



Access www.viewnetcam.com for registration information.



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

Clear Monitoring of a Wide Range of Subjects

The BB-HCM515 camera captures high-resolution images (1280 x 1024 pixels), so they can be thoroughly checked, corner to corner, even when they are enlarged to fill the screen. When recording in situations with strong contrast, such as backlighting, the camera automatically compensates for only the dark parts of the image. Its PoE*¹ capability lets you install it in locations that don't have a nearby power outlet, so you can monitor restaurants, chain stores, factories, apartment elevator entrances, and other places at anytime, from anyplace. This raises the quality of your management even from a distance, with Zero Distance Management*².

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

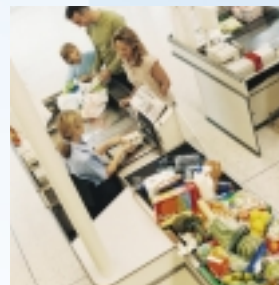
See There
When You Can't Be There™



Restaurant



Entrances



Stores



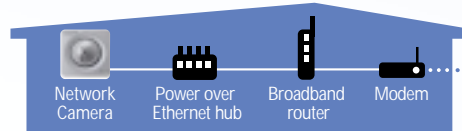
parking

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.



Monitoring Site



Office



Outdoors

*An optional AC adaptor can also be used.

Achieving Zero Distance Management with a Variety of Functions



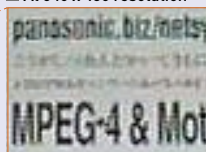
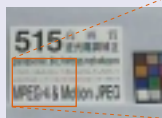
BB-HCM515

Capture

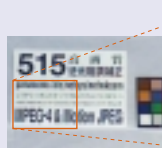
High resolution makes images easy to see. Mega-Pixel Recording

Shooting at the high resolution of 1280 x 1024 pixels allows a clear image even when enlarged. You can check any area you want by taking a closer look.

■ At 640 x 480 resolution



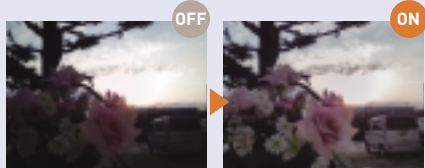
■ At 1280 x 1024 resolution



Clear, sharp image!

Compensates for backlighting too. Adaptive Contrast Enhanced

When part of the image becomes extremely dark, the camera automatically compensates for it. It also corrects only dark parts, so the entire image is appropriately bright and easy to see.



Store

SD Memory Card*1 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.



*1 The SD Memory Card is sold separately. The camera supports 64MB, 128MB, 256MB, 512MB, 1GB, and 2GB SD Memory Cards.

View

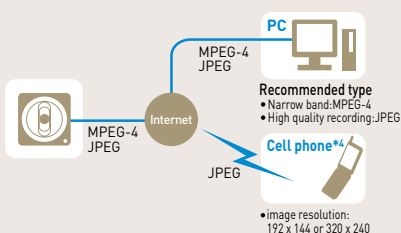
Enjoy comfortable, versatile monitoring. Simultaneous MPEG-4 and JPEG

Cameras simultaneously send MPEG-4 images in three resolutions (VGA*2, QVGA, and SCIF), and JPEG images in four resolutions*3 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.

*2 When viewing in VGA, only MPEG-4 playback offers a maximum of 30 fps.

*3 The fourth JPEG format resolution is SXGA (1280 x 1024), with a frame rate of 7 fps.

*4 For JPEG only. The audio feature does not work on cell phones.



MPEG-4 Visual License

When installing the MPEG-4 viewer program on additional PCs, please purchase additional licenses (Model No. BB-HCASA for USA, BB-HCA5CE for others).

Analogue 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.

*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 with analogue video output. The video image displays poorly in colour night view mode.

Connect

Image Transfer Function

In accordance with preset settings*6, the camera will automatically transfer images and a data log by e-mail*7 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.

