to 6 sites (H.323) with optional software PCSA-MCG106.</p> <p>7 to 10 sites (H.323) requires two PCS-XG77 units with optional software PCSA-MCG106 using cascaded connection.</p>
	PC images up to SXGA resolution is

Data Sharing	supported(1080p with PCSA-RXG77) Video annotation function
Lip Synchronization	AUTO/OFF
Mic Off Function	ON/OFF
Recording Feature	HD 720p

Video

Maximum Frame Rate	H.263 QCIF 30 fps, CIF 30 fps, 4CIF 30 fps H.264 QCIF 30 fps, CIF 30 fps, 4CIF 30 fps, wCIF 30 fps, w432p 30 fps, w4CIF 30 fps, 720p 60 fps, 1080p 60fps (with PCSA-RXG77)
Communication Protocol Standards	H.263, H.263+, H.263++, H.264, H.264 High profile, MPEG-4 SP@L3
Resolution	4:3 QCIF (176 x 144), CIF (352 x 288), 4CIF (704 x 576) 16:9 wCIF/w288p (512 x 288), w432p (768 x 432), w4CIF (1024 x 576), 720p (1280 x 720), 1080p (1920 x 1080) with PCSA-RXG77
Bit Rate	64 kbps to 4,096 kbps (5,120 kbps with PCSA-MCG106 and PCSA-

RXG77)

Screen Layout

Full Screen, PinP, PandP,
SideBySide, PandPandP

Audio

Bandwidth and
Coding

MPEG-4 AAC Stereo: 22 kHz at 192
kbps (IP only)
MPEG-4 AAC Mono: 14 kHz at 48
kbps, 64 kbps, 96 kbps
MPEG-4 AAC Mono: 22 kHz at 64
kbps, 96 kbps (IP only)
G.711: 3.4 kHz at 56 kbps, 64 kbps
G.722: 7.0 kHz at 48 kbps, 56 kbps,
64 kbps
G.728: 3.4 kHz at 16 kbps

Other Features

Stereo echo-cancelling (ON/OFF),
Auto Gain Control, Noise
Reduction

Network

Protocols

TCP/IP, UDP/IP, DHCP, DNS, HTTP,
TELNET, SSH, SNMP, NTP, ARP,
RTP/RTCP

Adaptive FEC (Forward Error
Correction), Real-time ARQ (Auto

QoS (Quality of Service)	Repeat reQuest), ARC (Adaptive Rate Control), IP Precedence, DiffServe
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Other Network Features	Packet reordering, TCP/UDP port setting, NAT, PPPoE, UDP shaping, Encryption*, Auto gatekeeper discovery, UPnP, URI Dialing, IPv6
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Interface

Video Input	External video inputs (DVI-I x 2)
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Video Output	HDMI x 1, DVI-I x 1
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Control Input	RS-232C x 1
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Audio Input	External analog microphone input Mini-jack (Plug in power) x 6 (L/R) HDMI (video, audio) x 1 Audio Input (MIC/AUX) x 2 (Phono jack, stereo)
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Audio Output	HDMI (video, audio) x 1, Line Output (Phono jack, stereo) x 1, REC Output (Phono jack, stereo) x 1
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Network Port	10BASE-T/100BASE-TX/1000BASE-T x 1, ISDN Unit Interface x 1
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USB Slots 2 (Pen Tablet, USB Memory)

Maintenance Interface RS-232C x 1

Standard

Communication Protocol Standards ITU-T H.320, H.323, IETF SIP

ITU-T (excluding audio/video standards) H.231, H.241 H.242, H.243, H.245, H.350, H.460.18, H.460.19

IETF RFC2190, RFC3016, RFC3047, RFC3261, RFC3264, RFC3550, RFC3984, RFC4573, RFC4587, RFC4629, RFC4856, RFC4628, RFC5168

Encryption* H.233, H.234, H.235 ver.3

Far End Camera Control H.224, H.281

Frame Format H.221, BONDING, H.225.0

Dual Stream H.239 (video and presentation data)

General

Power Requirements	DC 19.5 V (AC Adapter : AC 100 V to 240 V, 50/60 Hz)
Power Consumption	58.5W
Power Consumption (Standby)	23.4W
Operating Temperature	5°C to 35°C 41°F to 95°F
Storage Temperature	-20°C to +60°C -4°F to +140°F
Operating Humidity	20% to 80% (no condensation)
Storage Humidity	20% to 80% (no condensation)
Dimensions	Codec: Approx. 370 x 60 x 244 mm (excluding protrusions) Camera unit (SRG-120DH packaged camera): Approx. 153 x 156 x 153mm (excluding protrusions)
Mass	Codec: Approx. 2.3 kg Camera Unit (SRG-120DH packaged camera): Approx. 1.45 kg
	PCS-A1 microphones (1), AC adapter (1), HDMI cable (3m) (1), RF Remote Commander Unit (1), CD-

Supplied Accessories ROM (Operating instructions, Before using this unit, Quick connection guide) (1), Installation Guide (1), Warranty booklet (1), Camera cable (3m) for HD camera (1)

Note

* Encryption is not available in the models supplied in some regions. Please consult with local representative.

Gallery

