VB-H41
Network Camera

Intelligent full-HD PTZ network camera with 20x optical zoom, auto-focus, image stabilisation and best-in-class minimum illumination. Perfect for day and night shooting with increased sensitivity.

Built with a genuine Canon 20x optical zoom lens (capable of 12x digital zoom for a staggering total of 240x zoom), 60.4° wide angle, auto-focus and image stabilisation to ensure high image quality in a variety of situations. The VB-H41 Pan/Tilt/Zoom network camera comes equipped with a 2.1 megapixel CMOS image censor and Canon's advanced DiG!C NET II processor for simultaneous transmission of 1920x1080/30fps full-HD video in M.JPEG and bandwidth-saving H.264 codec. Intelligent functions include Moving Object Detection, Removed Object Detection, Abandoned Object Detection and alerts for Camera Tampering and Volume Detection. The compact and stylish VB-H41 provides clear, quality and reliable recordings and conforms to ONVIF network standards for integration purposes.

Key Features

Image Quality

- Full-HD Definition (1920x1080)
- Maximum frame rate of 30 frames per second (fps)
- 20x optical zoom lens with up to 12x digital zoom for a maximum 240x zoom
- 60.4° horizontal viewing angle
- Autofocus and image stabilisation for optimal lens performance in a variety of situations
- Best-in-class minimum illumination with 0.01 lux for colour and 0.001 lux for black and white[1]
- Day/Night function for up to 40x increased sensitivity
- 2.1 million pixels

Smart Functions

- Intelligent detection:
  - Moving objects detection
  - Removed objects detection
  - Abandoned objects detection
  - Tempering attempts detection
  - Sound volume detection
  - Passing boundaries detection
- Privacy Mask
- High quality and compression combined
- Smart shade control

Reliability

- Built in SD Memory Card Slot
- Recording logs

Connectivity

- Compatible with ONVIF protocol
- Compatible with WebView protocol
- Power over Ethernet

1. Minimum subject illumination based on F1.6, ½ second shutter speed and with smart shade control (SSC)

Full-HD Imaging with Finest 20x Optical Zoom Lens
Equipped with the widest 60.4° horizontal viewing angle and 20x zoom lens, this 2.1 Megapixel network camera with the pan/tilt/zoom function is the best in its class.

Day/Night Function with Increased Sensitivity
By combining the effect of increased sensitivity from turning off the IR cut filter and using digital gain, the day/night function of this camera can achieve up to 40 times of increased sensitivity.

Intelligent Function with Variety of Detections
With Canon's original background differencing method, intelligent functions such as moving object detection, removed object detection, abandoned object detection, tampering detection and sound volume detection are realized. Additionally it now features Passing Detection.

Improved Reliability with SD Memory Card Slot
With a built-in SD Memory Card slot, recording stream images and uploaded images can now be saved to the SD memory card during network troubles. High reliability is also realized by recording logs which will not be erased even when the power is turned off.

Privacy Mask Function for Detailed Consideration
The Privacy Mask Function blocks certain areas of the camera view. In locations where surveillance is required but passwords and input operations are not to be recorded, such as ATM and apartment entrances with keypad security, fine security measures can be taken by realizing security-conscious recording.

High Quality & High Compression Combined H.264 Streaming Compatible
Compatible with H.264, an image compression format that combines high quality and high compression rates, operation of surveillance systems streaming in high resolution with low network load is realised. Furthermore, it also features Smart Shade Control which automatically adjusts the contrast between bright and dark image areas for optimum detail display even during H.264 stream, to widely support the needs of high resolution streaming.

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VB-H41 Technical Specifications

Camera

Image Sensor	1/3 type CMOS (primary colour filter)
Number of Effective Pixels	Approx. 2.1 million pixels
Scanning Method	Progressive
Lens	20x optical (12x digital) zoom lens with auto focus
Focal Length	4.7 (W) – 94 mm (T)
F-number	F1.6 (W) – F3.5 (T)
Viewing Angle	Horizontal: 60.4° (W) – 3.2° (T) / Vertical: 35.1° (W) – 1.8° (T)
Day/Night Switch	Auto/Manual
Min. Subject Illumination	**Day Mode (Colour):** 0.4 lux (F1.6, shutter speed 1/30 sec., when smart shade control is off, 50IRE) 0.03 lux (F1.6, shutter speed 1/2 sec., when smart shade control is off, 50IRE) 0.01 lux (F1.6, shutter speed 1/2 sec., when smart shade control is on, 50IRE) **Night Mode (Monochrome):** 0.02 lux (F1.6, shutter speed 1/30 sec., when smart shade control is off, 50IRE) 0.002 lux (F1.6, shutter speed 1/2 sec., when smart shade control is off, 50IRE) 0.001 lux (F1.6, shutter speed 1/2 sec., when smart shade control is on, 50IRE)
Focus	Auto/One-shot AF/Manual/Fixed at infinity
Shooting Distance (from front of lens)	Day Mode: 0.3 m (12 in.) – ∞ (W), 1.0 m (3.3 ft.) – ∞ (T) Night Mode: 1.0 m (3.3 ft.) – ∞ (W), 1.5 m (4.9 ft.) – ∞ (T)
Shutter Speed	1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/1600
Exposure	Auto/Flickerless/Shutter-priority AE/Manual (Shutter Speed, Aperture, Gain)
White Balance	Auto / Light Source (Daylight Fluorescent / White Fluorescent / Warm Fluorescent / Mercury Lamp / Sodium Lamp/Halogen Lamp) / Lock (One-shot WB)/Manual
Metering Mode	Center-Weighted/Average/Spot
Exposure Compensation	9 levels
Smart Shade Control	7 levels (increases the brightness of shaded subjects in a video)
AGC Limit	5 levels
Image Stabilizer	2 levels (digital)
Pan Angle Range	340° (±170°)
Tilt Angle Range	100° (ceiling-mounted position: -90° – +10°) when horizontal direction of camera is 0°
Moving Speed	Pan: Max. 150°/sec., Tilt: Max. 150°/sec.

