

See from Anywhere with a Variety of Monitoring Environments

By sending images in both MPEG-4 and JPEG formats, these cameras let you monitor with a variety of environments - a PC in the office, a cell phone around town, or a TV in a waiting room. Their PoE*¹ capability allows them to be installed in places where it is difficult to provide power, like near an entranceway or elevator, or in a factory or warehouse. The BB-HCM531 can also be used outdoors*² to further expand its range of application. Using a network resolves many of the limitations that exist for installing and using conventional analogue cameras, to greatly expand your business opportunities through Zero Distance Management*³.

- *1 PoE (Power over Ethernet) supplies power through an Ethernet cable. An optional AC adaptor can also be used.
- *2 For details, see the information on the splash-resistant body on the back of this page.
- *3 For details, see the bottom of this page.

See There
 When You Can't Be There™



BB-HCM531



Entrances



Parking lots



Stores



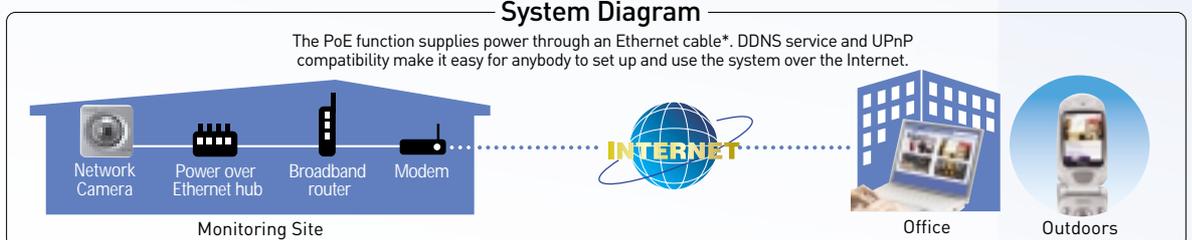
Constructions

Zero Distance Management

Zero Distance Management is a new business style made possible by Panasonic network cameras. It allows safe, smooth, economical business management that is totally free from conventional distance and time limitations.

System Diagram

The PoE function supplies power through an Ethernet cable*. DDNS service and UPnP compatibility make it easy for anybody to set up and use the system over the Internet.



*An optional AC adaptor can also be used.

Achieving Zero Distance Management with a Variety of Functions



Capture

Motion Detection Function

This function detects changes by reacting to a camera threshold or sensitivity that is set in advance on the PC. Captured images can also be stored temporarily in the camera*1 or sent to you by e-mail*2 or FTP data transfer*3.

Store

SD Memory Card*4 Recording

A large number of images can be saved onto an SD Memory Card inserted into the camera. The images on the card can be checked over the Internet, or if no network is being used, monitoring is possible using only the camera by simply storing the images onto the card.

■ 2GB SD Memory Card Recording Capacity
[Image quality: Standard] *The values in the table are all approximate.

Format	Resolution		
	640 x 480	320 x 240	192 x 144
JPEG	35 KB/file	16 KB/file	7 KB/file
	55,000 images	115,000 images	370,000 images
MPEG-4*5	9 hours	9 hours	17 hours

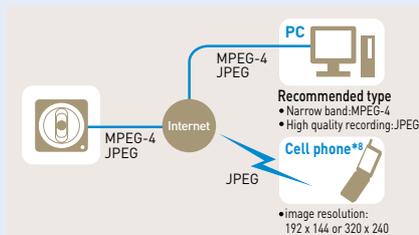
View

Analogue Video Output*6

By connecting a cable directly to the camera's video output terminal, you can use your existing TV or video recorder for monitoring.

Enjoy comfortable, versatile monitoring. Simultaneous MPEG-4 and JPEG

Cameras simultaneously send MPEG-4 images in three resolutions (VGA*7, QVGA, and SCIF), and JPEG images in the same three resolutions in favour motion, standard, and favour clarity image-quality types. MPEG-4 is recommended for viewing smooth motion images, and JPEG is recommended for recording higher quality images.



