Tough outdoor dome camera with a wide angle of view designed for extreme environments

This all-weather protected dome camera offers Full HD image capture with an ultra wide angle lens and reliable low temperature operation.

- See more of the scene with a wide 122.1° angle of view
- IK10, IP66, and NEMA250 Type 4X rated: ready for tough, extreme conditions
- Motion Adaptive Noise Reduction and Area-Specific Data Size Reduction (ADSR) to reduce data size while optimising image quality
- On-board analytics functions for advanced alarm detection
- Live monitoring and configuration on supported web browsers and mobile devices
- Support for ONVIF® Profile S and Profile G

Product Range

VB-H652LVE
VB-H651VE
VB-H630VE
VB-M641VE
VB-M640VE
VB-M620VE
**Technical Specifications**

**Camera**
- **Image Sensor**: 1/3-type CMOS (primary color filter)
- **Number of Effective Pixels**: Approx. 2.1 million pixels
- **Scanning Method**: Progressive
- **Lens**: 2.3x optical zoom (16:9 zoom) lens (electric drive)
- **Focal Length**: 2.55 (W) – 6.12 (T) mm
- **F-number**: F1.2 (W) – F1.8 (T)
- **Viewing Angle**
  - For 16:9 aspect ratios: Vertical: 121° (W) – 501° (T)
  - For 4:3 aspect ratios: Vertical: 85.8° (W) – 28.2° (T)
- **Day / Night Switch**: Auto / Day Mode / Night Mode
- **Min. Subject Illumination**
  - Day Mode (color): 0.027 lux
  - Night Mode (monochrome): 0.002 lux
- **Shutter Speed**: 1/1000, 1/2000, 1/4000, 1/8000, 1/10000, 1/16000 sec.
- **Light Source**: Daylight Fluorescent / White Fluorescent / Warm Fluorescent / Mercury Lamp / Sodium Lamp
- **Metering Mode**: Center-Weighted / Average / Spot
- **Exposure**: 9 levels
- **Smart Shade Control**
  - Auto / Manual / Disable
  - Manual: 7 levels
  - Brighten shaded areas of a video
- **Haze Compensation**
  - Auto / Manual / Disable
  - Auto: 3 levels
  - Manual: 7 levels
- **AGC Limit**: 6 levels
- **Image Stabilizer**: 2 levels (digital)
- **Motion-Adaptive NR (Noise Reduction)**: Available
- **Pan Angle Range**: 150° (W) – 150° (T)
- **Tilt Angle Range**: 65° (W) – 28.2° (T)
- **Moving Speed**: Pan: 20°/sec. Tilt: 20°/sec. 3.5 mm (w/o amplifier)
  - When using the camera angle in the Setting Page

**Server**
- **Video Compression Method**: JPEG, H.264
- **Video Size**: H.264: 1920 x 1080, 960 x 540, 480 x 270
  - 384 x 216, 640 x 352, 320 x 180
  - 192 x 108, 256 x 144, 128 x 72
- **Video Quality**: JPEG, H.264: 1920 x 1080, 960 x 540, 480 x 270
  - 384 x 216, 640 x 352, 320 x 180
  - 192 x 108, 256 x 144, 128 x 72
- **Frame Rate**: 0.5 – 10 fps
  - 1/3 – 1/300/sec.
  - When the frame rate may be reduced due to Viewer computer’s specs, the number of clients accessing the same time, network loads, video quality setting, type or movement of the subject or other reasons.
  - Maximum frame rate when used in the following combinations.
  - When streaming H.264: 1920 x 1080 and H.264: 1280 x 720 simultaneously: 15 fps
  - When streaming H.264: 1920 x 1080 (all sizes) and H.264: 1280 x 720 simultaneously: 15 fps
  - When streaming H.264: 1920 x 1080 and H.264: 1280 x 720 simultaneously: 15 fps
- **I-Frame Interval**: 0.5/1/1.5/2.5/4 sec.
- **Simultaneous Client Access**: Max. 128 clients / 2 Administrators
- **Bit Rate Control**: Target Bit Rate: 128/192/256/384/512/1024/1536/2048/3072/4096/6144/8192/10240 Mbps

**Audio**
- **Audio Compression Method**: G.711 a-law (8 kbps)
- **Audio Communication Method**: Full-duplex (two-way)/half-duplex
  - Echo cancelling function compliant
- **Audio File Playback**: Available (audio files can be played back when an event is triggered by the intelligent function or external device input)
  - A third-party amplifier speaker is necessary

**Privacy Mask**
- **Number of masks**: Max. 8 masks
- **Number of mask colors**: 1 (select from 8 colors)

**Preheat**
- **Number of registers**: Max. 20 positions
- **Number of preheat buttons**: 4

**Intelligent Function (Video)**
- **Event Trigger Type**: External Device Input, Intelligent Function (Video), Intelligent Function (Audio), Timer, Day/Night Switch
- **Number of Link Events**: 2
- **Linked Event Conditions**: OR, AND

**Intelligent Function (Audio)**
- **Volume Detection, Scream Detection**

**Image Upload**
- **FTP / HTTP / SMTP (e-mail)**

**Event Notification**
- **HTTP / SMTP (e-mail)**

**Log Notification**
- **SMTF (e-mail)**

**Image Cropping Function**
- **Digital PTZ**

**External Device I/O Terminal**
- **LINE OUT (connect to an amplifier speaker)**

**Memory Card**
- **MicroSD Memory Card, microSDHC Memory Card, microSDXC Memory Card**

**Installation Method**
- **Ceiling mount / Surface mount**

**Power Supply**
- **PoE + Power supply via LAN connector**: 802.3at Type1 compliant
- **AC Adapter**: PA-V1B (100 – 240 V AC) (sold separately)
- **External power sources**: 24 V AC/12 V DC

