SONY



Connect Your Vision





Stunning video and audio brought to you by the "IPELA" series of visual communication products that encompass the three-pronged concept of "Reality," "Intelligence," and "Usability." "IPELA" is the identity symbolizing the Sony vision for the workplace of the future, connecting people, places, and information with reality that has never before been achieved. "IPELA" lets you share ideas and dreams as if you are collocated when your counterpart is half-way around the world, experiencing images as if you are actually there.

Real audiovisual communication over networks – this is business communication of the future, this is business communication brought to you today, this is "IPELA."

A New Generation of Visual Communication Bringing People Closer Together — From High-definition Professional Solutions to Personal Desktop Systems

Visual communication systems continue to improve to meet the evolving needs of demanding users and to make the best use of cutting-edge technologies. Sony has a long history of developing state-of-the-art visual communication systems that make it possible for users to communicate more effectively regardless of location or distance. And now, utilizing the very latest technologies, Sony is defining a new era of visual communication.

From the breathtaking high-definition (HD) video of its flagship model to the 4CIF video of its high-end systems, the Sony PCS Series offers superb video quality across the line.

This incredible video, along with the sophisticated MPEG-4 AAC audio that is available on all models, takes your visual communication experience to a new level. With useful features such as multi-point visual communications, robust QoS support, a secure encryption function, and easy setup and intuitive operation, the PCS Series is an ideal visual communication tool that meets the needs of professional users.

The PCS Series is already widely used as a powerful business communication tool worldwide. Each model in the PCS Series has been designed for specific applications and can be used in a number of locations. From large conference rooms and auditoriums to executive offices, SOHOs, small offices, meeting spaces, or even on your desktop, the PCS Series has the right model for your application. Not only can you cut down the time and cost associated with traveling to meetings, but because you can grasp your visual communication counterpart's expressions, gestures, and voice tones, you can communicate as if you were meeting face-to-face in the same room.

The Sony PCS Series is a powerful visual communication tool for today and tomorrow. These systems can satisfy your uncompromising requirements whether you are a large enterprise or a small business, in market sectors ranging from government, education, broadcast, medical education, financial, and more. The PCS Series — a new generation of visual communication systems.



PCS SERIES PRODUCTS

Model Name PCS-HG90 PCS-G70 PCS-G50 PCS-1 PCS-TL33



The Flagship HD Model

Ideal for use in Broadcast Interviews, Telepresence, Medical Applications, Distance Learning, and for Communicating/ Displaying Detailed Designs in business.



High-end Model

Ideal for most videoconferencing applications for use in boardrooms, large venue meeting halls, and more.



High-performance Standard Model

Ideal for use in medium-sized conference rooms for a number of applications, such as corporate conferences and distance learning.



Entry Model

Incorporates versatile functions in a small and lightweight body. Also, its small size allows for custom installations.



All-in-one Business Personal Model

Built-in camera, display, speakers and microphone in a compact body. Ideal for business personal video communication and

	Designs in business.		distance learning.		Kiosks.	
Main features						
Туре	HD Videoconferencing System	Room Integration Videoconferencing Systems		Set-top Videoconferencing System	Desktop Videoconferencing System	
Camera	_	_	Supplied	-)	Integrated	
Microphone(s)	_	_	_	Integrated		
Speakers	_	_	_	_	Integrated	
Monitor	_	_	_	_	Integrated	
Video Resolution	1080 x 60i, 1080 x 50i, 720 x 60p, 720 x 30p*			QCIF, CIF, Interlaced SIF	QCIF, CIF	
H.264 Video Codec Support	0	0	0	0	0	
MPEG-4 AAC Audio Codec Support	0	0	0	0	0	
Network				·	<u>' </u>	
IP	512 kb/s to 8192 kb/s	56 kb/s to 4096 kb/s		56 kb/s to 1920 kb/s	64 kb/s to 2048 kb/s	
ISDN	_	56 kb/s to 1920 kb/s		56 kb/s to 768 kb/s	-	
Multi-Point Capability	0	0		30 KB/3 to 700 KB/3	_	
тина гола Саравлису	Up to 4 Sites of Video and Audio Full Screen Display Only (broadcast or voice activated mode)	Up to 6 Sites (Max. 10 sites with IP connection between base units)				
Speedmatching	_	0	0	_	_	
Site-Name Display	0	0	0	0	0	
Advanced Encryption Satandard (AES)						
H.235, Sony Proprietary	H.235 only	0	0	0	0	
H.233, H.234	-	0	0	0	_	
Quality of Service (QoS)						
Forward Error Correction	0	0	0	_	_	
Adaptive Rate Control	0	0	0	0	0	
Real-time Auto Repeat reQuest H.239	0	0	0	0	0	
Video and Presentation Data Sharing (sending presentation data is possible with an optional data solution box/module)	_	○ (XGA input/output with PCSA-DSB1S)			O (XGA input/output with PCSA-DSM1)	
Dual Live Video Stream	_	0	Reception Only	_	_	
Memory Stick						
Audio/Video Recording	=	0	0	_	_	
Data Storing (address book/still Images)	0	0	0	0	0	
Other Features						
Split Picture Sending	0	0	-	-	-	
Audio/Video Streaming	_	0	0	_	_	
2-Monitor OUT	0	0	0	0	○ (XGA output with PCSA-DSM1)	
3-Monitor OUT	-	Far-end, Near-end, Presentaion Data		_	-	
5-Monitor OUT	-	O Multi-Point Display OUT for Far-end Sites	_	-	-	
Tracking Camera Support	-	0	-	-	-	
Screen Layout	P-in-P/P-and-P (incl. side-by-side)	P-in-P/P and P (incl. side-by-side)		P-in-P	P-in-P/P-and-P (incl. side-by-side, 3-window display)	
3CCD Camera Support	0	0	0	-	-	
Application	Broadcast Interviews, Telepresence, Medical Applications, Distance Learning, and for Communicating/Displaying Detailed Designs in Business	Large Conference Rooms, Auditoriums, Executive Conference Rooms	Small to Medium-sized Conference Rooms	Small Conference Rooms, Custom Installations	Personal Use (desktop), SOHOs, Remote Offices and Kiosks	

