



## VGA / 640 x 480 H.264 Network Camera

### Key Features

- 0.32 Megapixel high sensitivity CMOS Sensor
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording by "UniPhier®", Panasonic's proprietary System LSI platform.
- Full frame (Up to 30 fps) transmission at VGA (640 x 480) image size
- High sensitivity with Day & Night (Electrical) function: 0.9 lx (Color), 0.6 lx (B/W) at F2.8
- Digital Noise Reduction: 3D-DNR ensures noise reduction in various conditions.
- Progressive scan ensures clear images with less motion blur and no tearing even when the subject is moving.
- Electronic sensitivity enhancement: Auto (Up to 8x) / OFF
- Selectable light control modes: Indoor scene (50 Hz) / Indoor scene (60 Hz) / ELC (maximum exposure time)  
Indoor scene (50 Hz/60Hz): Flicker caused by fluorescent lightning will be automatically compensated.  
ELC (maximum exposure time): The lightning control will be automatically performed by adjusting shutter speed in the range of ELC.
- 4x digital zoom controlled by browser
- VMD (Video Motion Detection) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of human face and the information is sent by XML or video stream.
- Privacy Zone can mask up to 2 private areas, such as house windows and entrances/exits.
- Camera title display: Up to 20 alphanumeric characters on the browser
- Alarm sources including VMD and Panasonic alarm command can trigger actions such as FTP image transfer, E-mail notification, Indication on browser, and Panasonic alarm protocol output.
- JPEG Image compression ratio can be changed by alarm so that higher quality image can be provided.
- Prioritized stream control: One of the video streams can be prioritized when multiple recorders or client PCs are accessing the camera so that the recorder or the client PC can maintain the frame rate.
- H.264 max. bit rate/client and Total bit rate control allows flexible network traffic management. Frame rate priority mode controls bit rate and compression ratio to provide the specified frame rate.
- Internet mode: H.264 images can be transmitted over HTTP protocol.

- Multi-language: English / Italian / French / German / Spanish / Russian / Chinese / Japanese
- IPv4/IPv6 protocol supported
- Supports SSL, DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet.
- Onvif compliant model
- Smartphone monitoring : Direct camera control from smartphone
- PC software recording (BB-HNP17: Network Camera Recorder with Viewer Software)

### Standard Accessories

- |  |       |                            |       |
|--|-------|----------------------------|-------|
| • Flexible Stand .....                       | 1 pc. | • Installation Guide ..... | 1 pc. |
| • AC Adaptor .....                           | 1 pc. | • CD-ROM*1 .....           | 1 pc. |
| • Configure the settings of the camera ..... | 1 pc. |                            |       |

\*1 The CD-ROM contains the operating instructions and different kinds of tool software programs.

