

# PCS-G60D PCS-G60DP

Visual Communication System

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Powerful, Compact, and Affordable

PCS-G60D and PCS-G60DP SD Visual Communication Systems

Experience Virtual Face-to-Face Communication at Any Time

**IPELA**™

# Key Features

Unless otherwise noted, "PCS-G60D" in the following text refers to both the PCS-G60D and PCS-G60DP.

## High-quality Videoconferencing on Low Bandwidth with H.264 High Profile Support

With H.264 High Profile support, this system achieves higher picture quality at a lower bandwidth rate than PCS-G50/G70 Series systems. Furthermore, the PCS-G60D receives up to 720p resolution video.

## Superb Audio Quality

The PCS-G60D produces clear and natural stereo sound, using the MPEG-4 AAC compression format.

With a built-in stereo echo canceller, which eliminates the annoying echo often heard with other systems, communication sounds far more natural.

## ITU-T H.239 Support – Presentation Data Transferred at 30 fps

With support for the ITU-T H.239 (video and presentation data) standard, the PCS-G60D can send your PC display (both video and presentation data) to all participants in your videoconference. This contributes to highly effective communication.

Presentation data can be transferred at frame rates as high as 30 fps, so they appear natural and smooth even when they include animation effects or video from your PC. This presentation data can also be projected, or shown on a sub display, using the RGB output.

## Enhanced Intelligent QoS™ Functions for Stable, Secure Videoconferencing

When you conduct your videoconference over a network, a common concern is how to maintain video and audio quality through constantly changing network performance. The PCS-G60D incorporates the following advanced Quality of Service (QoS) functions:

- Adaptive FEC (Forward Error Correction)
- Real-time ARQ™ (Automatic Repeat reQuest)
- ARC (Adaptive Rate Control)

These functions work in harmony for fast and consistent data throughput during the transmission of video signals, by adapting to any changes in network condition, and correcting any packet loss.

## Multi-point Connection - Embedded MCU

Using optional PCSA-MCG80 MCU software, the PCS-G60D can be configured to communicate simultaneously with up to 5 remote videoconferencing sites (6 sites in total), using an IP (H.323 protocol) connection\*. Moreover, two PCS-G60D units – each installed with optional MCU software – can be cascaded with an IP connection to support a maximum of 10 simultaneous sites.

\* Up to 3 remote videoconferencing sites (4 sites in total) using an ISDN (H.320 protocol) connection.

## Video Annotation Function\*

For effective communication, the PCS-G60D offers a useful video annotation function. Conference participants can clearly point out specific parts of shared data, including live images and presentation data, simply by writing on a tablet.

This function helps to minimize the time and effort required to communicate, enabling everyone to deliver clear, strong messages.

\* Requires an optional third-party pen tablet device.

## Simple Setup and Easy-operation Intuitive GUI – Simple Layer Structure with Translucent Cascading Menus

The PCS-G60D has been meticulously designed with an intuitive GUI, which includes a simple layer structure with translucent cascading menus. This provides simple functionality – users find it very easy to operate the entire videoconferencing system, including the camera.

## One-touch Dialing with the RF Remote Commander Unit

For user convenience, the PCS-G60D adopts an RF Remote Commander unit which you do not have to point directly towards the system. What's more, the PCS-G60D has a convenient One-touch Dialing feature, which allows you to easily connect to any of your registered contacts just by pushing the function button on the RF Remote Commander unit that corresponds to a thumbnail image on the GUI. Up to four contacts for one-touch dialing can be shown on the home menu from a maximum of 1,000 registered contacts.