^{*} The PCS-HG90 codec processes video at a 720/60p or 720/30p.

High-definition Visual Communication System -The Flagship PCS-HG90

Achieving Superb Audio and Video Quality, and Producing True Lifelike Color, the High-Definition PCS-HG90 Is Ideal For Dynamic Solutions Such as Live Interview Broadcasts, Telepresence, Product Design Conferences, and Distance-Learning Applications Including Medical Education

Stunning High-definition (HD) Images

Using the H.264 video codec, the PCS-HG90 can accept full HD 1080i video signals and process them at 720/60p to transmit high-definition video to far-end sites. This incredible system produces realistic and true-to-life images even on large-screen displays.

Superb-quality, Lifelike Stereo Sound

The PCS-HG90 features clear and natural-sounding audio thanks to its wide frequency range of up to 22 kHz using MPEG-4 AAC (Advance Audio Coding). What's more, using AUX audio inputs, the unit can support an even wider frequency range of up to 44 kHz, to provide superb-quality audio from a number of different sound sources.

Professional Interfaces

The PCS-HG90 comes equipped with HD-SDI terminals for video and XLR terminals for audio. These professional interfaces allow system integrators to design solutions for almost any application.

Intelligent QoS Function

In order to handle the large amounts of data associated with HD video, the PCS-HG90 adopts an Intelligent QoS™ function, which efficiently utilizes the following QoS features: ARC, ARQ, and FEC. This advanced QoS function allocates the amount of ARQ, FEC, and video data intelligently based on the bandwidth available. Also, FEC is performed with larger FEC blocks and the number of parity packets is adjusted as required.

Other Features

- Secure Videoconferencing (ITU-T H.235 Advanced Encryption Standard)
- Memory Stick™ Media Support
- Multiple Display Modes
- East to Use Remote Commander Unit/Intuitive GUI



Versatile Video Inputs/Outputs

Standard-definition Visual Communication Systems – PCS-G70, PCS-G50, PCS-1, and PCS-TL33

High-quality Video

PCS-G70 PCS-G50 PCS-1 PCS-TL33

Adopting the H.263 video codec/4CIF format*1, image resolution comparable to that of standard TV broadcasts can be produced. The H.264 video codec can also be selected to provide highquality images when bandwidth is limited.

*1 PCS-G70 and PCS-G50 only.

High-quality Audio





The PCS Series reproduces clear and natural-sounding audio using MPEG-4 AAC (Advanced Audio Coding). And a built-in echo cancellation system minimizes unwanted echoes during a videoconference.

Data-sharing Capabilities

PCS-G70 PCS-G50 PCS-1

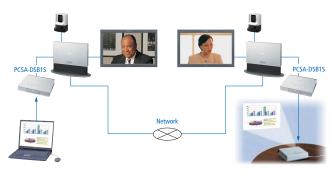
With the optional Data Solution Box (DSB), the PCS Series is capable of sending and receiving*2 any image that can be displayed on a PC (known as "presentation data") in native XGA resolution during a videoconference.

*2 Sending presentation data requires the optional DSB. The unit can receive presentation data without the DSB; however, it will receive the data at a higher refresh rate with the DSB.

PCS-TL33

With the optional Data Solution Module (DSM), the PCS Series is capable of sending and receiving*3 "presentation data" in native XGA resolution during a videoconference.