## Specifications

Camera	Image Sensor	1/5 type CMOS Sensor	
	Effective Pixels	Approx. 0.32 megapixels	
	Scanning Mode	Progressive	
	Scanning Area	2.69 mm (H) x 2.02 mm (V) (1/8 inches (H) x 1/16 inches (V))	
	Minimum Illumination	Color: 0.9 lx (F2.8, Auto slow shutter: Off (1/30s), Gain:On(High)) Color: 0.11 lx (F2.8, Auto slow shutter: Max. 8/30s, Gain:On(High)) <sup>*1</sup> BW: 0.6 lx (F2.8, Auto slow shutter: Off (1/30s), Gain:On(High)) BW: 0.08 lx (F2.8, Auto slow shutter: Off (8/30s), Gain:On(High)) <sup>*1</sup>	
	White Balance	AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K)	
	Light Control Mode	Indoor scene (50 Hz / 60 Hz) / ELC	
	Shutter Speed	ELC (1/30 s), ELC (3/100 s), ELC (3/120 s), ELC (2/100 s), ELC (2/120 s), ELC (1/100 s), ELC (1/120 s), ELC (1/250 s), ELC (1/500 s), ELC (1/1,000 s), ELC (1/2,000 s), ELC (1/4,000 s), ELC (1/8,000 s)	
	Adaptive Black Stretch	ON / OFF	
	AGC	ON (HIGH) / ON (MID) / ON (LOW) / OFF	
	Electronic Sensitivity UP	OFF (1/30 s), Max. 2/30 s, Max. 3/30 s, Max. 4/30 s, Max. 8/30 s	
	Day & Night (electrical)	OFF / AUTO	
	Digital Noise Reduction	HIGH / LOW	
	Video Motion Detection	ON / OFF (4 areas available)	
	Lens	Privacy Zone	ON / OFF (up to 2 zones available)
Camera Title (OSD)		Up to 20 characters (alphanumeric characters, marks) , On/Off	
Focal Length		2.7 mm	
Angular Field of View		Horizontal: 53 °, Vertical: 40.5 °	
Browser GUI	Maximum Aperture Ratio	1 : 2.8	
	Focusing Range	0.5 m ~ ∞	
	Camera Control	Brightness	
	Display Mode	Spot, Quad: Image from 16 cameras can be displayed in 4 different Quad screens or 16 split screen (JPEG only). 20 characters camera title available.	
	Zoom	electronic zoom (up to 4x).	
	Camera Title	Up to 20 alphanumeric characters	
	Clock Display	Time: 12H/24H, Date: 5 formats on the browser, Summer time (Manual)	
	Alarm Control	Reset	
	One Shot Capture	A still picture will be displayed on a newly opened window.	
	GUI/Setup Menu Language	English / Italian / French / German / Spanish / Russian / Chinese / Japanese	
Network	System Log	Up to 100 (Internal), error logs	
	Supported OS <sup>*4, *5</sup>	Microsoft® Windows® 7, Microsoft® Windows Vista®, Microsoft® Windows® XP SP3	
	Supported Browser	Windows® Internet Explorer® 9.0 (32 bit), Windows® Internet Explorer® 8.0 (32 bit), Windows® Internet Explorer® 7.0 (32 bit), Microsoft® Internet Explorer® 6.0 SP3	
	Network IF	10Base-T / 100Base-TX, RJ-45 connector (female)	
	Image Resolution <sup>*6</sup>	Aspect ratio: [4 : 3] H.264: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps JPEG: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps	
		Aspect ratio: [16 : 9] H.264: 640 x 360 / 320 x 180, up to 30 fps JPEG: 640 x 360 / 320 x 180, up to 30 fps	
	H.264	Transmission Mode	Constant bitrate / Frame rate / Best effort
		Frame Rate	1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 fps
		Bit Rate/Client	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4096
		Image Quality	LOW / NORMAL / FINE
JPEG	Refresh Interval	1 fps ~ 30 fps	
	Transmission Type	UNICAST / MULTICAST	
	Image Quality	10 steps	
	Refresh Interval	0.1 fps ~ 30 fps	
Alarm	Transmission Type	PULL / PUSH	
	Supported Protocol	IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, MLD, ICMP, ARP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP	
	FTP Client	Alarm image transmission, FTP periodic transmission	
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)	
	Face Detection	ON / OFF (with XML notification)	
	Cellular Phone Compatibility	JPEG image	
	Mobile Terminal Compatibility <sup>*7</sup>	iPad, iPhone, iPod touch (iOS 4.2.1 or later) , Android™ mobile terminals	
	Alarm Source	VMD, Command alarm	
	Alarm Actions	E-mail notification, Indication on browser, FTP image transfer, Panasonic protocol output	
	General	Schedule	VMD
Safety/ EMC Standard		BL-VP101: <Safety> UL60950-1 Ed.2, C22.2 NO.60950-1 Ed.2 <EMC> FCC Part15 ClassB, ICES-003 ClassB BL-VP101E / BL-VP101U: <Safety> IEC60950-1 Ed.2 <EMC> EN55022 ClassB, EN55024	
Power Source and Power Consumption		6.5 V DC (Use only with Panasonic AC adapter) BL-VP101/VP101E/VP101U: max. 1.8 W	
Ambient Operating Temperature		0 °C ~ 40 °C (32 °F ~ 104 °F)	
Ambient Operating Humidity		Less than 90 % (no condensation)	
Dimensions		70 mm (W) x 70 mm (H) x 25.4 mm (D) [2-3/4 inches (W) x 2-3/4 inches (H) x 1 inch (D)] (excluding projection)	
Mass (approx.)		Approx. 75 g (0.17 lbs)	
Finish		Main body: ABS resin, white	

\*1 Converted value

\*2 The actual line speed may be different depending on the network environment and the wireless devices connected.

\*3 Depending on the wireless router (wireless access point) used, connections may not possible between the camera and the wireless router.

When connecting with 802.11n, select WPA-PSK (AES) or WPA2-PSK (AES) for security.

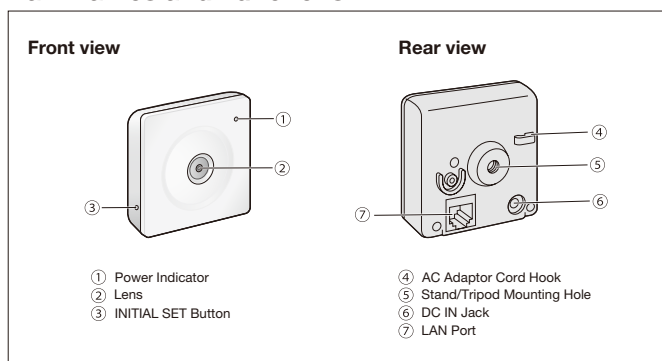
\*4 Refer to "Notes on Windows Vista" / Windows® 7 on the provided CD-ROM for further information about system requirements for a PC and precautions when using Microsoft® Windows® 7 or Microsoft® Windows Vista®.

\*5 When using IPv6 for communication, use Microsoft® Windows® 7 or Microsoft® Windows Vista®.

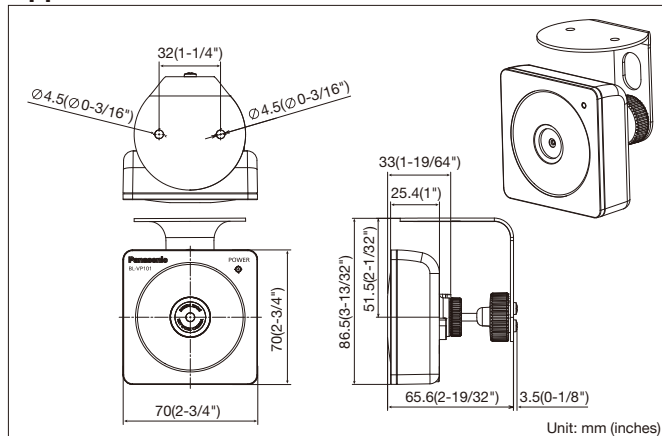
\*6 Transmission for 2 streams can be individually set in the same compression method.

\*7 For further information about compatible devices, refer to our website (<http://panasonic.net/pss/security/support/info.html>).

## Part Names and Functions



## Appearance



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### Important

- Safety Precaution: carefully read the operating instructions and installation manual before using this product.
- Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

- Masses and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.

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