

VB-H651V

Capture detailed images in low-light and reduce surveillance costs with this wide-angled indoor vandal-resistant dome camera.

This Full HD indoor vandal resistant dome camera offers a wide angle of view, superb low-light performance and IK10 impact protection.



Shown with PC640-VB



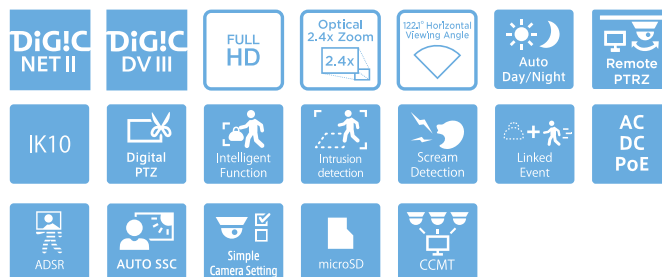
Shown with DU640-S-VB



- 1/3" Full HD CMOS sensor delivers a superb low light performance
- 2.4x optical zoom lens with a wide 122.1° angle of view
- IK10 vandal proof protection
- Motion Adaptive Noise Reduction enhances low-light capabilities
- 8 built-in analytics functions provide intelligent and efficient alarm detection
- Remote PTRZ adjustment reduces setup time and installation costs
- ADSR bandwidth technology
- Support for multiple web browsers and mobile devices
- ONVIF® Profile S & G

Product Range

VB-H630D
VB-M620D
VB-M641V
VB-M640V



Technical Specifications

VB-H651V

| | VB-H651V |
|--|---|
| CAMERA | |
| Image Sensor | 1/3 type CMOS (primary color filter) |
| Number of Effective Pixels | Approx. 2.1 million pixels |
| Scanning Method | Progressive |
| Lens | 2.4x optical zoom (4x digital zoom) lens (electric drive) |
| Focal Length | 2.55 (W) – 6.12 mm (T) |
| F-number | F1.2 (W) – F1.8 (T) |
| Viewing Angle | For 16:9 aspect ratios: Horizontal: 122.1° (W) – 50.1° (T) Vertical: 65.8° (W) – 28.2° (T) For 4:3 aspect ratios: Horizontal: 89.2° (W) – 37.6° (T) Vertical: 65.8° (W) – 28.2° (T) |
| Day/Night Switch | Auto/Day Mode/Night Mode |
| Min. Subject Illumination | Day Mode (colour): 0.035 lux Night Mode (monochrome): 0.002 lux When using the Smoked Dome (sold separately) Day Mode (colour): 0.07 lux Night Mode (monochrome): 0.004 lux - (F1.2, 1/30 sec, SSC off, 50IRE) |
| Focus | Auto/One-shot AF/Manual/Fixed at infinity |
| Shooting Distance (from front of lens) | Day & Night Modes: 0.3 m (12 in.) – infinity |
| 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, 1/10000, 1/16000 sec. |
| Exposure | Auto/Auto (Flickerless)/Auto (Shutter-priority AE)/Auto (Aperture-priority AE)/Manual (Shutter Speed, Aperture, Gain) |
| White Balance | Auto/Light Source/Manual Light Source: Daylight Fluorescent/White Fluorescent/Warm Fluorescent/Mercury Lamp/Sodium Lamp/Halogen Lamp Manual: One-shot WB/R Gain/B Gain |
| Metering Mode | Center-Weighted / Average / Spot |
| Exposure Compensation | 9 levels |
| Smart Shade Control | Auto/Manual/Disable, Auto: 3 levels, Manual: 7 levels |
| Haze Compensation | Auto/Manual/Disable, Auto: 3 levels, Manual: 7 levels |
| AGC Limit | 6 levels |
| Image Stabilizer | 2 levels (digital) |
| Motion-Adaptive NR | Available |
| Pan Angle Range | 350° (±175°) |
| Tilt Angle Range | 150° (±75°) |
| Rotation Angle Range | 350° (±175°) |
| Moving Speed | Pan: 20.1°/sec. Tilt: 20.7°/sec. Rotation: 40.0°/sec. |
| SERVER | |
| Video Compression Method | JPEG, H.264 |
| Video Size | JPEG, H.264: 1920 x 1080, 960 x 540, 480 x 270 1280 x 720, 640 x 360, 320 x 180 1280 x 960, 640 x 480, 320 x 240 |
| Video Quality | JPEG, H.264: 10 levels |
| Frame Rate | JPEG: 0.1 – 30 fps H.264: 1/2/3/5/6/10/15/30 fps - Values represent streaming performance from the camera. - The frame rate may be reduced due to Viewer computer's specs, the number of clients accessing at the same time, network loads, video quality setting, type or movement of the subject or other reasons. Maximum frame rate when streaming: H.264(1) (1920 x 1080) and H.264(2) (all sizes) simultaneously: 15 fps H.264(1) (all sizes) and H.264(2) (1920 x 1080) simultaneously: 15 fps H.264(1) (1280 x 960) and H.264(2) (1280 x 960) simultaneously: 15 fps H.264(1) (1280 x 720) and H.264(2) (1280 x 720) simultaneously: 15 fps |
| I-Frame Interval | 0.5/1/1.5/2/3/4/5 sec. |
| Simultaneous Client Access | Max. 30 Clients + 1 Admin Client - H.264: Max. 10 Clients |
| Bit Rate Control | Target Bit Rate: 64/128/256/384/512/768/1024/2048/3072/4096/6144/8192/10240/12288/14336/16384 kbps |
| ADSR: Area-specific Data Size Reduction | Number of Specified Areas: Max. 8 areas Data Size Reduction Level: 3 levels |
| Security | Camera Control: Administrator, Authorized user, Guest user (level of control varies depending on user) Access Control: User authority (user name and password), Host Access Restrictions (IPv4, IPv6) IEEE802.1X: EAP-MD5, EAP-TLS, EAP-TTLS, EAP-PEAP Encrypted Communications: SSL/TLS, IPsec |