*3 Sending presentation data requires the optional DSM. The unit can receive presentation data without the DSM; however, it will receive the data at a higher refresh rate with the DSM.



(simulated images)

Secure Videoconferencing

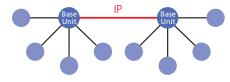
PCS-G70 PCS-G50 PCS-1 PCS-TL33

Secure videoconferencing over a network is possible because the PCS Series supports 128-bit encryption. The PCS Series offers two encryption modes, one that complies with the ITU-T H.235 standard, which allows encrypted communication with other H.235 compliant systems, and another that is Sony proprietary, which is ideal when connecting to other PCS Series systems and provides an authentication function.

Multi-point Videoconferencing at up to 10 sites

PCS-G70 PCS-G50 PCS-1

Using optional MCU software, the PCS Series can be configured to communicate with up to five remote videoconferencing sites (six sites in total) simultaneously using either an IP (H.323) or an ISDN (H.320) connection. It can also support videoconferences in which the connections are a combination of IP and ISDN using a bridging function. And two PCS Series units – each installed with the optional MCU (H.323) software – can be cascaded with an IP connection to support a maximum of 10 sites simultaneously. Moreover, the PCS-G70 and PCS-G50, have a "speedmatching" function, which maximizes performance by not reducing the higher-speed connection to match the lower-speed connection, as is done with some videoconferencing systems.



Multi-point Videoconferencing at up to 10 Sites

QoS (Quality of Service) Features

When holding a videoconference over a network, a common concern is how to maintain video and audio quality when the performance of the network is changing. The PCS Series provides three advanced functions ⁴ to enhance QoS over a network:





With QoS

Without QoS (simulated images)

Adaptive Rate Control (ARC)

PCS-G70 PCS-G50 PCS-1 PCS-TL33

This function automatically varies the video bit transfer rate to meet changing network conditions.

Auto Repeat reQuest (Real-time ARQ Function)

PCS-G70 PCS-G50 PCS-1 PCS-TL33

The real-time ARQ^T function recovers lost IP packets. This is performed by buffering the packets at the encoder and resending any that are lost.

Forward Error Correction (FEC)

PCS-G70 PCS-G50

This function corrects errors in transmission at the receiving end. If a transmission error occurs, the data can be repaired so that the original audio and video can be reproduced accurately.

*4 When hybrid mode is selected, the best balance between these QoS functions is automatically set to match network conditions.

Other Features

- Memory Stick Media Support
- Multiple Display Modes
- Easy to Use/Intuitive GUI

Remote Commander Unit

PCS-G70 PCS-G50 PCS-1

Optical Mouse Controller

PCS-TL33



Multi-point Videoconferencing (6-site continuous presence mode)

(simulated image)

OPTIONAL ACCESSORIES







Microphones

Model Name	PCS-A1	PCSA-A3	PCSA-A7P4**
Compatible systems	PCS-HG90, PCS-G70, PCS-G50, PCS-1, PCS-TL33	PCS-HG90, PCS-G70, PCS-G50, PCS-1, PCS-TL33	PCS-HG90, PCS-G70, PCS-G50
Uni/Omnidirectional	Omnidirectional (360 degrees)	Unidirectional (120 degrees)	Unidirectional (120 degrees)
Embedded Echo Cancelling	No*	No*	Yes
Frequency Response	14 kHz	14 kHz	14 kHz
Coverage Area			
Recommended	0.5 to 1.5m (1.7 to 5 ft)	0.5 to 1.5m (1.7 to 5 ft)	0.5 to 1.5m (1.7 to 5 ft)
Acceptable	up to 3 m (up to 10 ft)	up to 3 m (up to 10 ft)	up to 2 m (up to 6.7 ft)
Recommended Distance from Speaker(s)	1.5 m (5 ft) or more	1.5 m (5 ft) or more	1.5 m (5 ft) or more
Max Number	2 units (Max. 5 units via PCSA-DSB1S)	2 units (Max. 5 units via PCSA-DSB1S)	80 units (cascaded)
	up to 3 m 0.5 to 1.5 m	0.5 to 1.5 m up to 3 m	1.5 m or more 0.5 to 1.5 m up to 2 m















