

# Panasonic




NETWORK CAMERAS &  
ACCESSORIES PRODUCT CATALOG




Effective Date April, 2006

Supersedes all Previous Lists



## NETWORK CAMERAS AND ACCESSORIES PRODUCT CATALOG





Model Number	Description	Per Master Carton		UPC Code 0-37988-
		Units	Weight	
<b>SOHO NETWORK CAMERAS</b>				
<b>BL-C30A</b> 	<b>WIRELESS, PLUG AND PLAY NETWORK CAMERA</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• 802.11g/b Wireless Operation</li> <li>• Built in Web Server/IP Address</li> <li>• 10x Digital Zoom</li> <li>• 100° pan, 50° tilt</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• 1 lux Night View Mode</li> <li>• Up to 15fps</li> <li>• Viewnetcam.com address</li> <li>• Privacy button</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>9.1 lbs.</b>	<b>80972-1</b>
<b>BL-C10A</b> 	<b>PLUG AND PLAY NETWORK CAMERA</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Built in Web Server/IP Address</li> <li>• 100° pan, 50° tilt</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• Up to 15fps</li> <li>• Viewnetcam.com address</li> <li>• Privacy button</li> <li>• Multi-Language Display</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>7.8 lbs.</b>	<b>80973-8</b>
<b>BL-C20A</b> 	<b>WIRELESS, PLUG AND PLAY NETWORK CAMERA</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• 802.11g/b Wireless Operation</li> <li>• Built in Web Server/IP Address</li> <li>• 10x Digital Zoom</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• 4 lux Night View Mode</li> <li>• Up to 15fps</li> <li>• Viewnetcam.com address</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>5.6 lbs.</b>	<b>84505-7</b>



Model Number	Description	Per Master Carton		UPC Code 0-37988-
		Units	Weight	
<b>SOHO NETWORK CAMERAS (continued)</b>				
<b>BL-C1A</b>  	<b>PLUG AND PLAY NETWORK CAMERA</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Built in Web Server/IP Address</li> <li>• 10x Digital Zoom</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• 4 lux Night View Mode</li> <li>• Up to 15fps</li> <li>• Viewnetcam.com address</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>5.2 lbs.</b>	<b>84504-0</b>
<b>SEMI-PRO NETWORK CAMERAS</b>				
<b>KX-HCM280A</b>  	<b>PAN/TILT ZOOM NETWORK CAMERA</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Built in Web Server / IP Address</li> <li>• 42x Zoom (21x Optical)</li> <li>• Full 350° pan, 220° tilt</li> <li>• Higher Video Quality (CCD, 30fps)</li> <li>• Analog Video Output</li> <li>• 0.2 lux Night View Mode</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• 30 Users • Enhanced Customization</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Viewnetcam.com address</li> <li>• Banner/Caption Option</li> <li>• Multi-Language Display</li> <li>• IPv4/v6 supported</li> <li>• 1 Year Warranty</li> </ul>	<b>2</b>	<b>9.4 lbs.</b>	<b>80988-2</b>
<b>KX-HCM110A</b>  	<b>PAN/TILT NETWORK CAMERA WITH 2-WAY AUDIO</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Plug and Play Installation</li> <li>• Built in Web Server/IP Address</li> <li>• Audio Capability (2-way)</li> <li>• 10x Digital Zoom</li> <li>• 120° pan, 65° tilt</li> <li>• 1 lux Night View Mode</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Sensor Input with Preset Movement</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• Up to 30fps CMOS</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• IPv4/v6 supported</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>8.8 lbs.</b>	<b>80989-9</b>





Units, Weights and Specifications subject to change.