| | |
|---|---|
| Protocol | IPv4, IPv6, TCP/IP, UDP, HTTP, FTP, SNMPv1/v2c/v3 (MIB2), DHCP, DNS, AutoIP, mDNS, ARP, ICMP, POP3, NTP, SMTP, RTP/RTCP, RTSP, SSL/TLS, IPsec, ONVIF, WV-HTTP (Canon proprietary) |
| Audio Compression Method | G.711 μ -law (64 kbps) |
| Audio Communication Method | Full-duplex (two-way) – Echo cancellation function compliant RTP, 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) – Requires third-party amplifier & speaker |
| Privacy Mask | Registration: Max. 8 places, Mask colors: 1 (select from 9 colors) |
| Preset | Registers: Max. 20 positions (+Home Position) Preset Tours: Max. 1 |
| Intelligent Function | Detection Types: Moving Object, Abandoned Object, Removed Object, Camera Tampering, Passing, and Intrusion Detection Detection Settings: Max. 15 Non-detection Area Settings: Available |
| Intelligent Function | Volume Detection, Scream Detection |
| Event Trigger Type | External Device Input, Intelligent Function (Video), Intelligent Function (Audio), Timer, Day/Night Switch Number of Linked Events: 2 Linked Event Conditions: OR, AND (whether or not there is a sequence to events) |
| Image Upload | FTP/HTTP/SMTP (e-mail) |
| Event Notification | HTTP/SMTP (e-mail) |
| Log Notification | SMTP (e-mail) |
| Image Cropping Function | Digital PTZ Cropping sizes: 640 x 360/512 x 288/384 x 216/256 x 144/128 x 72 640 x 480/512 x 384/384 x 288/256 x 192/128 x 96 |
| On-Screen Display | Available English/Chinese (Simplified)/Japanese |
| Daylight Saving Time | Available |
| INTERFACE | |
| Network Terminal | LAN x 1 (RJ45, 100Base-TX (auto/full-duplex/half-duplex)) |
| Audio Input Terminal | Φ 3.5 mm (Φ 0.14 in.) mini-jack connector (monaural) LINE IN (connect to an amplifier microphone) or MIC IN (connect to a microphone w/o amplifier) – Switch LINE IN/MIC IN in the setting page. |
| Audio Output Terminal (LINE OUT) | Φ 3.5 mm (Φ 0.14 in.) mini-jack connector (monaural) LINE OUT (connect to an amplifier speaker) |
| External Device I/O Terminal | Input x 2, Output x 2 |
| Memory Card | microSD Memory Card, microSDHC Memory Card, microSDXC Memory Card Compatible. Recorded Content: Log, Video (Event, Manual, ONVIF, Timer, Upload) Frame Rate: Max. 1 fps (JPEG) Max. 30 fps (H.264) - To insure reliability in the recording speed, it is recommended to use CLASS 10 rated products. Even when using CLASS 10 products, reliability cannot be guaranteed during heavy access loads (e.g., when recording and deleting data at the same time). |
| OTHER | |
| Operating Environment | Temperature AC, DC, PoE: -10°C – +50°C (+14°F – +122°F) Humidity 5% – 85% (without condensation) |
| Storage Environment | Temperature -30°C – +60°C (-22°F – +140°F) Humidity 5% – 90% (without condensation) |
| Installation Method | Ceiling mount/Surface mount |
| Power Supply | PoE: PoE power supply via LAN connector (IEEE802.3at Type1 compliant) AC Adapter: PA-V18 (100 – 240 V AC) (sold separately) External power source: 24 V AC/12 V DC |
| Power Consumption | PoE: Max. approx. 8.4 W* AC Adapter PA-V18: Max. approx. 9.9 W (100 V AC) Max. approx. 9.8 W (240 V AC) DC: Max. approx. 8.7 W AC: Max. approx. 8.1 W * Class 0 power sourcing equipment (requests 15.4 W) |
| Dimensions | (Φ x H) Φ 150 x 129 mm (Φ 5.91 x 5.08 in.) – Camera only (excluding Ceiling Plate) |
| Weight | Approx. 890 g (1.97 lb.) |
| Impact Resistance | IK10 (20J) |