Cameras

Model Name	PCSA-CHG90	BRC-H700	EVI-HD1	PCSA-CG70/CG70P	PCSA-CTG70/CTG70P	BRC-300/300P
	HD	HD	HD/SD	SD	SD	SD
Compatible systems	PCS-HG90	PCS-HG90	PCS-HG90, PCS-G70, PCS-G50	PCS-G70, PCS-G50	PCS-G70	PCS-HG90, PCS-G70, PCS-G50
Image device	Three 1/3-type CCD	Three 1/3-type CCD	1/3-type CMOS	Single 1/4-type CCD	Single 1/4-type CCD	Three 1/4.7-type CCD
Zoom ratio	x12 optical zoom	x12 optical zoom	x10 optical zoom	x10 optical zoom	x10 optical zoom	x12 optical zoom
	(x48 with digital zoom)	(x48 with digital zoom)	(x40 with digital zoom)	(x40 with digital zoom)	(x40 with digital zoom)	(x48 with digital zoom)
Min. object distance (mm)	500 (Wide), 800 (Tele)	500 (Wide), 800 (Tele)	100 (Wide), –	100 (Wide), 600 (Tele)	100 (Wide), 600 (Tele)	300 (Wide), 800 (Tele)
Pan angle	+/- 170°	+/- 170°	+/- 100°	+/- 100°	+/- 100°	+/- 170°
Tilt angle	+ 90°/- 25°	+ 90°/- 30°	+/- 25°	+/- 25°	+/- 25°	+ 90°/- 30°
Preset positions	6	16	6	6	6	6

Others

Data Sharing Systems



Data Solution Box PCSA-DSB1S

PCS-G70 PCS-G50 PCS-1



Data Solution Module PCSA-DSM1***

PCS-G50

PCS-TL33

 $\ensuremath{^{***}}$ The PCSA-DSM1 fits into the rear of the PCS-TL33.

