

## View Places That You Couldn't Even See Before

Meet our new dome-shaped, ceiling-mounted network camera with a zoom lens.

A 4.6 zoom makes it possible to check places in detail.

Its 73° wide viewing angle allows you to recognize much broader range at the single sight.

Thanks to its PoE\*<sup>1</sup> capability and splash-resistant body\*<sup>2</sup>, the camera can be installed in places where it is difficult to provide power, like on factory and warehouse ceilings, or garage and store eaves.

This lets you grab every business possibility by breaking distance and time barriers with Zero Distance Management\*<sup>3</sup>.

\*1 PoE (Power over Ethernet) supplies power through an Ethernet Cable.

\*2 IPX4 (IEC 60529 standard) equivalent splash-resistance.

\*3 For details, see the bottom of this page.



See There  
When You Can't Be There



Parking lot



BB-HCM547



Walkway



Entrances



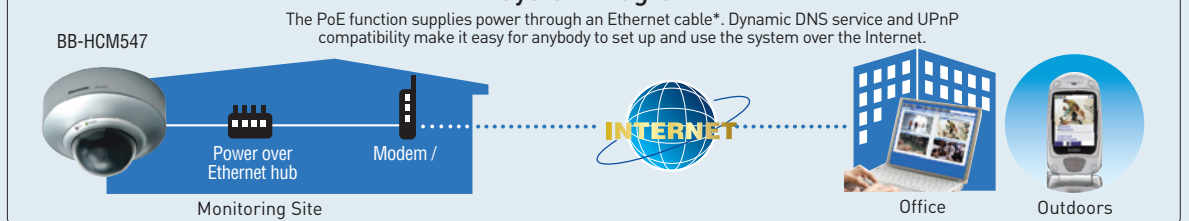
Warehouse



### 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



BB-HCM547

## Installation

### Outdoor Ready

The splash-resistant body\* expands the scope of applications by letting you install the camera outside, like on house, garage or store eaves.



\* IPX4 (IEC 60529 standard) equivalent splash-resistance

## Monitor

### Simultaneous MPEG-4\*1 and JPEG

Cameras simultaneously send MPEG-4\*1 images in three resolutions (VGA\*2, QVGA, and SCIF), and JPEG images in the same three resolutions in favor motion, standard, and favor clarity image-quality types. MPEG-4 is recommended for viewing smooth motion images, and JPEG is recommended for recording higher quality images.

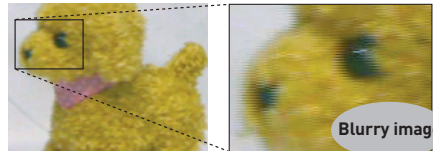
\*1 MPEG-4 is not applicable on a cell phone.  
\*2 When viewing in VGA, only MPEG-4 playback offers a maximum of 30 fps.

**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].

### Progressive scan

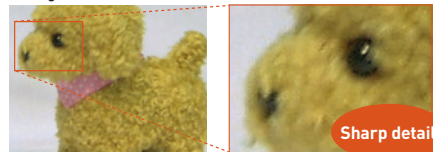
Progressive scanning eliminates the blurring that often occurs with interlaced scanning, to produce a high-quality image.

#### Interlaced scan



Blurry image

#### Progressive scan



Sharp detail

## Control

### Wide-angle Lens

The use of a 73° wide-angle lens lets you monitor a wide area in a single view. The coverage can be increased even more by combining pan and tilt operation.

The viewing angle



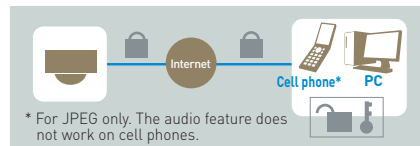
BB-HCM531 [54°]

BB-HCM547 [73°]

## Connect

### SSL support

Recorded data is sent in encrypted form, making it very difficult for someone else to "eavesdrop" on the network.



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

## 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\*3 or sent to you by e-mail\*4 or FTP data transfer\*5.

\*3 A maximum of approximately 350 images (320 x 240 pixels) can be stored in the camera.  
\*4 POP before SMTP authentication and SMTP authentication (PLAIN, LOGIN and CRAM-MD5) are supported.  
\*5 The sensor's detection history can also be e-mailed to you once a day at a preset time.



