

## PCS-XG100

### Full HD High Definition Videoconferencing System



#### Overview

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

Smooth, detail-packed Full HD (1080p) images at up to 60 fps make the PCS-XG100 ideal for mission-critical business communications, as well as broadcast, higher education and medical/healthcare applications.

Crystal-clear images from the PTZ camera (not included with PCS-XG100S) are complemented by clear, natural sounding stereo audio. 'Dual stream' Full HD video and PC presentations can be shared seamlessly with remote locations at 30 fps.

See 'Near' and 'Far' camera images plus PC presentations with exceptional layout flexibility on one, two or three connected video monitors.

The integrated MCU allows multi-point conferences over ISDN between up to six sites, expandable to nine sites over IP via a simple software upgrade. What's more, two PCS-XG100 systems can be cascaded without additional hardware to link 16 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 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-XG100S 'codec only' version (without PTZ camera).

## Features

### **Express yourself clearly with Full HD 60p images**

Communicate more clearly and effectively with smooth, detail-packed video conferences at up to Full HD (1920 x 1080) 60p resolution for exceptional realism. You'll even enjoy HD quality picture quality at low bitrates when network bandwidth is limited.

### **Smooth 30fps Full HD dual streaming**

Send dual HD 1080p video streams simultaneously (camera image and PC presentation) at a smooth 30 frames per second in accordance with H.239 standards. The other conference party can see both Full HD (1920 x 1080) images simultaneously on two connected monitors.

### **Instantly recall up to 100 camera positions**

The PCS-XG100 allows instant recall of up to 100 pre-programmed positions from a connected PTZ camera (not included), permitting quick transition from one camera set-up to another.

### **See everything with triple monitor mode**

Support for three video monitors allows full-size simultaneous views of 'Far' and 'Near' video sources (via HDMI) on two separate screens, plus a third screen (via DVI-I) showing smooth, crisply detailed PC presentations.

### **Three images, one monitor**

If you've only got one monitor, up to three separate images (Far,

Near and PC) can be displayed simultaneously with a choice of screen layout options: Full Screen, PinP, PandP, Side by Side or PandPandP.

## **High quality stereo audio**

Two supplied PCS-A1 mono microphones ensure more natural, lifelike conferences with crisp, clear stereo sound. The built-in 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 via ISDN. Adding optional PCSA-MCG109 software expands multi-point capabilities to link nine sites via IP connection. Two PCS-XG100 units can also be cascaded to support a maximum of 16 sites, with no additional hardware needed.

## **Continuous Presence mode with Voice Activation Switching**

See everyone clearly with support for three-, four-, six- or nine-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.

### **HDMI input**

Easily connect an additional video source – such as a camcorder or document camera – via HDMI.

### **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.

### **Easily switch between LAN and WAN connections**

Dual network interfaces allow easy switching between office-base LAN and WAN connections – saving time if you need to use the system both within an intranet environment and over the public Internet. Multi-point connections can also be made

between LAN and WAN environments.

## Specifications

### Camera (SRG-120DH packaged camera)

Image Sensor	1/2.8 Exmor CMOS
Image Sensor (Number of Effective Pixels)	Approx. 2.1 Megapixels
Signal System	1080/59.94p,50p,29.97p,25p 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 Distance	10 mm(Wide)~ 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
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## Key Features

Multipoint Capability	Up to 9 sites (H.323) with optional software PCSA-MCG109. (6 sites with H.320) 10 to 16 sites (H.323) requires two PCS-XG100 units with optional software PCSA-MCG109 using cascaded connection. (10 sites with H.320)
Data Sharing	PC images up to 1080p resolution is supported 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,
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	w4CIF 30 fps, 720p 60 fps, 1080p 60 fps
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)
Bit Rate	64 kbps to 16,000 kbps
Screen Layout	Full Screen, PinP, PandP, SideBySide, PandPandP

## Audio

	MPEG-4 AAC Stereo: 22 kHz at 192 kbps (IP only) MPEG-4 AAC Mono: 14 kHz at 48 kbps, 64 kbps, 96 kbps
Bandwidth and Coding	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
	Stereo echo-cancelling (ON/OFF),



Other Features	Auto Gain Control, Noise Reduction
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## Network

Protocols	TCP/IP, UDP/IP, DHCP, DNS, HTTP, TELNET, SSH, SNMP, NTP, ARP, RTP/RTCP
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QoS (Quality of Service)	Adaptive FEC (Forward Error Correction), Real-time ARQ (Auto 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 (HDMI x 1, DVI-I x 2)
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Video Output	HDMI x 2, DVI-I x 1
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Control Input	RS-232C x 1
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	External analog microphone input Mini-jack (Plug in power) x 6 (L/R)
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Audio Input	HDMI (video, audio) x 1 Audio Input (MIC/AUX) x 2 (Phono jack, stereo)
Audio Output	HDMI (video, audio) x 1, Line Output (Phono jack, stereo) x 1, REC Output (Phono jack, stereo) x 1
Network Port	10BASE-T/100BASE-TX/1000BASE-T x 2, ISDN Unit Interface x 1
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)
	Codec: Approx. 370 x 60 x 244 mm (excluding protrusions)

Dimensions	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
Supplied Accessories	PCS-A1 microphones (2), AC adapter (1), HDMI cable (3m) (1), RF Remote Commander Unit (1), CD-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.

Related products



## **PCSA- MCG106**

6-site MCU software  
license for PCS-  
XG100/77  
Videoconferencing  
System



## **PCSA- MCG109**

9-site MCU software  
license for PCS-XG100  
Videoconferencing  
System



## **PCS-MCS1**

HD Multipoint Control  
Unit (MCU) System

## Gallery