Model Number	Description	Per Master Carton		UPC Code 0-37988-
		Units	Weight	
<b>PRO NETWORK CAMERAS</b>				
<b>BB-HCE481A</b>  	<b>POE (POWER OVER ETHERNET COMPLIANT) PAN/TILT/ZOOM NETWORK CAMERA WITH 2-WAY AUDIO</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• 802.3af PoE Compliant</li> <li>• Plug and Play Installation</li> <li>• Built in Web Server/IP Address</li> <li>• 42x Zoom (21x Optical)</li> <li>• Full 350° pan, 220° tilt</li> <li>• Audio Capability (2-way)</li> <li>• 10x Digital Zoom</li> <li>• 120° pan, 65° tilt</li> <li>• 0.09 lux Night View Mode</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Dual Sensor Input with Preset Movement</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• Up to 30fps CCD</li> <li>• Analog Video Output</li> <li>• SD Memory Card Recording Supports 2GB SD Cards</li> <li>• Download Buffered Images to Remote Computer</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• IPv4/v6 supported</li> <li>• 1 Year Warranty</li> </ul>	<b>2</b>	<b>8.6 lbs.</b>	<b>84509-5</b>
<b>BB-HCM381A</b>  	<b>PAN/TILT/ZOOM NETWORK CAMERA WITH 2-WAY AUDIO</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Plug and Play Installation</li> <li>• Built in Web Server/IP Address</li> <li>• 42x Zoom (21x Optical)</li> <li>• Full 350° pan, 220° tilt</li> <li>• Audio Capability (2-way)</li> <li>• 10x Digital Zoom</li> <li>• 120° pan, 65° tilt</li> <li>• 0.09 lux Night View Mode</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Dual Sensor Input with Preset Movement</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• Up to 30fps CCD</li> <li>• Analog Video Output</li> <li>• SD Memory Card Recording Supports 2GB SD Cards</li> <li>• Download Buffered Images to Remote Computer</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• IPv4/v6 supported</li> <li>• 1 Year Warranty</li> </ul>	<b>2</b>	<b>15 lbs.</b>	<b>80978-3</b>

Units, Weights and Specifications subject to change.

Model Number	Description	Per Master Carton		UPC Code 0-37988-
		Units	Weight	
<b>PRO NETWORK CAMERAS</b> <i>(continued)</i>				
<b>BB-HCM371A</b>  	<b>OUTDOOR WIRELESS NETWORK CAMERA WITH 2-WAY AUDIO</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Outdoor use (splash proof, low temperature)</li> <li>• 802.11g/b wireless operation</li> <li>• Plug and Play Installation</li> <li>• Built in Web Server/IP Address</li> <li>• Audio Capability (2-way)</li> <li>• 10x Digital Zoom</li> <li>• 120° pan, 65° tilt</li> <li>• 0.2 lux Night View Mode</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Dual Sensor Input with Preset Movement</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• Up to 30fps CCD</li> <li>• SD Memory Card Recording Supports 2GB SD Cards</li> <li>• Download Buffered Images to Remote Computer</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• IPv4/v6 supported</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>11.4 lbs.</b>	<b>80977-6</b>
<b>BB-HCM331A</b>  	<b>OUTDOOR NETWORK CAMERA WITH 2-WAY AUDIO</b> <ul style="list-style-type: none"> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Outdoor use (splash proof, low temperature)</li> <li>• Plug and Play Installation</li> <li>• Built in Web Server/IP Address</li> <li>• Audio Capability (2-way)</li> <li>• 10x Digital Zoom</li> <li>• 120° pan, 65° tilt</li> <li>• 0.2 lux Night View Mode</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Dual Sensor Input with Preset Movement</li> <li>• 20 Presents - 2 Alarms - Home</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• Up to 30fps CCD</li> <li>• SD Memory Card Recording Supports 2GB SD Cards</li> <li>• Download Buffered Images to Remote Computer</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• IPv4/v6 supported</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>11.4 lbs.</b>	<b>80975-2</b>

Model Number	Description	Per Master Carton		UPC Code 0-37988-
		Units	Weight	
<b>PRO NETWORK CAMERAS</b> <i>(continued)</i>				
<b>BB-HCM311A</b>  	<b>INDOOR NETWORK CAMERA WITH 2-WAY AUDIO</b> <ul style="list-style-type: none"> <li>• Camera Server with 2-Way Audio "convert an existing camera and audio source to an IP network camera"</li> <li>• BNC Video Input/Output</li> <li>• RCA Audio Input/Output</li> <li>• Outdoor use (splash, low temperature)</li> <li>• Audio Capability (2 Way<sup>9</sup>)</li> <li>• Plug and Play Installation<sup>3</sup></li> <li>• PC, PDA and Cell Phone Viewing<sup>5</sup></li> <li>• Built in Web Server / IP Address</li> <li>• Higher Video Quality (CCD, 30fps<sup>2</sup>)</li> <li>• 30 Users • Customization Features</li> <li>• SD Memory Card Recording</li> <li>• Low Light (3Lux /0.2Lux<sup>8</sup>)</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Dual Sensor Input with Presets</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>9.8 lbs.</b>	<b>80974-5</b>
<b>BB-HCS301A</b>  	<b>NETWORK CAMERA SERVER WITH 2-WAY AUDIO</b> <ul style="list-style-type: none"> <li>• Converts nearly all video source to an internet video stream</li> <li>• View from Virtually Any Web Browser<sup>1</sup>, Video Display<sup>2</sup> or Even a Compatible Cell, Phone or PDA<sup>3</sup></li> <li>• Plug and Play Installation</li> <li>• Built in Web Server/IP Address</li> <li>• Audio Capability (2-way)</li> <li>• 4-up and 12-up Multi-Camera Pages</li> <li>• Sensor Input with Presets</li> <li>• Built-In Motion Sensor with Email Alert</li> <li>• Alarm Log</li> <li>• Up to 30fps</li> <li>• Digital Output Control</li> <li>• SD Memory Card Recording</li> <li>• Supports 2GB SD Cards</li> <li>• Download Buffered Images to Remote Computer</li> <li>• Viewnetcam.com address</li> <li>• Multi-Language Display</li> <li>• IPv4/v6 supported</li> <li>• 1 Year Warranty</li> </ul>	<b>3</b>	<b>6 lbs.</b>	<b>84501-9</b>