*6 Preset settings can include timer, alarm, and motion detection. With JPEG connection only.

*7 PDP before SMTP authentication and SMTP authentication (PLAIN, LOGIN and CRAM-MD5) are supported.

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.

■ Pan and tilt control



*8 This is a digital zoom function and cannot be used from a cell phone.

■ 10x digital zoom



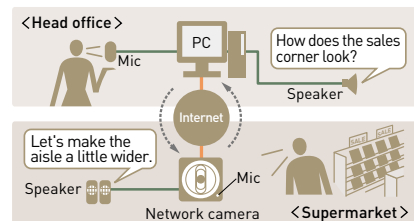
*Area is multiplied by 10x.

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.

*9 The audio feature does not work with cell phones.

*10 Walkie-talkie type conversation.



Part Names

Front View

Lens cover
Lens
Microphone
Indicator

Rear View

Factory default reset button
SD Memory Card slot
Restart button
Function button/indicator
DC IN jack
I/O connector
Stand mounting hole
LAN port
Mic terminal
Audio out terminal
Video out terminal

Specifications [BB-HCM515]

Server		Camera		General	
Video Compression	JPEG (3 levels), MPEG4	Sensor Type	1/4 inch CMOS sensor, approx. 1,300,000 pixels	Temperature	Operation: 0°C to +40°C (+32°F to +104°F) Storage: 0°C to +50°C (+32°F to +122°F)
Video Resolution	1280 x 1024*1, 640 x 480, 320 x 240 (default), 192 x 144	Lens Focal Point	Fixed (focal range: 0.5 m to infinity)	Humidity	Operation: 20% to 80% (No Condensation) Storage: 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*2	Max. 7 frames/sec. (1280 x 1024*3) Max. 30 frames/sec. (640 x 480*4, 320 x 240, 192 x 144)	White Balance	Auto/manual/hold	Weight (Only the Unit)	320 g (0.71 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, RTPC IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NDP, NTP, RTP, RTSP, RTPC	Required Light Intensity	At 640 x 480: 10 to 100,000 lux (in Colour Night View mode: 5 to 100,000 lux) At 1280 x 1024: 7 to 100,000 lux (in Colour Night View mode: 3 to 100,000 lux)	Power Supply	PoE: 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			
Buffered Image*5	Approx. 350 images (320 x 240) *standard image quality • with time display • without using SD Memory Card	Audio Communication	2-Way half duplex		
Image Transfer Method	SMTP*6, FTP, HTTP	Audio Play Method	Play with ActiveX		
Image Buffer/Transfer Triggers	Alarm, timer or motion detection	Audio Encoding Method	Encoding with ActiveX		
Camera		Audio Compression	ADPCM 32 kbps		
Zoom	10x digital zoom (by area)	Audio Bandwidth	300 Hz - 3.4 kHz		
Viewing Angle	Horizontal: 50° (total 170°), vertical: 37° (total 102°)	Audio Input	Built-in microphone, external microphone input terminal		
Pan Angle	-60° up to +60°	Audio Output	Audio line output terminal for external speaker		
Tilt Angle	-45° up to +20°	Terminal			
Revolving Speed	Pan: max. 80°/sec, tilt: max. 90°/sec	Network Interface	Ethernet (10Base-T/100Base-TX)		
		External I/O Connector	Input: 2, output: 1		
		Video Output*7	Analog composite (NTSC/PAL)		
		Audio Output*7	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 For JPEG only. Not applicable to MPEG-4.
*2 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.
*3 When viewing images at 1280 x 1024 resolution, frame rate is reduced to 7 fps for all users, regardless of the resolution they are using to view images.
*4 For MPEG-4 only. Not applicable to JPEG.
*5 The maximum number of frames changes depending on the image quality and what object you buffer.
*6 PDP before SMTP authentication and SMTP authentication (PLAIN, LOGIN and CRAM-MD5) are supported.
*7 Use only the included Audio/Video Cable when connecting an external microphone, speaker or TV.