Server

Video Compression Method	JPEG, H.264
Video Size	JPEG: 1920 x 1080, 960 x 540, 480 x 270, 320 x 240; H.264: 1920 x 1080, 960 x 540, 480 x 270
Video Quality	JPEG, H.264: 5 levels
Frame Rate	JPEG: 0.1 – 30 fps H.264: 1/2/3/5/6/10/15/30 fps
Max. Frame Rate	1920 x 1080 (when streaming): 30 fps[1]
I-Frame Interval	0.5/1/1.5/2/3/4/5 sec.
Simultaneous Client Access	JPEG: Max. 30 Clients + 1 Admin Client; H.264: Max. 10 Clients
Camera Control	Administrator, Authorized user, Guest user (level of control varies depending on user) Max. 50 user names and passwords registered for authorized users.
Access Control	User authority (user name and password), Host Access Restrictions (IPv4, IPv6)
Encrypted Communications	SSL/TLS, IPsec (Auto Key Exchange/Manual)
Protocol	IPv4: TCP/IP, UDP, HTTP, FTP, SNMP (MIB2), SMTP (Client), DHCP (Client), DNS (Client), ARP, ICMP, POP3, NTP, SMTP authentication, RTSP, WV-HTTP (Canon proprietary), ONVIF IPv6: TCP/IP, UDP, HTTP, FTP, SMTP (Client), DHCPv6 (Client), DNS (Client), ICMPv6, POP3, NTP, SMTP authentication, RTSP, WV-HTTP (Canon proprietary), ONVIF
AutoIP	Available
Audio Compression Method	G.711 μ-law (64 kbps)
Audio Communication Method	Full-duplex (two-way) – Echo cancellation function compliant Sound Transfer Protocol by Canon
Audio File Playback	Available (audio files can be played back when an event is triggered by the intelligent function or external device input.)[2]
Privacy Mask	Number of registration: Max. 8 places, Number of mask colours: 1 (select from 9 colours)
View Restriction	Available
Preset	Max. 20 positions (Preset Tour capable)
Intelligent Function	Type of Detection: moving object, abandoned object, removed object, camera tampering, passing Area of Detection: Max. 15 places, Volume Detection
Event Trigger Type	External Device Input, Intelligent Function (Video), Intelligent Function (Volume), Timer
Image Upload	FTP/HTTP/SMTP (e-mail) Temporary storage memory in camera: Max. approx. 5 MB, Frame Rate: Max. 10 fps
Event Notification	HTTP/SMTP (e-mail)
On-Screen Display	Available
Daylight Saving Time	Available

Interface

Network Terminal	LAN x 1 (RJ45, 100Base-TX (auto/full-duplex/half-duplex))
Audio Input Terminal	3.5 mm mini-jack connector (monaural) Switch LINE IN/MIC IN (in setting page) LINE IN x 1 (connect to an amplifier microphone) or MIC IN x 1 (connect to a microphone w/o amplifier)
Audio Output Terminal	3.5 mm mini-jack connector (monaural), LINE OUT x 1 (connect to an amplifier speaker)
External Device I/O Terminal	Input x 2, Output x 2
Memory Card	SD Memory Card, SDHC Memory Card, SDXC Memory Card Compatible. Frame Rate: Max. 1 fps

Other

Operating Environment	Temperature: -10°C – +50°C (+14°F – +122°F) / Humidity: 5% – 85% (without condensation)
Power Supply / Consumption	PoE: PoE power supply via LAN connector (IEEE802.3af compliant) / Max. approx. 9.2W AC Adapter: optional PA-V17 (100 – 240 V AC) / Max. approx. 10.7W External power source: 24 V AC Max. approx. 8.8W / 12 V DC Max. approx. 8.6W
Dimensions	132 x 155 mm (H)
Weight	Approx. 1140 g

[1] The frame rate may be reduced due to Viewer PC's specs, the number of clients accessing at the same time, network loads, image quality setting, type or movement of the subject or other reasons.

[2] A third-party amplifier speaker is necessary

Subject to change without notice.