Model Number	Description	Per Master Carton		UPC Code 0-37988-
		Units	Weight	
<b>HOME NETWORKING THROUGH THE POWERLINE</b>				
<b>BL-PA100A</b> 	<b>HD-PLC ETHERNET ADAPTOR</b> <ul style="list-style-type: none"> <li>• Connect to the Network and Internet through any AC Outlet</li> <li>• Easy Setup - No New Wiring or PC Required</li> <li>• Broadcasts both Data and Video Up to 4 Streams of HD Quality Video</li> <li>• Secure and Fast Communication 190Mbps and 128bit encryption</li> <li>• Signal Stays within the Electrical Circuit</li> <li>• Requires a Minimum of 2 Units - Master and Terminal Refer to BL-PA100KT - Starter Pack</li> </ul>	<b>5</b>	<b>6.15 lbs.</b>	<b>84506-4</b>
<b>BL-PA100KTA</b> 	<b>HD-PLC ETHERNET ADAPTOR SET - 2 BL-PA100S</b> <ul style="list-style-type: none"> <li>• Connect to the Network and Internet through any AC Outlet</li> <li>• Easy Setup - No New Wiring or PC Required</li> <li>• Broadcasts both Data and Video Up to 4 Streams of HD Quality Video</li> <li>• Secure and Fast Communication 190Mbps and 128bit encryption</li> <li>• Signal Stays within the Electrical Circuit</li> <li>• Requires a Minimum of 2 Units - Master and Terminal</li> </ul>	<b>5</b>	<b>9.91 lbs.</b>	<b>84508-8</b>
<b>RECORDING SOFTWARE</b>				
<b>BB-HNP11A</b> 	<b>RECORDING AND CONTROL SOFTWARE</b> View Many Cameras on One Screen, Record to a Hard Drive, Multi-Camera Recording with Date/Time Stamp*, Pan/Tilt/Zoom Controls, Motion Detection, Automatic Archive, Automatic Overwrite, Multiple Profiles with Password Management, Selectable Recording Rate (up to 10 FPS to 1 Frame per Hour)*	<b>3</b>	<b>0.4 lbs.</b>	<b>80979-0</b>
<b>ROUTER AND CAMERA MANAGEMENT</b>				
<b>BB-HGW700A</b> 	<b>VPN 802.11G ROUTER AND CAMERA MANAGEMENT SYSTEM</b> VPN Secured Router, Automatically configures up to 16 cameras, Creates custom portal page with link to each camera, 4 Switched Ethernet ports, 802.11g Access Point, Integrated Router with NAT Firewall	<b>3</b>	<b>8.7 lbs.</b>	<b>80981-3</b>