MPEG-4 Visual License

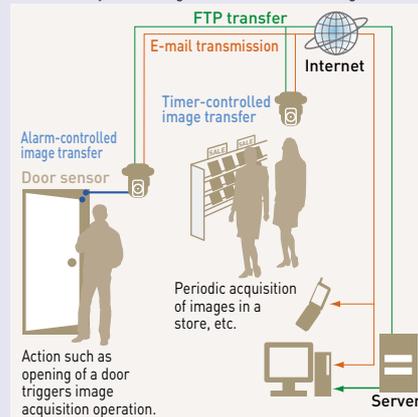
When installing the MPEG-4 viewer program on additional PCs, please purchase additional licenses [Model No. BB-HCA5A for USA, BB-HCA5CE for others].

Connect

Alerting yourself when motion occurs Image Transfer Function

In accordance with preset settings*9, the camera will automatically transfer images and a data log by e-mail*2 to an e-mail address or by FTP to a server. This allows you to check images only when necessary, and also prevents you from forgetting to check them.

■ Transfer system using timer and alarm settings



Control

Monitor large areas entirely. Remote Pan/Tilt and Zoom Control

The camera angle can be varied by remote control to monitor large areas. You can also use the zoom function*10 to take a closer look at certain places.

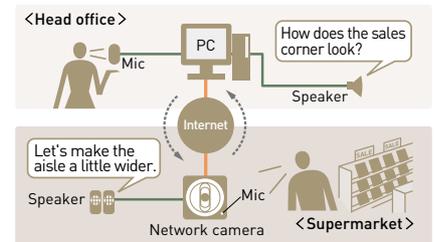


- *1 A maximum of approximately 350 images (320 x 240 pixels) can be stored in the camera.
- *2 PDP before SMTP authentication and SMTP authentication (PLAIN, LOGIN and CRAM-MD5) are supported.
- *3 The sensor's detection history can also be e-mailed to you once a day at a preset time.
- *4 The SD Memory Card is sold separately.
- *5 The MPEG-4 recording times will vary depending on the subject and the maximum MPEG-4 frame rate (image refresh speed) and bit rate settings for image distribution.
- *6-1 Compatible with both NTSC and PAL systems.
- *6-2 A mini video cable [with 3.5-mm mini plug] is required.
- *6-3 The camera cannot be controlled when using analogue video output. The video image displays poorly in colour night view mode.
- *7 When viewing in VGA, only MPEG-4 playback offers a maximum of 30 fps.
- *8 For JPEG only. The audio feature does not work on cell phones.
- *9 Preset settings can include timer, alarm, and motion detection. With JPEG connection only.
- *10 This is a digital zoom function and cannot be used from a cell phone.
- *11 The audio feature does not work with cell phones.
- *12 Walkie-talkie type conversation.
- *13-1 BB-HCM531 only.
- *13-2 Complies with JIS C0920, equivalent to IPX4 splash resistance.

Enjoy smooth communication.

Audio 2-Way Communication*11

By using the built-in microphone and a separately purchased speaker, you can speak*12 to someone near the camera while monitoring. This gives you more precise communication to lessen the inconvenience of being in a distant location.



Other Features

Splash Resistant Body*13 (Splash resistant standard: IPX4)

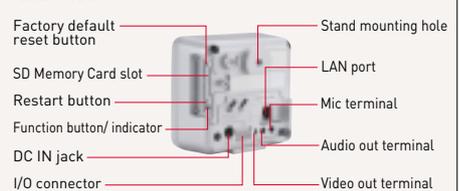
The camera can be mounted just as it is onto a store eave or other outdoor location. This allows installation in a variety of places to expand its scope of application.

