



*This logo mark is issued by the IPv6 Ready Logo Program Committee, an IPv6 promotion group established mainly by the IPv6 Forum.

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.

See There
 When You Can't Be There™



BB-HCM531

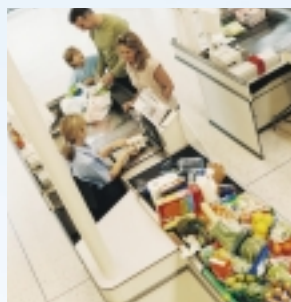
*1 PoE (Power over Ethernet) supplies power through an Ethernet cable.
 An optional AC adaptor can also be used.
 *2 For details, see the information on the splash-resistant body on the back of this page.
 *3 For details, see the bottom of this page.



Entrances



Parking lots



Stores

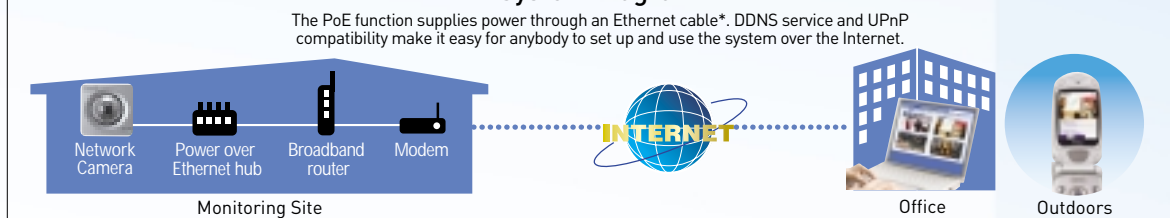


Entrances

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



*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.

■ Number of recording files per SD Memory Card [image quality: Standard]

SD Memory Card	Resolution		
	640 x 480	320 x 240	160 x 120
	Approx. 33KB/file	Approx. 16KB/file	Approx. 5KB/file
2GB	55,000 images	115,000 images	370,000 images
1GB	28,000 images	58,000 images	180,000 images
512MB	14,000 images	29,000 images	94,000 images

*The values in the table are all approximate.

View

You can make use of your existing equipment. Analog Video Output*5

By connecting a cable directly to the camera's video output terminal, you can use your existing TV or video recorder for monitoring. When using analogue video output, the camera automatically switches to interlace scanning*6 to suppress flicker in motion images.

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

Cameras simultaneously send MPEG-4 images in three resolutions (VGA, QVGA, and SCIF), and JPEG images in the same three resolutions in favour of 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.



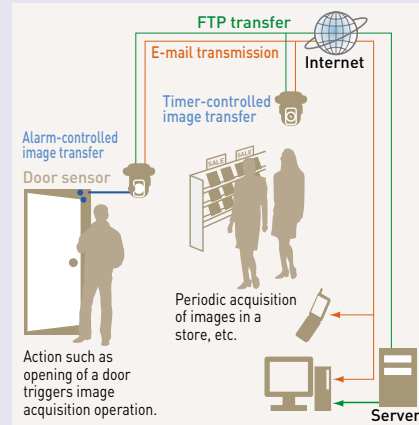
*Size comparisons are simulated.

Connect

Alerting yourself when motion occurs Image Transfer Function

In accordance with preset settings,*7 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*8 to take a closer look at certain places.

■ 10x digital zoom

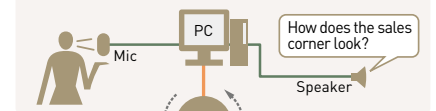


*Area is multiplied by 10x.

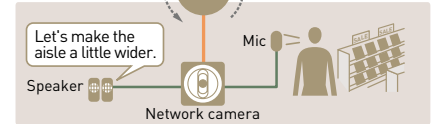
Enjoy smooth communication. Audio 2-Way Communication*9

By using the built-in microphone and a separately purchased speaker, you can speak*10 to someone near the camera while monitoring. This gives you more precise communication to lessen the inconvenience of being in a distant location.

<Head office>



<Supermarket>



Other Features

Splash Resistant body*11

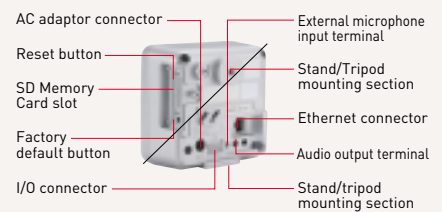
The camera can be mounted just as it is onto a store eave or other outdoor location. This allows installation in a variety of places to expand its scope of application.