Model Number	Description	Per Master Carton		UPC Code 0-37988-
		Units	Weight	
<b>TELEVISION VIEWING</b>				
<b>BL-WV10A</b> 	<b>TELEVISION ADAPTOR</b> <ul style="list-style-type: none"> <li>• Easy to Set Up and Watch on TV</li> <li>• Change the Camera Direction by Remote Control (Pan/Tilt)</li> <li>• A Warning Buzzer informs you when a person is detected</li> <li>• Record and Email Camera-triggered events on an optional SD memory card</li> <li>• The camera images can be easily recorded</li> <li>• Connect and operate up to 8 cameras</li> <li>• Display up to 4 cameras on one screen</li> <li>• Plug and play camera settings include Wireless Security</li> <li>• Use with a Video Modulator and IR Blaster (optional) to put onto whole house video system</li> </ul>	<b>3</b>	<b>10.61 lbs.</b>	<b>80990-5</b>
<b>BL-MS103A</b> 	<b>INTERNET VIDEO MONITORING SYSTEM</b> Includes 3 Color Cameras, TV Adaptor and Remote Control <ul style="list-style-type: none"> <li>• It's Wireless. Place the cameras anywhere.</li> <li>• Pan/Tilt Control. Move each camera via the internet, cell phone or TV.</li> <li>• Easy Setup. It's Plug and Play simple! No PC required on location.</li> <li>• Monitor up to 8 locations with your TV.</li> <li>• Built-in Thermal Sensor with Alarm.</li> <li>• Record and Email Camera-triggered events on an optional SD memory card.</li> </ul>	<b>1</b>	<b>7.6 lbs.</b>	<b>80998-1</b>
<b>BB-HCA1A-B</b> 	<b>INDOOR TINTED CAMERA COVER</b> <ul style="list-style-type: none"> <li>• Fits KX-HCM280A, BB-HCM381A and BB-HCE481A models</li> <li>• Ceiling Mounted</li> <li>• Permability 36%</li> <li>• Minimum illuminance 9 lux (with cover) and 3 lux (without cover)</li> <li>• Minimum illum 0.27 lux (color night view) and 0.09 lux (without cover)</li> </ul>	<b>3</b>	<b>4.5 lbs.</b>	<b>84502-6</b>
<b>FOOTNOTES</b>				
1. Internet Explorer 6.0 or later. 2. Requires optional BL-WV10A TV Adaptor 3. Compatible cell phones and PDAs must be able to display JPEG images and HTML or XHTML web pages. Additional fee-based cellular may be required.				



