



## 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
- 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 <sup>1</sup> ..... | 1 pc. |
| • Configure the settings of the camera ..... | 1 pc. |                             |       |

<sup>1</sup> The CD-ROM contains the operating instructions and different kinds of tool software programs.

## Specifications

<b>Camera</b>	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)
	Privacy Zone	ON / OFF (up to 2 zones available)
	Camera Title (OSD)	Up to 20 characters (alphanumeric characters, marks) . On/Off
<b>Lens</b>	Focal Length	2.7 mm
	Angular Field of View	Horizontal: 53 °, Vertical: 40.5 °
	Maximum Aperture Ratio	1 : 2.8
<b>Browser GUI</b>	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
	System Log	Up to 100 (Internal) error logs
	Supported OS <sup>*1, *5</sup>	Microsoft® Windows® 8, Microsoft® Windows® 7, Microsoft® Windows Vista®, Microsoft® Windows® XP SP3
	Supported Browser	Windows® Internet Explorer® 10.0 (32 bit), 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
<b>Network</b>	Network IF	10Base-T / 100Base-TX, RJ-45 connector (female)
	Image Resolution <sup>*2</sup>	Aspect ratio: H.264: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps [4 : 3] JPEG: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps
		Aspect ratio: H.264: 640 x 360 / 320 x 180, up to 30 fps [16 : 9] 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
	Image Quality	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
	Supported Protocol	Image Quality 10 steps
		Refresh Interval 0.1 fps ~ 30 fps
	FTP Client	Transmission Type PULL / PUSH
		No. of Simultaneous Users Up to 14 users (Depends on network conditions)
	Cellular Phone Compatibility	Mobile Terminal Compatibility iPad, iPhone, iPod touch (iOS 4.2.1 or later) , Android™ mobile terminals
		Alarm Source VMD, Command alarm
<b>Alarm</b>	Alarm Actions	E-mail notification, Indication on browser, FTP image transfer, Panasonic protocol output
	Schedule	VMD
<b>General</b>	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.

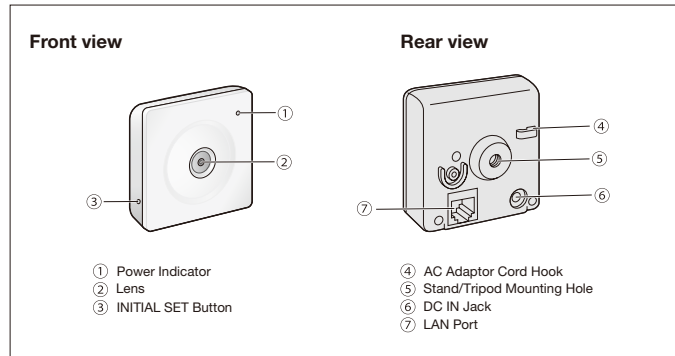
\*4 Refer to "Notes on Windows Vista® / Windows® 7 / Windows® 8" on the provided CD-ROM for further information about system requirements for a PC and precautions when using Microsoft® Windows® 8 or Microsoft® Windows® 7 or Microsoft® Windows Vista®.

\*5 When using IPv6 for communication, use Microsoft® Windows® 8 or Microsoft® Windows® 7 or Microsoft® Windows Vista®.

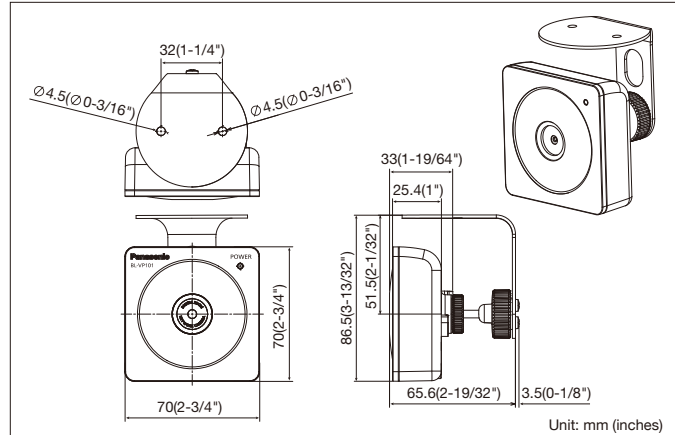
\*6 Transmission for 2 streams can be individually set in the same compression method.

\*7 For further information about compatible devices, refer to our website (<http://security.panasonic.com/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 cannot be responsible for the performance of the network and/or other manufacturers' products used 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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