



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

## 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>.

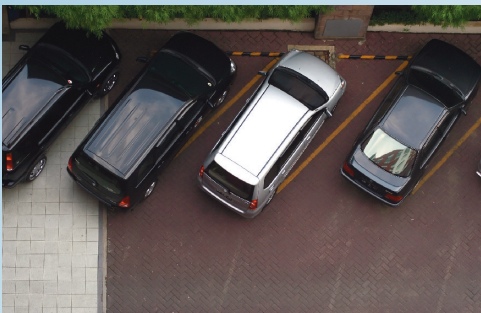
\*1 PoE (Power over Ethernet) supplies power through an Ethernet Cable.

\*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

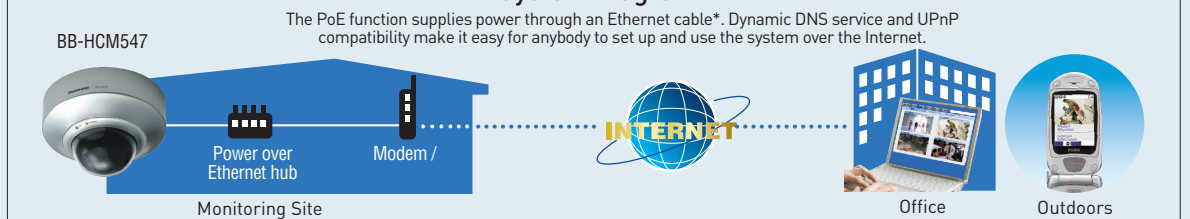


Warehouse

### 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 QSIF\_SP), 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.

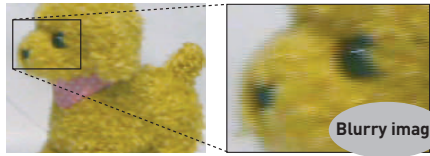
#### MPEG-4 Visual License

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

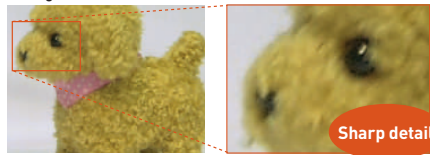
### Progressive scan

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

#### Interlaced scan



#### Progressive scan



## 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°)

## 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 970 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.

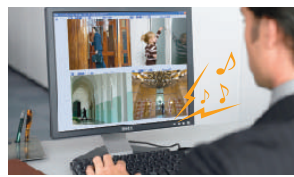
\*5 The sensor's detection history can also be e-mailed to you once a day at a preset time.



Threshold

### Detection Notification Sound

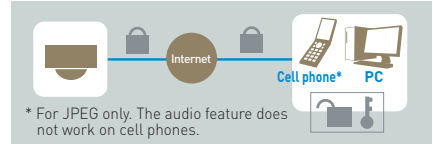
While viewing MJPEG images on the single or multi-camera screens, your computer can play a sound to notify you when motion is detected or the external sensor is triggered. This feature can be set independently on each computer that accesses the camera.



## Connect

### SSL support

Image/voice 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.

## Store

### Recording program\*6

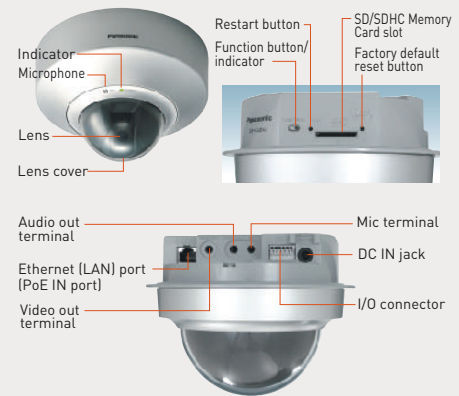
Video data can be downloaded to a PC using optional software. In stores, this allows for more detailed monitoring of customer behavior, and of employee attitudes toward customers, information that cannot be obtained from still images alone.