# Specifications

## Network camera

Product type	Business use						Home use				
	Outdoor/Indoor type		Indoor type				Indoor type				
	Wireless type and voice function		Voice function		Zoom, voice function		Wireless type		Wireless type		
Model No.	BB-HCM371 	BB-HCM331 	BB-HCM311 	KX-HCM110 	KX-HCM280 	BB-HCE481 	BB-HCM381 	BL-C30 	BL-C10 	BL-C20 	BL-C1 
Image data compression system	JPEG (Motion JPEG for moving image display)										
Video resolution	640 x 480, 320 x 240, 160 x 120										
Image quality	3 modes (favor clarity, standard, favor motion)										
Frame rate <sup>*1</sup>	Max. 12 frames/sec (640 x 480) <sup>**</sup> Max. 30 frames/sec (320 x 240) Max. 30 frames/sec (160 x 120)		for KX-HCM280 Max. 10 frames/sec (640 x 480) <sup>**</sup> Max. 30 frames/sec (320 x 240) Max. 30 frames/sec (160 x 120)				Max. 7.5 frames/sec (640 x 480) Max. 15 frames/sec (320 x 240) Max. 15 frames/sec (160 x 120)				
Security	User ID/Password/PSec						User ID/Password				
Encryption algorithm	DES-CBC, 3DES-CBC, AES-CBC						—				
IPsec function <sup>*1</sup>	ESP encryption, ESP authentication, transport mode (main mode only)/tunnel mode (IKE (Internet Key Exchange))						—				
Supported protocols	IPv4/IPv6 dual stack IPv4: TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, iPPsec, UPnP IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NTP, NTP, iPPsec						TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, DDNS		TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, UPnP		
User access limit	Max. 30 simultaneous accesses (max. 10 accesses with voice reception) (KX-HCM280 has no voice function.)						Max. 20 simultaneous accesses				
Buffered images <sup>*2</sup>	Approx. 125 images (320 x 240) • Approx. 10 KB per image • Without using SD Memory Card						Approx. 250 images (320 x 240, standard image quality)				
Zoom	10x digital zoom			Maximum 42x (21x optical, 2x digital)			10x digital zoom				
Viewing angle	53° horizontal (total 173°) 40° vertical (total 105°)			Tele: 2.6°, Wide: 51° (horizontal) Tilt: 1.9°, Wide: 38° (vertical)			43° horizontal (total 143°) 32° vertical (total 82°)		53° horizontal 41° vertical		
Pan (horizontal direction)	-60° up to +60°			-175° up to +175°			-50° up to +50°		—		
Tilt (vertical direction)	-45° up to +20°			-120° up to 0° (On a table), 0° up to +90° (On a ceiling)			-40° up to +10°		—		
Revolving speed	Pan: Max. 80°/sec Tilt: Max. 80°/sec			Pan: Max. 300°/sec Tilt: Max. 200°/sec			Pan: Max. 50°/sec Tilt: Max. 50°/sec		—		
Number of pixels	1/4 inch, approx. 320,000 pixels, CCD sensor		CMOS		1/4 inch, approx. 360,000 pixels, CCD sensor		1/4 inch, approx. 320,000 pixels, CMOS sensor				
Lens focal point	Fixed (focal range: 0.5 m to ∞)						Fixed (focal range: 0.5 m to ∞) / Fixed (focal range: 0.3 m to ∞)				
Lens brightness	F 3.5						F 1.6 (Wide) - 3.6 (Tele)		F 2.8		
Required light intensity	3 to 100,000 lux (In color night view mode: 0.2 to 100,000 lux)		5 to 100,000 lux (1 to 100,000 lux)		3 to 100,000 lux (In color night view mode: 0.09 to 100,000 lux)		1 to 10,000 lux		10 to 10,000 lux (In color night view mode: 4 to 10,000 lux)		
Voice direction	Half duplex two-way communication (transceiver system)						—				
Voice data compression system	ADPCM 32 kbps						—				
Voice band	300 Hz - 3.4 kHz						—				
Audio input	Built-in microphone or external microphone (sold separately), external microphone input terminal (3.5-mm dia. mini-jack)						—				
Audio output <sup>*3</sup>	Audio line output terminal for external speaker (3.5-mm dia. stereo mini-jack, monoaural output)						—				
Standards	802.11 b/g		—		802.11 b/g		—		802.11 b/g		—
Antenna	Diversity		—		Diversity		—		Diversity		—
Number of channel	11 ch.		—		11 ch.		—		11 ch.		—
Transmission speed	up to 54 Mbps.		—		up to 54 Mbps.		—		up to 54 Mbps.		—
Security	WEP 64/128/152 bit		—		WEP 64/128/152 bit		—		WEP 64/128/152 bit		—
Network interface	Ethernet (10Base-T/100Base-TX)										
I/O connector for sensor	G GND 1 External sensor input G GND 2 External sensor input 3 External device control output 4 DC power output terminal (10.5-13.5 VDC)			1 GND 2 PC power output terminal 3 External sensor input 4 External device control output		G GND 1 External sensor input G GND 2 External sensor input 3 External device control output 4 DC power output terminal (10.5-13.5 VDC)		—			
Analog video output	—						Composite NTSC				
SD Memory Card slot	Full size (operation guaranteed for 2GB, 1GB, 512MB, 256MB, 128MB and 64MB SD Memory Cards)			—		Full size (operation guaranteed for 2GB, 1GB, 512MB, 256MB and 64MB SD Memory Cards)		—			
Operating temperature	-4°F to 122°F (-20°C to +50°C)		32°F to 104°F (0°C to +40°C)				41°F to 104°F (+5°C to +40°C)				
Operating humidity	20% to 90% (No condensation)		20% to 80% (No condensation)				20% to 80% (No condensation)				
Dimensions (H x W x D)	0.51 x 0.51 x 0.46 inches (13.0 x 13.0 x 11.8 mm)		2.01 x 1.15 x 2.78 inches (50.8 x 29.1 x 71.1 mm)			5.12 x 4.13 x 4.13 inches (130.0 x 105.0 x 105.0 mm)		3.8 x 1.5 x 1.8 inches (96.5 x 38.1 x 45.7 mm)		3.8 x 1.5 x 1.8 inches (96.5 x 38.1 x 45.7 mm)	
Weight (Only the unit)	0.78 lb (350 g)		0.68 lb (310 g)		0.61 lb (275 g)		1.41 lb (640 g)		1.43 lb (650 g)		1.41 lb (640 g)
Power supply	AC adaptor: Input 120 V AC, Output 12 V DC						PoE		AC adaptor: Input 120 V AC, Output 12 V DC		AC adaptor: Input 120 V AC, Output 9 V DC
Consumption	10 W		6 W		5.5 W		12 W		11 W		12 W



\*1 This series depending on the subject, image quality, network environment, PC performance, etc.  
 \*2 The image update speed may decrease when four motion is set, where images are recorded onto an SD Memory Card, and when IPsec is used, as well as due to the network environment and PC performance.  
 \*3 Transpar mode (made for IPsec communication between terminals, for IPv4 only) operating environment: Microsoft® Windows® XP Service Pack 1 only, tunnel mode (made for IPsec between VPN routers, IPv4/IPv6)  
 \*4 The number of images that can be stored varies depending on the subject. \*5 Install an amp or use a speaker with a built-in amp.