Threshold

## Store

### Recording program\*6

Video data can be downloaded to a PC using optional software. In stores, this allows for more detailed monitoring of customer behavior, and of employee attitudes toward customers, information that cannot be obtained from still images alone.

\*6 Recording is possible for only one camera. To record images from multiple cameras, use the BB-HNP11 or BB-HNP15.



■ Playback screen (BB-HNP15)

## Others

### Easy PoE power supply

The power is supplied through the Ethernet cable, so the network camera can be installed on the ceiling very easily, since the additional work for the power outlet is not required.



PoE IN port

## Part Names



## Specifications [BB-HCM547]

Network camera		Server		Terminal	
Zoom	4.6x zoom (2.3x optical, 2x digital)	Image compression	JPEG (Motion JPEG for moving image display), MPEG-4	Network interface	Ethernet (10Base-T/100Base-TX)
Viewing angle	Horizontal 32° (tele) - 73° (wide)	Video resolution	640 x 480, 320 x 240 (default), 192_144	External I/O connector	Input: 2, Output: 1
	Vertical 24° (tele) - 55° (wide)	Image quality	JPEG (favor clarity, standard, favor motion), MPEG-4	Video output	Analog composite (NTSC/PAL)
Pan (horizontal)	-175° up to +175°	Frame rate*2	Max. 30 frames/sec. (640 x 480 <sup>1</sup> , 320 x 240, 192 x 144)	Audio output	3.5 mm stereo mini jack (output is mono)
Tilt (vertical)	0° up to 82°	Security	User ID / Password, SSL	External microphone input	3.5 mm mini jack
Revolving speed	Pan: max. 300°/sec, Tilt: max. 80°/sec	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, HTTPS, SSL, TLS IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NDP, NTP, RTP, RTSP*, RTCP, HTTPS, SSL, TLS	SD Memory Card slot	Full size (operation guaranteed for 8 GB and 4 GB SDHC Memory Cards, for 2 GB, 1 GB, 512 MB, 256 MB, 128 MB and 64 MB SD Memory Cards)
Sensor Type	1/3.6 inch MOS <sup>1</sup> sensor, approx. 370,000 pixels	User access limit	Max. 30 simultaneous accesses (Max. 10 accesses with SSL communication)	<b>General</b>	
Focus	Fixed (focal range: 0.75 m to ∞)	Buffered images*5	Approx. 350 images (320 x 240) • Standard image quality (16KB per image) • with time display • without SD / SDHC Memory Card	Operating Temperature	-20°C to +50°C [-4°F to +122°F]
Aperture (F No.)	F1.9 (wide) - F2.8 (tele)	Image transfer method	SMTP*6, FTP, HTTP	Operating humidity	20% to 90% [No Condensation]
Required light intensity	2 to 100,000 lx (0.2 to 100,000 lx in color night view mode)	Image buffer/transfer triggers	Alarm, Timer or Motion detection	Dimensions (H x W x D)	153 x 115 x 153 mm [6 x 4 9/16 x 6 inches]
Scanning system	Progressive scan			Weight (only the unit)	690g [1.52 lb.]
Audio				Power supply	PoE, 4B V, IEEE802.3af-compliant Power over Ethernet AC adaptor (option): input 100 - 240 V AC, output 12 V DC
Audio communication	2-way half duplex			Power Consumption	PoE 4.4 W (7.9 W during pan/tilt scan) AC adaptor 4.4 W (8.5 W during pan/tilt scan)
Audio compression	ADPCM 32 kbps				
Audio bandwidth	300 Hz - 3.4 kHz				
Audio input	Built-in microphone or external microphone input terminal				
Audio output	Audio line output terminal for external speaker				
Audio Reception Method	ActiveX				
Audio Reception decoding	ActiveX				

\*1 Original image sensor developed by Panasonic.

\*2 The frame rate may slow down depending on the network environment, PC performance, image quality, when viewing dark images, etc.

\*3 For MPEG-4 only. Not applicable to JPEG.

\*4 Only still images in JPEG format can be displayed on a mobile phone.

\*5 The maximum number of images that can be buffered depends on image resolution and image quality.

For information about MPEG-4 image capacity, see the Panasonic Network Camera website at <http://panasonic.net/pcc/support/netwcam/support/info.html>.

\*6 POP Before SMTP Authentication and SMTP Authentication (PLAIN, LOGIN, and CRAM-MD5) are supported.