canon.com

Canon Europe
canon-europe.com

English edition

© Canon Europa N.V., 2016

Technical Specifications

VB-H651V

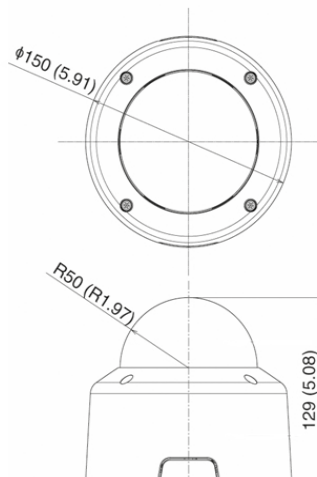
| APPLICATION | |
|----------------------------------|--|
| Viewer | Camera Viewer - Supports Video Display Rotation Mobile Camera Viewer |
| Included Software | Camera Management Tool RM-Lite Recorded Video Utility |
| Language | German/English/Spanish/French/Italian/Russian/Thai/Turkish/Chinese (Simplified)/Japanese |
| Operating Environment | Setting Page, Viewer |
| PC | CPU (Recommended): Intel Core i7-2600 or higher Graphics Board (Recommended): Not specified Memory (Recommended): 2 GB or higher Viewer Display (Recommended): 1920 x 1080 or higher |
| Operating System | Windows Vista Ultimate/Business/Enterprise/Home Premium SP2 32/64-bit Windows 7 Ultimate/Professional/Enterprise/Home Premium SP1 32/64-bit Windows 8/Windows 8 Pro/Windows 8 Enterprise 32/64-bit* Windows 8.1/Windows 8.1 Pro/Windows 8.1 Enterprise 32/64-bit* Windows 10 Pro/Windows 10 Enterprise/Windows 10 Education/ Windows 10 Home 32/64-bit Windows Server 2008 Standard SP2 32/64-bit Windows Server 2008 R2 Standard SP1 64-bit Windows Server 2012 Standard 64-bit* Windows Server 2012 R2 Standard 64-bit* * Can not be started from the start screen |
| Operating System Language | German/English/Spanish/French/Italian/Russian/Thai/Turkish/Chinese (Simplified)/Japanese |
| Compatible Browser | Internet Explorer 9 32-bit Internet Explorer 10/11 Microsoft Edge* Chrome 45* * Does not support playback of Video (H.264) and audio files, reception of audio - Must be configured to allow use of JavaScript, IFRAME (html tag), and web storage. - For Camera Viewer only, cookies must be enabled - Does not support Mobile Camera Viewer |
| Compatible Mobile Devices | Surface, iPad, iPhone, Nexus, Galaxy |
| Operating Environment | Camera Management Tool, Recording Video Utility |
| PC | CPU (Recommended): Intel Core i7-2600 or higher |
| Operating System | Windows Vista Ultimate/Business/Enterprise/Home Premium SP2 32/64-bit Windows 7 Ultimate/Professional/Enterprise/Home Premium SP1 32/64-bit Windows 8/Windows 8 Pro/Windows 8 Enterprise 32/64-bit* Windows 8.1/Windows 8.1 Pro/Windows 8.1 Enterprise 32/64-bit* Windows Server 2012 Standard 64-bit* Windows 10 Pro/Windows 10 Enterprise/Windows 10 Education/ |