Part Names

Front View



Rear View



- *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. The camera supports 64MB, 128MB, 256MB, 512MB, 1GB, and 2GB SD Memory Cards.
- *5-1 Compatible with both NTSC and PAL systems.
- *5-2 A mini video cable (with 3.5-mm mini plug) is required.

- *5-3 The camera cannot be controlled when using analogue video output. The video image displays poorly in colour night view mode. Images are output to the PC with progressive scanning.
- *6 Preset settings can include timer, alarm, and motion detection. With JPEG connection only.
- *8 This is a digital zoom function and cannot be used from a cell phone.
- *9 The audio feature does not work with cell phones.
- *10 Walkie-talkie type conversation.
- *11-1 BB-HCM531 only.
- *11-2 Complies with JIS C0920, equivalent to IPX4 splash resistance.

Specifications [BB-HCM511/BB-HCM531]

Server	Camera	General
Video Compression	JPEG (3 levels), MPEG4	Operating Temperature
Video Resolution	640 x 480, 320 x 240 (default), 192 x 144	BB-HCM511: 0°C to +40°C [+32°F to +104°F] BB-HCM531: -20°C to +50°C [+32°F to +122°F]
Image Quality	JPEG (favor clarity, standard, favor motion), MPEG4	Operating Humidity
Frame Rate*1	Max. 30 frames/sec. (640 x 480*, 320 x 240, 192 x 144)	BB-HCM511: 20% to 80% (No Condensation) BB-HCM531: 20% to 90% (No Condensation)
Security	User ID/password	Dimension (H x W x D)
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	Weight (Only the Unit)
User Access Limit	Max. 30 simultaneous accesses (max. 10 accesses with voice reception)	BB-HCM511: 330 g [0.73 lb.] BB-HCM531: 335 g [0.74 lb.]
Buffered Image*3	Approx. 350 images (320 x 240) *standard image quality / with time display / without using SD Memory Card	Consumption
Image Transfer Method	SMTP*, FTP, HTTP	PoE: approx. 6.5 W, AC adaptor (option): 7 W
Image Buffer/Transfer Triggers	Timer, sensor alert, motion detection	Power Supply
Camera		PoE: 48 V, IEEE802.3af-compliant Power over Ethernet AC adaptor (option): input 120 V AC, output 12 V DC
Zoom	10x digital zoom (by area)	
Viewing Angle	Horizontal: 54° (total 174°), vertical: 40° (total 105°)	
Pan Angle	-60° up to +60°	
Tilt Angle	-45° up to +20°	
Revolving Speed	Pan: max. 50°/sec - Tilt: max. 50°/sec	
Sensor Type	1/4 inch CCD sensor, approx. 320,000 pixels	
Lens Focal Point	Fixed (focal range: 0.5 m to infinity)	
Lens Brightness	F2.8	
White Balance	Auto/manual/hold	
Exposure	Auto	
Required Light Intensity	2 to 100,000 lux (in Colour Night View mode: 0.2 to 100,000 lux)	
Audio		
Audio Communication	2-Way half duplex	
Audio Play Method	Play with ActiveX	
Audio Encoding Method	Encoding with ActiveX	
Audio Compression	ADPCM 32 kbps	
Audio Bandwidth	300 Hz - 3.4 kHz	
Audio Input	Built-in microphone, external microphone input terminal	
Audio Output	Audio line output terminal for external speaker	
Terminal		
Network Interface	Ethernet (10Base-T/100Base-TX)	
External I/O Connector	Input: 2, output: 1	
Video Output*5	Analogue 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*6	

- *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 resolution and image quality.
- *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.
- *6 Operation guaranteed for 2GB, 1GB, 512MB, 256MB, 128MB and 64MB SD Memory Cards.

Panasonic

<http://panasonic.co.jp/pcc/products/en/netwkcaw/>

011045P-C111/C131-LT

All pictures simulated.

Design and specifications are subject to change without notice.

This unit is designed for use in the United States of America. Sales or use of this product in other countries may violate local laws.