**Power Consumption**
- **PoE**: Max. approx. 8.7 W
- **AC Adapter PA-V1B**: Max. approx. 10.2 W (100 V AC)
  - Max. approx. 10.4 W (240 V AC)
- **DC Accessory**: Max. approx. 9.2 W
  - Max. approx. 10.7 W

**Dimensions**
- **(W x H x D)**: 480 x 135 mm (18.9 x 5.3 x 5.1 in.)
- **Camera only (excluding Ceiling Fixing)**

**Weight**
- **Approx. 17.0 kg (37.7 lb.)**

**Impact Resistance**
- **IK10 (20J)**

**Dust-resistant/Waterproof Specification**
- IP66
### Technical Specifications

**International Standard**
- EN55032 Class A, FCC part15 subpart B Class A, ICES-003 Class A, VCCI Class A, BSMI AS/NZS EN55032 Class A, EN55024, EN55181
- IEC/UL/EN 60950-1, IEC/UL/EN 60950-1/-22, EN55150-4, IEC/UL/EN 60529
- IP66, IEC/UL/EN 62262, IEC, NEPA 255 Type 4X

**APPLICATION**
- **Viewer**
  - Supports Video Display Rotation
- **Mobile Camera Viewer**
  - Camera Management Tool
  - Recorded Video Utility

**Language**
- German/English/Spanish/French/Italian/Polish/Russian/Turkish/Thai/Korean/Chinese
  - (Simplified)/Japanese

**Operating System/Compatible Browser**
- Windows 7, Internet Explorer 11/Chrome 65
- Windows 8.1, Internet Explorer 11/Chrome 65
- Windows 10, Internet Explorer 11/Microsoft Edge/Chrome 65
- Windows Server 2008, Internet Explorer 9
- Windows Server 2008 R2, Internet Explorer 11/Chrome 65
- Windows Server 2012, Internet Explorer 10/Chrome 65
- Windows Server 2012 R2, Internet Explorer 11/Chrome 65
- Windows Server 2016, Internet Explorer 11/Chrome 65

**Verified Mobile Devices**
- Surface, iPad, iPhone, Nexus, Galaxy

**What’s in the box?**
- VB-M651VE Main Unit
- Before Using this Camera
- EAC-Supported Guide
- Ceiling Plate
- Safety Wire
- Fixing Screw & Safety Wire Screw
- Wrench
- Template
- Multi Cable with Waterproof Rubber Seal (LAN/IO/Audio/Power)
- Waterproofing Tape
- LAN Cable Cap
- Waterproof Rubber Seal for LAN Cable
- Zip Tie
- Packing Attachment
- RJ45 Coupler
- GND Screw
- Installation Guide
- Warranty Card

### Dimensions

![Dimensions Diagram](image)

All dimensions are in mm (in.)

### Compatible Accessories

- **PC640-VB**
  - Pendant Mounting Kit
- **SC640-VB**
  - Sunshade Cover
- **DU640-S-VB**
  - Smoked Dome Unit
- **HU641-VB**
  - Heater Unit
- **PA-V17 / PA-V18**
  - AC Power Supply
  - Available in Euro 2-Pin & UK 3-pin plug
**Product Details:**

**Product Name**: Network Camera VB-H651VE  
**Mercury Code**: 1384C001AC  
**EAN Code**: 4549292077322

Tough outdoor dome camera with a wide angle of view designed for extreme environments

This all-weather protected dome camera offers Full HD image capture with an ultra wide angle lens and reliable low temperature operation.

**Sales Start Date**: October 2016

---

**Optional Accessories:**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Mercury Code</th>
<th>EAN Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater Unit HU641-VB</td>
<td>0724C001AA</td>
<td>4549292043587</td>
</tr>
<tr>
<td>Smoked Dome Unit DU640-S-VB</td>
<td>0722C001AA</td>
<td>4549292043563</td>
</tr>
<tr>
<td>Pendant Mounting Kit PC640-VB</td>
<td>0719C001AA</td>
<td>4549292043532</td>
</tr>
<tr>
<td>Sunshade Cover SC640-VB</td>
<td>0723C001AA</td>
<td>4549292043570</td>
</tr>
<tr>
<td>AC Adapter PA-V18 (E)</td>
<td>8362B002AA</td>
<td>4960999986791</td>
</tr>
<tr>
<td>AC Adapter PA-V18 (GB)</td>
<td>8362B003AA</td>
<td>4960999986319</td>
</tr>
</tbody>
</table>

---

**Measurement / Logistic Information:**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Mercury code</th>
<th>Pack type</th>
<th>Pack description</th>
<th>Quantity per pack</th>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Net Weight (kg)</th>
<th>Gross Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Camera VB-H651VE</td>
<td>1384C001AC</td>
<td>EA</td>
<td>Each</td>
<td>1</td>
<td>248</td>
<td>248</td>
<td>257</td>
<td>1.7</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CT</td>
<td>Carton</td>
<td>2</td>
<td>277</td>
<td>518</td>
<td>264</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP</td>
<td>Euro Pallet</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30.8</td>
</tr>
</tbody>
</table>