Software



PCS-G50

H.320 MCU Software PCS-320M1 PCSA-M0G50

PCS-1

PCSA-M0G70 PCS-G70

H.323 MCU Software

PCS-323M1 PCSA-M3G50

PCSA-M3G70 PCS-G70

ISDN Interface Units



PCS-G70 PCS-G50



PCS-G70 PCS-G50 PCS-1

PCS-1

000 PCSA-B384S

PCS-G70 PCS-G50 PCS-1

Stands



PCS-STP1 PCS-1



PCSA-STMG70 PCS-G70 PCS-G50



PCSA-STCG70 PCS-G70 PCS-G50









SPECIFICATIONS

fiele e	PCS-HG90	PCS-G70	PCS-G50	PCS-1	PCS-TL33		
leo nal System	-	PCS-G70S: NTSC, PCS-G70SP: PAL	PCS-G50: NTSC, PCS-G50P: PAL	PCS-1: NTSC, PCS-1P: PAL	-		
ndard	-	H.261 (Annex D)					
	_	H.263 (Annex D,F) H.263+ (Annex J)					
	-	H.263++ (Annex U,W)					
	H.264	MPEG-4 SP@L3					
	-	H.239 Video and Presentation Data Sup	port*				
	-	H.239 Dual Video Stream Support	H.239 Dual Video Reception Only	-	-		
Resolution	HD 720p (1280 x 720)	SQCIF (128 x 96, reception only) QCIF (176 x 144) CIF (352 x 288)		QCIF (176 x 144) CIF (352 x 288)	QCIF (176 x 144) CIF (352 x 288)		
		4CIF (704 x 576, H.263 only)		Interlaced SIF	Cii (332 x 200)		
		Interlaced SIF (352 x 480, H.263 or H.26 Interlaced 4SIF (704 x 480, H.263 only)		(352 x 480, H.263 only)			
me Rate	Max. 60 frames/s		+, H.263++, H.264, and MPEG-4 SP@L3)		Max. 30 frames/s		
		Interlaced SIF Mode	Interlaced SIF Mode	Interlaced SIF Mode			
		(H.263 or H.264 Interlace Mode) Interlaced 4SIF (704 x 480, H.263 only)	(H.263 or H.264 Interlace Mode) Interlaced 4SIF (704 x 480, H.263 only)	(H.263 Interlace Mode) PCS-1: 60 fields/s,			
		PCS-G70S: 60 fields/s,	PCS-G50: 60 fields/s,	PCS-1P: 50 fields/s			
ıdio		PCS-G70SP: 50 fields/s	PCS-G50P: 50 fields/s				
ndwidth and Coding	MPEG-4 AAC Stereo: 22 kHz	-	-	-	-		
	(Aux In / Mic In) at 192 kb/s (Fs = 48 kHz), (default)						
	MPEG-4 AAC Mono : 22 kHz	=	-	=	-		
	(Aux In / Mic In) at 96 kb/s (Fs = 48 kHz)						
	MPEG-4 AAC Stereo : 44 kHz	-	-	-	-		
	(Aux In) / 22 kHz (Mic In) at 192 kb/s (Fs = 96 kHz)						
	MPEG-4 AAC Mono : 44 kHz	-	_	-	_		
	(Aux In) / 22 kHz (Mic In) at						
	96 kb/s (Fs = 96 kHz) G.711: 3.4 kHz at 56 kb/s, 64 kb/s						
	G.722: 7.0 kHz at 48 kb/s, 56kb/s, 64kb	's					
	G.728: 3.4 kHz at 16 kb/s	G.722.1: 7.0 kHz at 24/32 kb/s (H.323)	·		-		
	=	G.723.1: 3.4 kHz at 5.3/6.3 kb/s (H.323)			-		
	-	G.729: 3.4 kHz at 8 kb/s (H.323)					
	_	MPEG-4 AAC (mono): 14 kHz at 64/96 kb/s (H.323),			MPEG-4 AAC (mono): 14 kHz at 64/96 kb/s		
		48 kb/s (H.320)			14 K112 dt 04/30 kb/3		
no Cancellation	Noise Suppressor						
	Automatic Gain Control Included Stereo Echo-canceling Supported	Monaural Echo-canceling Supported for	Audio Frequencies up to 14 kHz				
	for Audio Frequencies up to 22 kHz	, 3 P.					
raphics GA	1024 x 768 (XGA)	1024 x 768 (H.263) with PCSA-DSB1S		1024 x 768 (H.263)	1024 x 768 (H.263)		
	1024 X 700 (XGA)			with PCSA-DSB1	with PCSA-DSM1		
IF	_	704 x 576 (H.261 Annex D and H.263)					
ransmission Speed Connection	512 kb/s to 8 Mb/s (8192 kb/s)	56 kb/s to 4096 kb/s**		56 kb/s to 1920 kb/s	64 kb/s to 2048 kb/s		
DN Connection	-	56 - 1920 kb/s with PCSA-PRI		-	-		
	_	56 - 768 kb/s with PCSA-B768S 56 - 384 kb/s with PCSA-B384S	=				
TU-T Standards (exclud	des audio/video and encryption standa						
	H.323 (HD video only)	H.320, H.323					
		11.520, 11.525			H.323		
	H.281 FECC (Far End Camera Control)	11.525, 11.525			H.323		
	H.281 FECC (Far End Camera Control) H.245 H.225.0						
	H.281 FECC (Far End Camera Control) H.245	H.221			H.323		
	H.281 FECC (Far End Camera Control) H.245 H.225.0						
	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18					
	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19					
	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18					