Specifications

Wireless camera monitoring system		Network camera server	
Model No.	BL-WV10	Model No.	BB-HCS301
			
Monitoring	Image data compression system	JPEG (Motion JPEG for moving image display)	JPEG (Motion JPEG for moving image display)
	Video resolution	640 x 480, 320 x 240	640 x 480, 320 x 240 (default), 160 x 120
	Image quality	3 modes (favor clarity, standard, favor motion)	3 modes (favor clarity, standard, favor motion)
	Frame rate	Max. 30 frames/sec (320 x 240)	Max. 12 frames/second (640 x 480) Max. 30 frames/second (320 x 240 or 160 x 120)
LAN interface	Security	User ID/Password	User ID/Password/PSec
	Supported protocols	IPv4, TCP, UDP, HTTP, FTP, DHCP	DES-CBC, 3DES-CBC, AES-CBC
	Camera image display	Displays a maximum of 8 camera images 1 screen per 8 pages, 4 screens per 2 pages Camera pan/tilt operations Image size switching Resolution switching	ESP Encryption, ESP Authentication Transport mode/Tunnel mode IKE (Internet Key Exchange)
	Camera motion sensor support	Automatic switch to camera image Automated camera image recording Buzzer/LED notification	Pre-Shared Key, Main mode
Wireless LAN interface	Encryption algorithm		
	IPsec function		
	IKE (Internet Key Exchange)		
	Supported protocols	IPv4/IPv6 Dual-Stack • IPv4: TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, IPsec, UPnP™ • IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NDP, NTP, IPsec	
Terminal	User access limit	Max. 30 simultaneous accesses (max. 10 accesses with voice reception)	
	Buffered image*1	Approx. 125 images (320 x 240) • Approx. 16 KB per image • Without using SD Memory Card	
	Message-digest algorithm	HMAC-MD5, HMAC-SHA-1	
	Image transfer condition	Alarm, Timer or Motion Detection	
General	Image transfer method	SMTP, FTP	
	Audio communication	2-way half duplex	
	Audio bandwidth	300 Hz — 3.4 kHz	
	Audio play method	Play with ActiveX	
General	Input encoding method	Encoding with ActiveX	
	Audio input	RCA pin jack Input impedance: 47 kΩ maximum 0 dBm	
	Audio output*1	RCA pin jack Output impedance: 600 Ω	
	Interface	10Base-T/100Base-TX Ethernet RJ-45 connector x 1	
General	External I/O	External sensor input x 1 External sensor output x 1	
	Video input	BNC connector 1.0 Vp-p/75 Ω(NTSC)	
	Video output	BNC connector through output of video input	
	SD Memory Card slot	Full size (operation guaranteed for 1GB, 512MB, 256MB, 128MB and 64MB SD Memory Cards)	
General	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating humidity	20% to 80% (No condensation)	
	Dimensions (H x W x D)	1 5/8 x 8 11/16 x 6 3/4 inches (42 x 220 x 171 mm) (excluding antenna and protrusions)	
	Weight (Main unit only)	1.1 lb (500 g)	
General	Power supply	AC adaptor: Input 120 V AC, Output 12 V DC	
	Consumption	7.5 W	
		*1 Frame rate may slow down depending on the network environment, the PC performance, the image quality, existing IPsec, or what object you view.	
		*2 The maximum number of frames changes depending on the image quality and what object you buffer.	
		*3 Use the audio output with an amp.	


\*1 The values listed here are the theoretical maximum transmission speeds for wireless networks, and do not represent the actual speed of transmission.