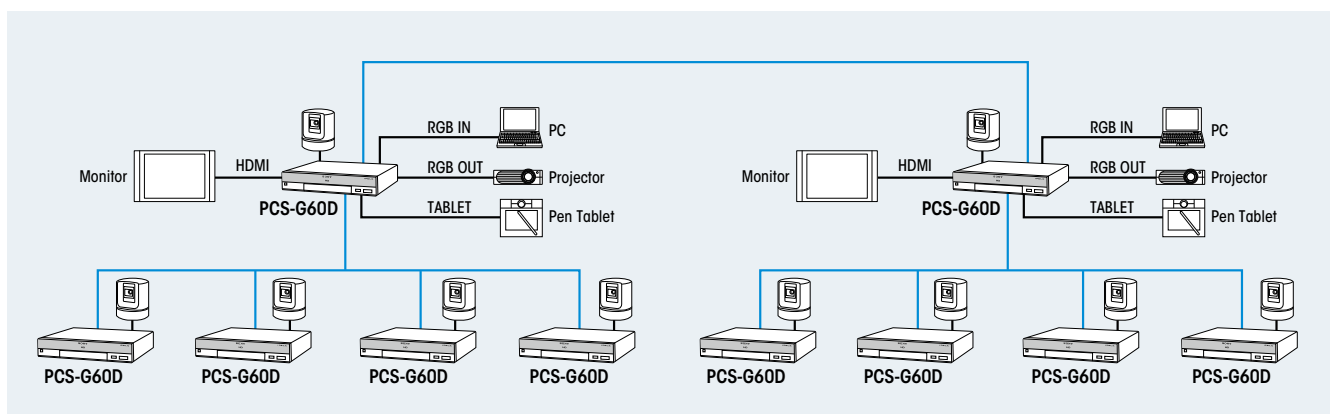
## Other Features

- Memory Stick™ recording - video/presentation data (including annotations) and audio can be recorded for later review
- Built-in streaming function for multicasting to large audiences
- Support for IPv6
- Support for H. 460 Firewall Traversal
- Up to 100 camera preset positions can be stored, each with a thumbnail image for easy recall
- Advanced Encryption Standard (AES) for high security
- Multiple display layout (Full screen, Picture-in-Picture, Picture-and-Picture, Side-by-Side)
- Single cable connection with HDMI

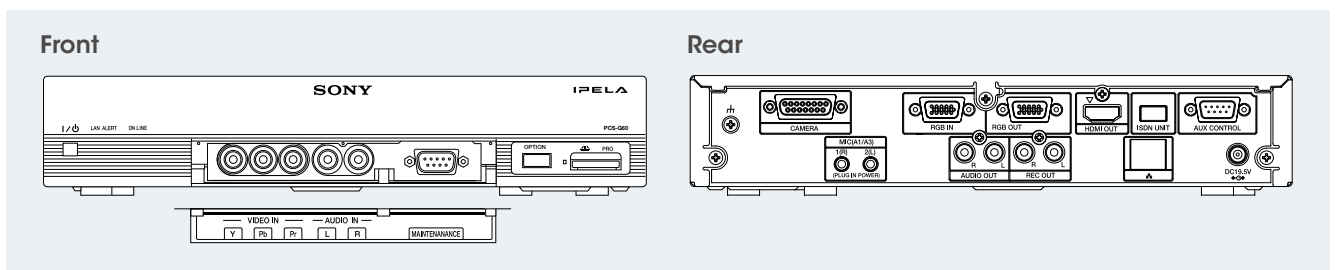
### Videoconferencing for Our Environment

You can help reduce CO<sub>2</sub> emissions and support our environment by using videoconferences in lieu of business travel. Sony visual communication systems can make you feel as if you are communicating in the same room. Stay in touch, travel less, and save our earth. Sony has an answer.

## Sample System Configuration



## Connector Panels



## Optional Accessories

- Omnidirectional Microphone PCS-A1  
(One PCS-A1 mic is supplied with the PCS-G60D.)
- Unidirectional Microphone PCSA-A3
- MCU Software PCSA-MCG80
- ISDN I/F Box 768 Kbps PCSA-B768S
- ISDN I/F Box 384 Kbps PCSA-B384S
- Camera Stand PCSA-STCG70

