



## HD / 1,280 x 720 H.264 Wireless Network Camera (BL-VP104W) HD / 1,280 x 720 H.264 Network Camera (BL-VP104)

### Key Features

- 720p HD images up to 30 fps
- 1.0 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 1,280 x 720 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 16x) / 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.
- 1.5x extra zoom at VGA resolution
- 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
- Wireless LAN function (IEEE802.11 n/b/g) : Camera images can be monitored over a wireless router. (BL-VP104W)
- WPS (Wi-Fi Protected Setup) function : WPS enables the camera to automatically obtain the connection configuration information and the security configuration information of the wireless router. WPS can be configured by pressing the WIRELESS button (WPS indicator) (PBC method) or entering an 8 digit pin code (Pin code method). (BL-VP104W)
- 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.

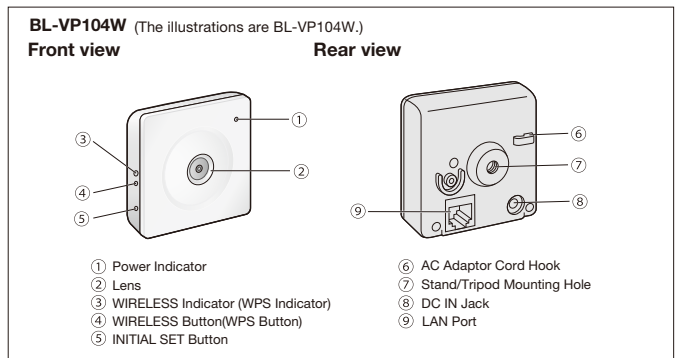
# Specifications

		BL-VP104W	BL-VP104	
<b>Camera</b>	Image Sensor	1/4 type CMOS Sensor		
	Effective Pixels	Approx. 1 megapixel		
	Scanning Mode	Progressive		
	Scanning Area	3.89 mm (H) x 2.43 mm (V) (5/32 inches (H) x 3/32 inches (V))		
	Minimum Illumination	Color: 0.9 lx (F2.8, Auto slow shutter: Off (1/30s), Gain:On(High)) Color: 0.06 lx (F2.8, Auto slow shutter: Max. 16/30s, Gain:On(High)) <sup>*1</sup> BW: 0.6 lx (F2.8, Auto slow shutter: Off (1/30s), Gain:On(High)) BW: 0.04 lx (F2.8, Auto slow shutter: Off (16/30s), 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 (60 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 (1/10,000 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. 4/30 s, Max. 6/30 s, Max. 10/30 s, Max. 16/30 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	3.6 mm	
		Zoom Ratio	Extra zoom: 1.5x (at VGA resolution)	
Angular Field of View		Horizontal: 57 °, Vertical: 34 °		
Maximum Aperture Ratio		1 : 2.8		
Focusing Range		0.4 m - ∞		
<b>Wireless</b> (BL-VP104W/ BL-VP104WE/ BL-VP104WU only)	Antenna	1x1 (Diversity)		
	Transmission method	SISO (Single Input/ Single Output) -OFDM, OFDM, DSSS		
	Frequency range (center frequency)/ Channel	BL-VP104W: 2.412 GHz - 2.462 GHz (1 - 11ch) BL-VP104WE: 2.412 GHz - 2.472 GHz (1 - 13ch) BL-VP104WU: 2.412 GHz - 2.472 GHz (1 - 13ch)		
	Data transfer rate: <sup>*2</sup>	IEEE802.11n: 6.5 - 72.2 Mbps IEEE802.11g: 6 - 54 Mbps IEEE802.11b: 1 - 11 Mbps		
	Access method	Infrastructure mode		
	Authentication method	Open System		
	Security: <sup>*3</sup>	WPA/WPA2-PSK (TKIP/AES) WEP (64 bit/128 bit)		
	WPS	PBC method (push button method), PIN method (PIN code method)		
	Camera Control	Brightness		
	<b>Browser GUI</b>	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		extra zoom(1x - 1.5x) and the electronic zoom (higher zoom factors, up to 6x).		
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>*4,5</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>*6</sup>	Aspect ratio: [4 : 3]	H.264: SVGA(800 x 600) / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps JPEG: SVGA(800 x 600) / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps
	Aspect ratio: [16 : 9]		H.264: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps JPEG: 1,280 x 720 / 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 / 4,096 / 8,192 kbps	
	Image Quality	Refresh Interval	LOW / NORMAL / FINE	
		Transmission Type	1 fps - 30 fps	
	JPEG	Image Quality	UNICAST / MULTICAST	
		Refresh Interval	10 steps	
	<b>Alarm</b>	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)		
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		
Schedule		VMD		

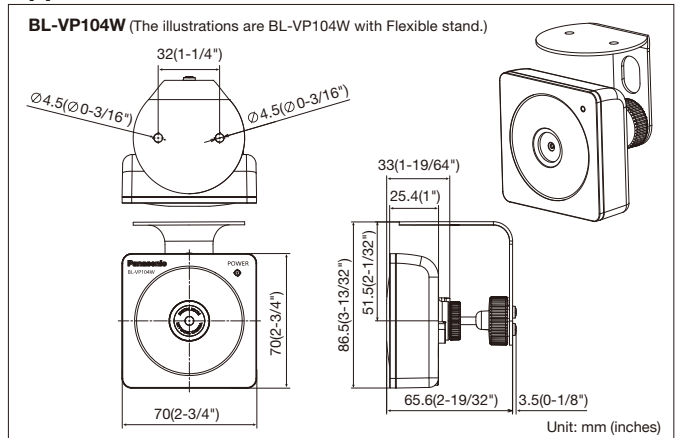
		BL-VP104W	BL-VP104
<b>General</b>	Safety/ EMC Standard	BL-VP104W: <Safety> UL60950-1 Ed.2, C22.2 NO.60950-1 Ed.2 <EMC> FCC Part15 ClassB <Wireless> FCC Part15C	BL-VP104: <Safety> UL60950-1 Ed.2, C22.2 NO.60950-1 Ed.2 <EMC> FCC Part15 ClassB, ICES-003 ClassB
	Power Source and Power Consumption	BL-VP104W/BL-VP104WU: <Safety> IEC60950-1 Ed.2 <EMC> EN55022 ClassB, EN55024 <Wireless> EN300328	BL-VP104/BL-VP104U: <Safety> IEC60950-1 Ed.2 <EMC> EN55022 ClassB, EN55024
	Ambient Operating Temperature	6.5 V DC (Use only with Panasonic AC adapter) BL-VP104W: max. 3.5W (120 V AC/ 60 Hz) BL-VP104WE: max. 3.5 W (230 V AC/ 50 Hz) BL-VP104WU: max. 3.5 W (230 V AC/ 50 Hz)	6.5 V DC (Use only with Panasonic AC adapter) BL-VP104: max. 2.0W (120 V AC/ 60 Hz) BL-VP104E: max. 2.0 W (230 V AC/ 50 Hz) BL-VP104U: max. 2.0 W (230 V AC/ 50 Hz)
	Ambient Operating Humidity	0 °C - 40 °C (32 °F - 104 °F)	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)	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. 80 g (0.18 lbs)	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



### Trademarks and registered trademarks

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- iPad, iPhone and iPod touch are registered trademarks of Apple Inc.
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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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