Part Names

Front View



Rear View



Specifications [BB-HCM511/BB-HCM531]

Server		Camera		General	
Video Compression	JPEG [3 levels], MPEG4	Sensor Type	1/4 inch CCD sensor, approx. 320,000 pixels	Operating Temperature	BB-HCM511: 0°C to +40°C (+32°F to +104°F) BB-HCM531: -20°C to +50°C (-4°F to +122°F)
Video Resolution	640 x 480, 320 x 240 [default], 192 x 144	Lens Focal Point	Fixed [focal range: 0.5 m to infinity]	Operating Humidity	BB-HCM511: 20% to 80% [No Condensation] BB-HCM531: 20% to 90% [No Condensation]
Image Quality	JPEG (favor clarity, standard, favor motion), MPEG4	Lens Brightness	F2.8	Dimension [H x W x D]	100 x 100 x 74 mm [3 15/16 x 3 5/16 x 2 15/16 inches]
Frame Rate*1	Max. 30 frames/sec. (640 x 480*2, 320 x 240, 192 x 144)	White Balance	Auto/manual/hold	Weight [Only the Unit]	BB-HCM511: 330 g (0.73 lb.) BB-HCM531: 335 g (0.74 lb.)
Security	User ID/password	Exposure	Auto	Consumption	PoE: approx. 6.5 W, AC adaptor (option): 7 W
Supported Protocols	IPv4 / IPv6 Dual-Stack IPv4: TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, UPnP*, SMTP Authentication, RTP, RTSP, RTCP IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NTP, RTP, RTSP, RTCP	Required Light Intensity	2 to 100,000 lux (in Colour Night View mode: 0.2 to 100,000 Lux)	Power Supply	PoE: 48 V, IEEE802.3af-compliant Power over Ethernet AC adaptor (option): input 100 - 240 V AC, output 12 V DC
User Access Limit	Max. 30 simultaneous accesses (max. 10 accesses in MPEG-4 mode with sound playback)	Audio Communication	2-Way half duplex		
Buffered Image*3	Approx. 350 images (320 x 240) •standard image quality •with time display •without using SD Memory Card	Audio Play Method	Play with ActiveX		
Image Transfer Method	SMTP*4, FTP, HTTP	Audio Encoding Method	Encoding with ActiveX		
Image Buffer/Transfer Triggers	Alarm, timer or motion detection	Audio Compression	ADPCM 32 kbps		
Camera		Audio Bandwidth	300 Hz - 3.4 kHz		
Zoom	10x digital zoom [by area]	Audio Input	Built-in microphone, external microphone input terminal		
Viewing Angle	Horizontal: 54° [total 174°], vertical: 40° [total 105°]	Audio Output	Audio line output terminal for external speaker		
Pan Angle	-60° up to +60°	Terminal			
Tilt Angle	-45° up to +20°	Network Interface	Ethernet (10Base-T/100Base-TX)		
Revolving Speed	Pan: max. 80°/sec, tilt: max. 80°/sec	External I/O Connector	Input: 2, output: 1		
		Video Output*5	Analog composite (NTSC/PAL)		
		Audio Output*5	3.5 mm stereo mini jack (output is mono)		
		External Microphone Input	3.5 mm mini jack		
		SD Memory Card Slot	Full size (operation guaranteed for 2GB, 1GB, 512MB, 256MB, 128MB and 64MB SD Memory Cards)		

- *1 Frame rate may slow down depending on the network environment, PC performance, image quality, SD memory recording, when colour night view mode is activated, etc.
- *2 For MPEG-4 only. Not applicable to JPEG.
- *3 The maximum number of frames changes depending on the image quality and what object you buffer.
- *4 PDP before SMTP authentication and SMTP authentication (PLAIN, LOGIN and CRAM-MD5) are supported.
- *5 Use only the included Audio/Video Cable when connecting an external microphone, speaker or TV.

Panasonic®

0M0207SP-HCM531/511-LT.CE

All pictures simulated.

Design and specifications are subject to change without notice.