letwork Protocols	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120					
etwork Protocols	H.281 FECC (Far End Camera Control) H.245 H.225.0 TELNET (Server), HTTP (Server).	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120	ver), SNMP (Agent), DNS (Client), DHCP (C	lient), RTP/RTCP, TCP/UDP, ARP, SIP			
etwork Protocols	H.281 FECC (Far End Camera Control) H.245 H.225.0 TELNET (Server), HTTP (Server). FTP (Server), SNMP (Agent), DNS (Client), DHCP (Client),	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120	ver), SNMP (Agent), DNS (Client), DHCP (C	lient), RTP/RTCP, TCP/UDP, ARP, SIP			
	H.281 FECC (Far End Camera Control) H.245 H.225.0 TELNET (Server), HTTP (Server). FTP (Server), DNS (Client), DHCP (Client), RTP/RTCP, TCP/UDP, ARP	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120	ver), SNMP (Agent), DNS (Client), DHCP (C	lient), RTP/RTCP, TCP/UDP, ARP, SIP			
	H.281 FECC (Far End Camera Control) H.245 H.225.0 TELNET (Server), HTTP (Server). FTP (Server), SNMP (Agent), DNS (Client), DHCP (Client), RTP/RTCP, TCP/UDP, ARP	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Sen	d, or Continuous Presence Mode)***	lient), RTP/RTCP, TCP/UDP, ARP, SIP			
ultipoint Capabilities	H.281 FECC (Far End Camera Control) H.245 H.225.0 TELNET (Server), HTTP (Server). FTP (Server), SNMP (Agent), DNS (Client), DHCP (Client), RTP/RTCP, TCP/UDP, ARP	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Server)	d, or Continuous Presence Mode)***	lient), RTP/RTCP, TCP/UDP, ARP, SIP			
ultipoint Capabilities	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Sen	d, or Continuous Presence Mode)***	lient), RTP/RTCP, TCP/UDP, ARP, SIP			
ultipoint Capabilities p Synchronization	H.281 FECC (Far End Camera Control) H.245 H.225.0 TELNET (Server), HTTP (Server). FTP (Server), SNMP (Agent), DNS (Client), DHCP (Client), RTP/RTCP, TCP/UDP, ARP Up to 4 sites Full Screen Display Only (Broadcast or Voice Activated Mode) Manual (On/Off)	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Server) to 6 Sites (Broadcast, Voice Activated Up to 10 Sites (Broadcast or Voice Activated Up to 10 Sites (Broadcas	d, or Continuous Presence Mode)***	lient), RTP/RTCP, TCP/UDP, ARP, SIP	-		
ultipoint Capabilities p Synchronization	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Server) to 10 Sites (Broadcast, Voice Activated Up to 10 Sites (Broadcast or Voice Activated Up to 11 Sites (Broadcast or Voice Activated Up to 11 Sites (Broadcast or Voice Activated Up to 12 Sites (Broadcast or Voice Activated Up to 13 Sites (Broadcast or Voice Activated Up to 14 Sites (Broadcast or Voice Activated Up to 15 Sites (Broadcast or Voice Activated Up to 16 Sites (Broadcast or Voice Activated Up to 17 Sites (Broadcast or Voice Activated Up to 18 Sites (Broadca	d, or Continuous Presence Mode)***	lient), RTP/RTCP, TCP/UDP, ARP, SIP			
lultipoint Capabilities p Synchronization ncryption	H.281 FECC (Far End Camera Control) H.245 H.225.0 TELNET (Server), HTTP (Server). FTP (Server), SNMP (Agent), DNS (Client), DHCP (Client), RTP/RTCP, TCP/UDP, ARP Up to 4 sites Full Screen Display Only (Broadcast or Voice Activated Mode) Manual (On/Off)	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Server) to 6 Sites (Broadcast, Voice Activated Up to 10 Sites (Broadcast or Voice Activated Up to 10 Sites (Broadcas	d, or Continuous Presence Mode)***	lient), RTP/RTCP, TCP/UDP, ARP, SIP	-		
ultipoint Capabilities p Synchronization acryption etwork Features 5 (Quality of Service)	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Senver) to 10 Sites (Broadcast, Voice Activated Up to 10 Sites (Broadcast or Voice Activated Up to 10 Sites (Broadc	d, or Continuous Presence Mode)***	lient), RTP/RTCP, TCP/UDP, ARP, SIP ARC, Real-time ARQ, IP Precedence, Diff	- - - -		