# Specifications

## Codec Unit

	PCS-G60D	PCS-G60DP
<b>Standard</b>		
Communication protocol standards	ITU-T H.320, H.323 <sup>*1</sup> , IETF SIP	
ITU-T (excludes 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	
FrameFormat	H.221, BONDING, H.225.0	
Dual Stream	H.239 (video and presentation data)	
<b>Key Features</b>		
Multipoint capability	Up to 6 sites (H.323)/up to 4 sites (H.320) with optional software PCSA-MCG80 Up to 10 sites (H.323) requires two PCS-G60D/G60DP units with optional software PCSA-MCG80 Using Cascaded Connection	
Data sharing	PC images up to SXGA resolution is supported Video annotation function	
Lip synchronization	AUTO/OFF	
Mic off function	ON/OFF	
Streaming/Recording feature	Audio: 64kb/s Video: 0 to 512 kb/s (5-step)	
<b>Video</b>		
Maximum frame rate	30fps: H.264 - 720p <sup>*2</sup> H.261 - QCIF, CIF H.263 - QCIF, CIF H.264 - QCIF, CIF, 4CIF, wCIF, w432p <sup>*2</sup> , w4CIF <sup>*2</sup> 10fps: H.263 - 4CIF	
Communication protocol standards	H.261, H.263, H.263+, H.263++, H.264 Baseline profile, H.264 High profile, MPEG-4 SP@L3	
Resolution	QCIF (176 x 144), CIF (352 x 288), 4CIF (704 x 576), wCIF/w288p (512 x 288), w432p <sup>*2</sup> (768 x 432), w4CIF <sup>*2</sup> (1024 x 576), 720p <sup>*2</sup> (1280 x 720)	
Bit rate	64 to 4,096 kb/s	
Screen layout	Full Screen, PinP, PanD, SideBySide	
<b>Audio</b>		
Bandwidth and coding	- Point-to-point connection MPEG-4 AAC Stereo: 22 kHz at 192 kb/s (IP only) MPEG-4 AAC Mono: 14 kHz at 48 kb/s, 64 kb/s, 96 kb/s MPEG-4 AAC Mono: 22 kHz at 64 kb/s, 96 kb/s (IP only) G.711: 3.4 kHz at 56 kb/s, 64 kb/s G.722: 7.0 kHz at 48 kb/s, 56 kb/s, 64 kb/s G.728: 3.4 kHz at 16 kb/s  - Multipoint connection G.711: 3.4 kHz at 56 kb/s, 64 kb/s G.722: 7.0 kHz at 48 kb/s, 56 kb/s, 64 kb/s	
Other features	Stereo echo-cancelling (ON/OFF), Auto Gain Control, Noise Reduction	
<b>Network</b>		
Protocols	TCP/IP, UDP/IP, DHCP, DNS, HTTP, TELNET, SSH, SNMP, NTP	
QoS (Quality of Service)	Adaptive FEC (Forward Error Correction), Real-time ARQ (Auto Repeat reQuest), ARC (Adaptive Rate Control), IP Precedence, DiffServe	
Other network features	Packet reordering, TCP/UDP port setting, NAT, PPPoE, UDP shaping, Encryption, Auto gatekeeper discovery, UPnP <sup>*3</sup> , URI Dialing, IPv6	
<b>Interface</b>		
Video input	AUX video inputs (V/Pb/Pr x 1, RGB x 1)	
Video output	HDMI x 1, RGB x 1	
Control input	RS-232C x 1	
Audio input	External analog microphone input Mini-jack (Plug in power) x 2 (L/R), Audio Input (MIC/AUX) x 1 (RCA pin, stereo)	
Audio output	HDMI (video, audio) x 1, Line Output (RCA pin, stereo) x 1, REC Output (RCA pin, stereo) x 1	
Network port	10BASE-T/100BASE-TX x 1, ISDN Unit Interface x 1	
Memory stick slots	1	
Maintenance interface	RS-232C x 1	
Others	Tablet Interface x 1	
<b>General</b>		
Power requirements	DC 19.5 V (AC Adapter : AC 100 to 240 V, 50/60 Hz)	
Power consumption	40W (the codec only)	
Power consumption (stand-by)	10W (the codec only)	
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%	
Storage humidity	20% to 80% (non condensing)	
Dimensions (W x H x D)	Codec: Approx. 282 x 56 x 244 mm (11 1/8 x 2 1/4 x 9 5/8 inches) excl. projections Camera unit: Approx. 130 x 138.5 x 130mm (5 1/8 x 5 1/2 x 5 1/8 inches) excl. projections	
Mass	Codec: Approx. 2 kg (4 lb 3 oz), Camera unit: Approx. 1 kg (2lb 3 oz)	

\*1 Interoperable with other manufacturers' H.323/H.320-compliant endpoints; not all connections are guaranteed.

\*2 Receive only

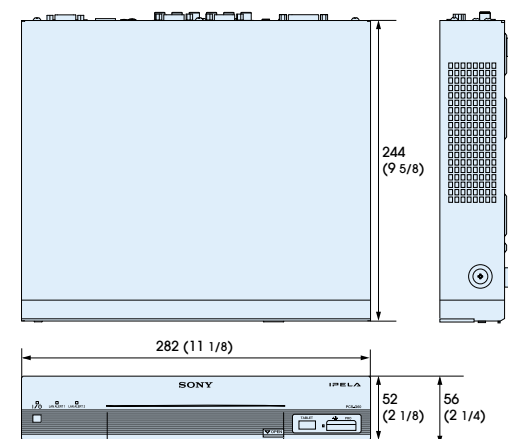
\*3 It is unavailable depending on the model.

## Camera Unit

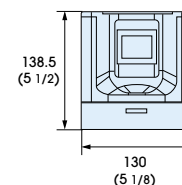
	PCSA-CG70	PCSA-CG70P
<b>Camera</b>		
Image sensor	1/4-type color CCD	
Image sensor (Number of effective pixels)	380,000 pixels	440,000 pixels
S/N ratio	50 dB	
Exposure control	Auto/Manual	
Zoom ratio	x 40 zoom (x 10 optical zoom, x 4 digital zoom)	
<b>Focusing system</b>		
Horizontal viewing angle	6.6 to 65 degrees	
Focal length	f=3.1 to 31 mm	
F-number	F1.8 to F2.9	
Minimum object distance	100 mm (At WIDE end)	
Pan/Tilt angle	Pan±100°/Tilt±25°	
Preset position	100 positions	
Power supply	Supplied from Codec Unit	
Other features	Auto White Balance, Backlight Compensation, VISCA output to the 2nd camera	

## Dimensions

### Codec Unit



### Camera Unit



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