| | |
|---|---|
| | Windows 10 Home 32/64-bit Windows Server 2008 Standard SP2 32/64-bit Windows Server 2008 R2 Standard SP1 64-bit Windows Server 2012 R2 Standard 64-bit* * Can not be started from the start screen |
| Software | Runtime Library |
| Camera Management Tool | .NET Framework 3.5 SP1 (When using Internet Explorer 9) .NET Framework 4.5 (When using Internet Explorer 10/11) .NET Framework 4.6 (When using Internet Explorer 11) - One of the above must be installed |
| Recorded Video Utility | .NET Framework 3.5 SP1 .NET Framework 4.5 .NET Framework 4.6 - One of the above must be installed |
| Operating System Language | German/English/Spanish/French/Italian/Russian/Thai/Turkish/Chinese (Simplified)/Japanese |
| Verified Mobile Devices | (Settings Page, Viewer) - As of February 2016 |
| Surface 3 | Operating System Windows 8.1 Professional/Windows 8.1 Enterprise 64-bit* Windows 10 Pro/Windows 10 Enterprise/Windows 10 Education/ Windows 10 Home 64-bit * Can not be started from the start screen Compatible Browser Internet Explorer 11 Microsoft Edge* - Must be configured to allow use of JavaScript, and web storage - For Camera Viewer only, cookies must be enabled * Does not support playback of Video (H.264) and audio files, reception of audio |
| iPad mini 3 / 4 iPad Air / Air 2 iPhone 6 / 6 Plus iPhone 6s / 6s Plus | Operating System iOS 8.4.1 iOS 9.1 Compatible Browser Safari - Must be configured to allow use of JavaScript, IFRAME (html tag), and web storage - For Camera Viewer only, cookies must be enabled - Does not support playback of Video (H.264) and audio files, reception of audio - Settings page and Camera Viewer is not supported on the iPhone |
| Android Devices | Nexus 9, Android 6.0, Chrome 46 Galaxy Tab S 8.4, Android 4.4.2, Chrome 46 Galaxy Tab S 10.5, Android 4.4.2, Chrome 46 - Does not support playback of Video (H.264) and audio files, reception of audio Nexus 6, Android 6.0, Chrome 46 Galaxy S6, Android 5.0.2, Chrome 46 - Does not support playback of Video (H.264) and audio files, reception of audio - Settings page and Camera Viewer is not supported |

What's in the box?

- VB-H651V Main Unit
- Setup CD-ROM
- Template
- Ceiling Plate
- Installation Guide
- Fixing Screw(s)
- Power Connector
- Audio Interface Cable
- Wrench
- Safety Wire & Fixing Screw
- Warranty Card
- Leaflet of Warranty Card
- Notification Leaflet for lens unit
- Caution When Using Memory Cards
- Packaging

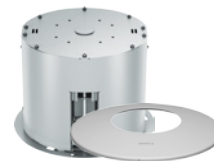
Dimensions (mm)



Compatible Accessories



SR640-S-VB
Recessed Mounting Kit



SR640-P-VB
Plenum Recessed Mounting Kit
(Fire resistant)



PC640-VB
Pendant Mounting Kit



DU640-S-VB
Smoked Dome Unit



PA-V17 / PA-V18
AC Power Supply
*Available in Euro 2-Pin
& UK 3-Pin plug