p Synchronization ncryption etwork Features S (Quality of Service)	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Server). FTP (Server) to 10 Sites (Broadcast, Voice Activated Up to 10 Sites (Broadcast or Voice Activated Up to 10	d, or Continuous Presence Mode)***		- - - -		
p Synchronization ncryption etwork Features 5 (Quality of Service)	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Senver) to 10 Sites (Broadcast, Voice Activated Up to 10 Sites (Broadcast or Voice Activated Up to 10 Sites (Broadc	d, or Continuous Presence Mode)***		- - - -		
p Synchronization ncryption etwork Features S (Quality of Service) In Permote Commander it	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Server). FTP (Server) to 10 Sites (Broadcast, Voice Activated Up to 10 Sites (Broadcast or Voice Activated Up to 10	d, or Continuous Presence Mode)***		- - - -		
fultipoint Capabilities ip Synchronization ncryption letwork Features os (Quality of Service) AT PhP lemote Commander nit nterfaces	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Senver). FTP (d, or Continuous Presence Mode)*** ated Mode)****	ARC, Real-time ARQ, IP Precedence, Diff	- - - - H.235		
Jultipoint Capabilities ip Synchronization ncryption letwork Features 05 (Quality of Service) AT PhP emote Commander nit nterfaces	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (d, or Continuous Presence Mode)*** ated Mode)**** D-Sub 15-pin Dedicated Camera I/F x1 S-video or Composite input x1		- - - - - H.235		
fultipoint Capabilities ip Synchronization ncryption letwork Features os (Quality of Service) AT PhP lemote Commander nit nterfaces	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (Server). T10 (Server). FTP (d, or Continuous Presence Mode)*** ated Mode)**** D-Sub 15-pin Dedicated Camera I/F x1	ARC, Real-time ARQ, IP Precedence, Diff D-Sub 15-pin Dedicated Camera I/F x1	-		
Aultipoint Capabilities ip Synchronization incryption Letwork Features oS (Quality of Service) AT PrnP Letmote Commander nit Interfaces deo IN	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (d, or Continuous Presence Mode)*** ated Mode)**** D-Sub 15-pin Dedicated Camera I/F x1 S-video or Composite input x1 (switchable with conversion connector)	ARC, Real-time ARQ, IP Precedence, Diff D-Sub 15-pin Dedicated Camera I/F x1 S-video input x1 Composite input x1	-		
Jetwork Protocols Multipoint Capabilities ip Synchronization incryption Jetwork Features os (Quality of Service) AT PnP lemote Commander nit nterfaces deo IN	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (d, or Continuous Presence Mode)*** ated Mode)**** D-Sub 15-pin Dedicated Camera I/F x1 S-video or Composite input x1 (switchable with conversion connector) S-video output x2 (for main/sub monitor) Composite output (AUX) x1	ARC, Real-time ARQ, IP Precedence, Diff D-Sub 15-pin Dedicated Camera I/F x1 S-video input x1 Composite input x1 S-video output x2 (for main/sub monitor) Composite output x1	-		
p Synchronization ncryption etwork Features S (Quality of Service) AT inP emote Commander it tterfaces Jeo IN	H.281 FECC (Far End Camera Control) H.245 H.225.0	H.221 H.242 H.243 H.460.18 H.460.19 H.350 T.120 TELNET (Server), HTTP (Server). FTP (d, or Continuous Presence Mode)*** ated Mode)**** D-Sub 15-pin Dedicated Camera I/F x1 S-video or Composite input x1 (switchable with conversion connector) S-video output x2 (for main/sub monitor)	ARC, Real-time ARQ, IP Precedence, Diff D-Sub 15-pin Dedicated Camera I/F x1 S-video input x1 Composite input x1 S-video output x2 (for main/sub monitor)	-		