Specifications

Network camera control unit		Network camera recorder		
Model No.	BB-HGW700 	Model No.	BB-HNP11 	
<b>Main unit</b>				
WAN interface	Number of ports	1		
	Connector shape	8-pin modular jack (RJ-45)		
	Physical interface	IEEE 802.3 (10Base-T) IEEE 802.3u (100Base-TX)		
	Throughput between WAN and LAN using IPv4 (value measured by Panasonic)	Maximum of 98 Mbps (IPv4/SmartBits) Maximum of 93 Mbps (FTP [Static]) Maximum of 92 Mbps (FTP [PPPoE]) Maximum of 16 Mbps (FTP [PPTP]) Maximum of 45 Mbps (IPsec, No Encryption, SHA-1 Authentication Algorithm)		
LAN interface	Throughput between WAN and LAN using IPv6 (value measured by Panasonic)	Maximum of 98 Mbps (IPv6/SmartBits) Maximum of 85 Mbps (FTP [Static]) Maximum of 47 Mbps (IPsec, No Encryption, SHA-1 Authentication Algorithm)		
	Number of ports	4		
	Connector shape	8-pin modular jack (RJ-45)		
	Physical interface	IEEE 802.3 (10Base-T) IEEE 802.3u (100Base-TX)		
Wireless interface	IEEE 802.11b	Transmission speed (Standard value) (Mbps)	11/5.5/2/1* (complying with IEEE 802.11b); automatic fallback	
		Security	WPA-PSK (TKIP), WPA2-PSK (AES), WEP (64 bit/128 bit/152bit), SSID, stealth SSID (hidden SSID), permitting/not permitting connection using the ANY key, MAC address filtering	
	IEEE 802.11g	Transmission speed	54/48/36/24/18/12/9/6* (complying with IEEE 802.11g); automatic fallback	
		Number of channels	11	
General	Security	WPA-PSK (TKIP), WPA2-PSK (AES), WEP (64 bit/128 bit/152 bit), SSID, stealth SSID (hidden SSID), permitting/not permitting connection using the ANY key, MAC address filtering		
	Operating temperature	32°F to 104°F (0°C to 40°C)		
	Operating humidity	20% to 85% (No condensation)		
	Dimensions (H x W x D)	1 7/16 x 8 1/16 x 5 1/2 inches (36x204x140 mm) (when the antenna is stored)		
	Weight (Only the unit)	0.7 lb (330 g)		
	Power supply	AC adaptor: Input 120 V AC, Output 12 V DC		
Consumption	6 W			
**The figures shown are theoretical maximums and not the actual figures when using the product.				
<b>Software</b>				
Router function	WAN side connection mode	IPv4: PPPoE/DHCP (static) IPv6: Tunneling/6 to 4 (static, v6)		
	PPPoE connection	Always/Manual		
	RIP	Yes (RIPv2)		
	RIPng	Yes		
	DHCP server	Yes (128 client setup is possible)		
	DNS relay (DNS proxy/servering)	Yes		
	IP packet filtering	Yes (64 setup)		
Address translation method	IP masquerade, port forwarding			
VPN	PPTP Server (IPv4) IPsec (IPv4)			
		Camera registration monitoring	No. of registrable camera units	No limitation. Note that the actual number of registrable camera units varies depends on the performance of the PC used.
			Camera image view	Images captured by registered cameras are shown in small images on a single screen.
			Image display size	6 sizes from 320 x 240 to 60 x 45
			Camera setup	Each camera can be set up individually (camera name, resolution, image quality setting, recording format, timer setting, etc.)
		Recording	Selected camera image display	The image of the selected camera can be enlarged (640 x 240, 320 x 240)
			Image zoom in/out	Increase/decrease of image size in 25% steps (25% to 700%), image display size adjusted according to window size
			Camera control	Control of basic camera functions (pan/tilt/zoom, brightness, resolution, image quality, sound level).
			Preset	Preset functions set in cameras can be used
		Image operation	Recording file format	Original file format; images and voices are recorded continuously in a moving image file.
			Recording media	Hard disk
			Recording resolution	640 x 480, 320 x 240, 160 x 120
			Image quality	Image-quality priority, standard, motion-priority
			Recording interval	Not specified (based on camera's image update interval), specified: 2 images/second to 1 image/hour
			No. of camera units for simultaneous recording	Dependent on camera type and performance of PC. See the hardware specifications below.
			Recording capacity limit function	Maximum recording capacity value can be set for individual camera units (whether to save new data by overwriting or stop recording when the set capacity is reached can be selected).
			Motion detection recording	The unit can be set to activate recording when motion is detected (sensitivity and threshold value can be adjusted) or to record for a certain time length before and after motion detection.
			Timer recording	Programming of start and stop schedules based on day of week and time. Keyword can also be set for recording (10 schedules can be registered per camera).
			Disk capacity limit function	Monitors the free space on the specified recording disk, and stops recording when the free space becomes smaller than the set value.
		Image search	Continuous playback	Playback of images with voices, playback of image files, Playback speed can be varied.
			Recorded image view	Displays recorded image files in a list format.
			Operation of recorded images	Recorded images can be copied or deleted.
		System Requirements	Automatic backup of recorded images	Automatically copies recorded images in a specified folder at a set time.
			Format conversion	Converts all or part of recorded images to JPEG format file.
			Recorded image search function	Search using recording time or keyword set before recording.
			Item	Description
		OS	Microsoft® Windows® XP Professional Edition, Windows® 2000 (Service Pack2 or later)	
		Web browser	Internet Explorer 6.0 or later	
		File system	NTFS (NT File System) recommended	
		Hardware specifications	Recording condition	<ul style="list-style-type: none"> <li>When 10 network camera units are connected CPU: Intel® Pentium® 4 3GHz or greater, or equivalent compatible processor, RAM: 512 MB or more</li> <li>When 4 network camera units are connected CPU: Intel® Pentium® 4 1.8GHz or greater, or equivalent compatible processor, RAM: 256 MB or more</li> </ul>
			Voice	Audio output function (including speaker or headphone)