\*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)

## Part Names



## Specifications [BB-HCM547]

Network camera		Server		Terminal	
Zoom		Image compression		Network interface	
4.6x zoom (2.3x optical, 2x digital)		JPEG (Motion JPEG for moving image display), MPEG-4		Ethernet (10Base-T/100Base-TX)	
Viewing angle	Horizontal	Video resolution		External I/O connector	
	32° (tele) - 73° (wide)	640 x 480, 320 x 240 (default), 192 x 144		Input: 2, Output: 1	
Pan (horizontal)	Vertical	Image quality		Video output	
	24° (tele) - 55° (wide)	JPEG (favor clarity, standard, favor motion), MPEG-4		Analog composite (NTSC/PAL)	
Tilt (vertical)	Pan (horizontal)	Frame rate*2		Audio output	
-175° up to +175°		Max. 30 frames/sec. (640 x 480*, 320 x 240, 192 x 144)		3.5 mm stereo mini jack (output is mono)	
Revolving speed	Tilt (vertical)	Security		External microphone input	
Pan: max. 300°/sec, Tilt: max. 80°/sec	0° up to 82°	User ID / Password, SSL		3.5 mm mini jack	
Sensor Type	Revolving speed	Supported protocols		SD Memory Card slot*7	
1/3.6 inch MOS*1 sensor, approx. 370,000 pixels	Pan: max. 300°/sec, Tilt: max. 80°/sec	IPv4/IPv6 Dual-Stack		Full size (for more information, see the Panasonic Network Camera website at <a href="http://panasonic.net/pcc/support/netwcam/support/info.html">http://panasonic.net/pcc/support/netwcam/support/info.html</a> )	
Focus	Sensor Type	IPv4: TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, UPnP™		General	
Fixed (focal range: 0.75 m to ∞)	Focus	SMTP Authentication, RTP, RTSP*, RTCP, HTTPS, SSL, TLS		Operating Temperature	
Aperture (F No.)	Aperture (F No.)	IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NDP, NTP, RTP, RTSP*, RTCP, HTTPS, SSL, TLS		-20°C to +50°C (-4°F to +122°F)	
F1.9 (wide) - F2.8 (tele)	Aperture (F No.)	User access limit		Operating humidity	
2 to 100,000 lx (0.2 to 100,000 lx in color night view mode)	Required light intensity	HTTP: Max. 30 simultaneous accesses (max. 10 accesses in MPEG-4 mode) HTTPS: Max. 10 simultaneous accesses (max. 5 accesses in MPEG-4 mode)		20% to 90% (No Condensation)	
Scanning system	Scanning system	Buffered images*5		Dimensions (H x W x D)	
Progressive scan	Progressive scan	Approx. 970 images (320 x 240)		153 x 115 x 153 mm (6 x 4 1/2 x 6 inches)	
Audio	Audio	• Standard image quality (16KB per image)		Weight (only the unit)	
Audio communication	Audio communication	• with time display *without SD / SDHC Memory Card		690g (1.52 lb.)	
2-way half duplex	Audio communication	Image transfer method		Power supply	
ADPCM 32 kbps	Audio communication	SMTP*6, FTP, HTTP		PoE: 48 V, IEEE802.3af-compliant Power over Ethernet AC adaptor (option): input 100 - 240 V AC, output 12 V DC	
300 Hz - 3.4 kHz	Audio communication	Image buffer/transfer triggers		Power Consumption	
Built-in microphone or external microphone input terminal	Audio communication	Alarm, Timer, Motion detection or CGI trigger		PoE 4.4 W (7.9 W during pan/tilt scan) AC adaptor 4.4 W (8.5 W during pan/tilt scan)	
Audio line output terminal for external speaker	Audio communication				
Audio Reception Method	Audio communication				
ActiveX	Audio communication				
Audio Reception decoding	Audio communication				
ActiveX	Audio communication				

\*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.

\*7 SD Memory Card is a consumable storage device. The life cycle may be substantially shortened depending on usage.