^{*} The optional Data Solution Box or Module is required to send presentation data.

** When the H.Z61 video standard is used, up to 2Mb/s is supported.

*** Requires optional MCU software. IP/ISDN Bridging is possible.

**** Requires optional MCU software. Connections between base units must be IP (H.323). IP/ISDN Bridging is possible.

	PCS-HG90	PCS-G70	PCS-G50	PCS-1	PCS-TL33
Interfaces	VID v2 (I/D Line Lovel to Available 1.5)	Line input DCA v4		Line output DCA v2 (or a mind or a)	Futured analysis at the control of
Audio IN	XLR x2 (L/R, Line Level to Audio Mixer)	Line input RCA x1 AUX input RCA (bypassess echo cancelle	or\ v1	Line output RCA x2 (one mixed output) Internal microphone x1	External analog microphone input
	XLR x2 (L/R, Aux1, Line Level to Audio Mixer) RCA x2 (L/R, Aux2, Line Level to VCR, DVD, etc)	External analog microphone input Mini-ja	Mini-jack (plug in power) x1		
	External analog microphone input	External digital microphone input x2	ack (plug III power) xz	Line input RCA x1 External analog microphone input	
	Mini-jack (Plug in power) x2	External digital inicrophone input x2		Mini-jack (Plug in power) x2	
	External digital microphone input x2			IVIIII Jack (Flag III power) X2	
OUT	XLR x2 (L/R, Far, Line Level)	Line output RCA x2 (one mixed output)			External headhone output (mini-jack) x
001	XLR x2 (L/R, Mix, Far + Near for Rec, Line Level)	Eine output Nervaz (one mixeu output)			External ricuations output (mini juck) x
	RCA x2 (L/R, Mix, Far, Line Level)				
Network	10Base-T/100Base-TX	10Base-T/100Base-TX, External ISDN Unit I.	/F		10Base-T/100Base-TX
Control	Wired SIRCS In x1 for Remote	SIRCS IR Out x2	SIRCS IR Out x2	SIRCS IR Out x1	RS-232C x1
2011(10)	Commander Unit	Wired SIRCS In (Control-S) x1	Wired SIRCS In (Control-S) x1	RS-232C x1	NS 252C XI
	RS-232C x1, VISCA x2	RS-232C x1, VISCA x2	RS-232C x1, VISCA x1	IR for Remote Commander Unit x1	
	NS ESEC XI, VISCA XE	NO ESEC XI, VISCA XE	NS 252C XI, VISCA XI	IN 101 Nemote communici one x1	
OSB I/F or DSM I/F	_	Dedicated D-Sub 15			Dedicated Connector
Memory Stick I/F	Memory Stick slot x 1				
Memory Stick Support	Memory Stick, Memory Stick PRO™ (2GB	nr less)		Memory Stick ,	Memory Stick, Memory Stick PRO (2GB or less
vicinory stick support	Memory Stick Duo™ with adaptor,	01 1033/,		Memory Stick Duo with adaptor,	Memory Stick Duo with adaptor,
	Memory Stick PRO Duo™ with adaptor (2	GB or less).		MagicGate Memory Stick/	Memory Stick PRO Duo with
	MagicGate™ Memory Stick/MagicGate Me			MagicGate Memory Stick Duo	adaptor (2GB or less), MagicGate
	with adaptor containing files without con			with adaptor containing files without	Memory Stick/MagicGate Memory Stick
				content protection technology	Duo with adaptor containing files
				.,	without content protection technology
Camera Unit	<u> </u>			·	, I I I I I I I I I I I I I I I I I I I
-	Not Supplied		Supplied Camera Unit		Integrated Camera
mage Device	=		1/4-type CCD		1/3.8-type CMOS
Resolution	_		Approx. 380,000 Pixels (effective Pixels)	<u> </u>	Approx. 1.28 Million Pixels (effective Pixe
OCUS	_		Auto/Manual Pan Focus	'	Approx. 1.20 Willion Fixels (effective Fixe
RIS			Auto/Manual		
Zoom Ratio			x 10 Optical Zoom, x 40 with Digital Zo	om	x3 Digital Zoom
	=			OIII	Degital Pan/Tilt
Pan Angle/Speed	=		±100° (max 300° /sec) ±25° (max 125° /sec)		
Tilt Angle/Speed	-				(horizontal viewing angle approx. 87°)
Preset	-		Up to 6 Positions		
S/N	=		More Than 50 dB		-
Others Features	_		Backlight Compensation, Auto White ba	lance	
Display					
LCD	-				17.1-inch Widescreen****
Aspect	-				15:9
Resolution	-				1280 x 768 (WXGA)
Brightness	=				410 Cd/m2 (max.)
Response	_				13 ms
Contrast Ratio	_				600:1
Viewing Angle	_				Greater Than 176°
Colors	_				16.7 Million
General					10.7 Willion
Operating Temperature	5° to 35 °C (41° to 95 °F)				
Operating Humidity	20 to 80% (non condensing)	30 to 70% (non condensing)			20 to 80% (non condensing)
Storage Temperature	-20° to 60 °C (-4° to 140 °F)	-20° to 55 °C (-4° to 131 °F)			-20 to 60 °C (-4 to 140 °F)
Storage Humidity	25 to 80% (non condensing)	25 to 75% (non condensing)	DCC CTO AC 420 V F0/C0 V	DCC 4 4C 420 V F0/C0 II	20 to 80% (non condensing)
Power Requirements	AC 100 to 240 V, 50/60 Hz	PCS-G70S: AC 120 V, 50/60 Hz	PCS-G50: AC 120 V, 50/60 Hz	PCS-1: AC 120 V, 50/60 Hz	AC 100 to 240 V
			PCS-G50P: AC 220 V to 240V, 50/60Hz	PCS-1P: AC 220 to 240 V, 50/60 Hz	50/60 Hz
Power Consumption	-	DC 19.5 V, 5 A		DC 19.5 V, 3.5 A	DC 19.5 V, 6.15 A
Current	1.8 A	-			
Main Unit Dimensions	440 x 150 x 450 mm	420 x 70 x 254 mm	420 x 66 x 254 mm	258 x 54 x 171 mm	424 x 419 x 258 mm
(W x H x D)	(17 ³ /8 x 6 x 17 ³ /4 inches),	(16 ⁵ /8 x 2 ⁷ /8 x 10 inches),	(16 ⁵ /8 x 2 ⁵ /8 x 10 inches),	(10 ¹ / ₄ x 2 ¹ / ₄ x 6 ³ / ₄ inches),	(16 ³ /4 x 16 ¹ /2 x 10 ¹ /4 inches),
	excl. projections	excl. projections	excl. projections	excl. projections	incl. stand
Main Unit Mass	13 kg (28 lbs 11 oz)	5.3 kg (11 lbs 11 oz)	4.6 kg (10 lbs 2 oz)	1.3 kg (2 lbs 14 oz)	8 kg (17 lbs 10 oz)
System Components ar	nd Supplied Accessories				
	Communication Terminal				
	Remote Commander Unit				Optical Mouse
	Remote Control Receiver			-	-
	AC Adaptor/Power Cord Unit				
	=	IR Repeater x2			-
	Manganese Battery for Remote Comman				-
	Operating Instructions CD-ROM				•
	Worldwide Warranty Booklet				
	Before Using this Unit				Quick Start Guide
	Quick Connection Guide/Remote Comm	ander Guide			Ouick Start Guide Ouick Connection Guide/Ouick Operation Guide
	Connection Sheet	ander Julue			Quiek Connection Guide/Quiek Operation Guid
	Conflection sneet	Audia Cabla (1.0 m)			-
	-	Audio Cable (1.0 m)			-
	_	S-Video Cable (1.5 m)			-
	-	Mini DIN 7-pin to RCA Conversion	Mini DIN 7-pin to RCA Conversion	Camera Unit	-
		Connector x2	Connector x1	(includes dedicated 0.25 m camera cable) x1	
			C 11-24	Velcro Strips for Terminal x2	1
		Video Converter Cable (0.15m) x2	Camera Unit		
		Video Converter Cable (0.15m) x2	(includes dedicated 3 m camera cable) x1	Double-sided Tape for Camera Unit x3	
		Video Converter Cable (0.15m) x2	(includes dedicated 3 m camera cable) x1 VISCA Cable (0.15m) x1		
		Video Converter Cable (0.15m) x2	(includes dedicated 3 m camera cable) x1		

^{*****} Viewable area, measured diagnonally.

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