Specifications

HD-PLC Ethernet adaptor

Model No.		BL-PA100		LAN / PLC interface	Maximum no. of devices connected to each adaptor	8
					Interface	10Base-T/100Base-TX Auto MDI/MDI-X
				Protocol	IPv4 / IPv6 / TCP / UDP	
				Operating temperature	32 °F to 104 °F (0 °C to 40 °C)	
				Operating humidity	20 % to 85 %	
				Dimensions (H x W x D)	2 3/4 x 4 3/4 x 1 9/16 inches (70 x 121 x 40 mm) (Except protrusion)	
				Weight	0.53 lb (240 g)	
				Power supply	Input 120 V AC	
				Consumption	4 W	
<b>Main unit</b>						
PLC interface	Standard	HD-PLC				
	Actual rate	Maximum 70 Mbps (UDP) Maximum 42 Mbps (TCP-When using FTP)				
	Maximum no. of adaptors per network	16 (including the master)				
<b>HD-PLC standard specification</b>						
Frequency band	4 — 28MHz			Error collection	Reed-Solomon encoder/decoder and Convolutional encoder/Viterbi decoder	
Modulation	Wavelet OFDM (16 PAM to 2 PAM)			Encryption	AES 128-bit encryption	
Transmission PHY rate	Maximum 190 Mbps <sup>*)</sup>			Communication distance	About 400 ft (130 m) (Varies depending on the electrical environment.)	
Access method	CSMA / CA TDMA					

<sup>\*)</sup> This is the theoretical maximum data transmission speed.

**WARRANTY DATA** – COMPLETE TERMS OF THE WARRANTY ARE SET FORTH ON WARRANTY CARDS PACKED WITH THE PRODUCT AND AVAILABLE FOR THE CUSTOMER'S EXAMINATION FROM THE DEALER PRIOR TO PURCHASE.

**LIMITED WARRANTY**

- All Panasonic supplied "KX-HCM", "KX-HCM", "BB-HCM" and "BB-HCE" Network Camera Systems, Home Gateway Routers and Recording Software  
1 Year Parts and Labor

**ALL OF THE ABOVE SUBJECT TO TERMS  
OF WRITTEN WARRANTY**

**All shipments F.O.B. from our warehouse**

**All Orders subject to our acceptance.**

**Prices quoted are subject to change without notice.**

**Units, Weights, and Specifications are subject to change.**

**NO RETURNS without prior approval in writing by our Regional Office.**

**For Warranty service, please send product, including detailed description of problem, to one of the Network Camera Repair Centers Listed below.**

**NETCAM Service Centers**

Panasonic Factory Service  
410B Airport Road  
Elgin, IL 60123  
(847) 468-5543

**MINIMUM ORDER QUANTITY POLICY**

ALL ORDERS MUST BE IN MASTER CARTON QUANTITY INCREMENTS ONLY!  
WHEN PRODUCT CATEGORIES ARE MIXED ON AN ORDER, THE CATEGORY WITH THE HIGHEST MINIMUM WILL DETERMINE THE MINIMUM ORDER QUANTITY FOR THAT ORDER.

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