SNC-VB635
Network Fixed Full HD Camera – V Series

Fixed 1080p/60 fps Full HD Camera with Half-inch Exmor® CMOS Sensor Powered by IPELA ENGINE™ EX Technology

- Maximum resolution of 1920 x 1080 pixels with the half-inch Exmor CMOS sensor
- CS mount, 5mm C mount adapter included
- Minimum illumination of 0.04 lx in Color mode and 0.03 lx in B/W mode at 50 IRE and 30 frames per second (fps)
- High frame rate of 60 fps
- Wide Dynamic Range equivalent to 90 dB achieved with View-DR® technology
- RS-485 interface for porting control to external device using camera’s data transparency feature
- Operating temperature up to 140°F (60°C)

KEY FEATURES

- IPELA ENGINE EX signal processing system developed based on Sony’s unique signal processing and video analytics technologies to provide unique features such as a high frame rate, View-DR, XDNR®, and DEPA™ Advanced technologies
- High frame rate of 60 fps to provide smoother and less blurry moving pictures
- View-DR – Sony’s innovative wide dynamic range technology – to capture objects clearly under very harsh lighting conditions
- XDNRI® (eXcellent Dynamic Noise Reduction) technology for clear images with virtually no motion blur under low illumination
- True D/N (Day/Night) function to switch to Day or Night mode depending on the light level
- VBR (variable bitrate) or CBR (constant bitrate) compression mode selectable to correspond with various network conditions
- Edge Storage function to record video and audio data with an SD/SDHC card attached to the camera
- Image Stabilizer to help minimize the effect of camera shake or vibration to achieve less blurry images
- RS-485 interface to transparently control camera peripherals such as powered zoom lenses and camera pedestals with pan and tilt functionalities; the camera converts control commands sent over the network to serial data and transfers this to devices via an RS-485 interface for easy and convenient operations
- Easy focus function for easy installation
- Easy initial network settings by supplied SNC Easy IP Setup Guide application
- Powered by either IEEE 802.3af-compliant (PoE system), AC 24 V ±20%, or DC 12 V ±10% for easy installation
- Smartphone viewer to display an image of the camera on the smartphone’s screen and control the camera’s pan, tilt, and zoom functions by simple touch-panel manipulation
- ONVIF™ (Open Network Video Interface Forum) Profile S-conformance firmware that ensures greater interoperability and more flexibility in building multi-vendor systems

The camera does not include a lens.
**SPECIFICATIONS**

**Camera**

- **Image Sensor:** 1/3\textvisiblespace$I$-type progressive scan Exmor CMOS sensor
- **Number of Effective Pixels:** Approx. 2.38 Megapixels
- **Signal System:** NTSC
- **Sync System:** internal synchronization
- **Minimum Illumination (30 IRE):**
  - Color: 0.014 lx (F1.2, View-DR OFF, OFF, AGC OFF, ON, 1/100, 30 fps)
  - B/W: 0.002 lx (F1.2, View-DR OFF, OFF, AGC OFF, ON, 1/100, 30 fps)
- **Dynamic Range:** Equivalent to 100 dB with View-DR technology
- **Remote Control:** Supported

**Network**

- **Protocols:** IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, HTTPS, SSN (v1, v2c, v3), SSL
- **Network Interface:** 10BASE-T/100BASE-TX (RJ-45)
- **Alarm Input:** (Sensor Input) Yes (x2)
- **Alarm Output:** Yes (x2)
- **Line Output:** Mini jack (monaural)
- **Line Input:** Mini jack (monaural)
- **Network Port:** 10BASE-T/100BASE-TX (RJ-45)
- **Video Output:** BNC

**Smartphone viewer:** Yes

**Superimpose:**

- **Language:** English
- **Number:** 3 independent positions for characters (Codec, Date & Time, Event, Edge)

**Privacy Masking:**

- **(color/effect):** Opaque: 14 colors (Black, White, Red, Green, Blue, Cyan, Yellow, Magenta, Gray (6 scales)), Mosaic
- **(shape):** Quadrangle formed by any four corner points
- **(number):** 20

**Picture Mode:** Yes

**Audio Scene Analytics:**

- Passing, Intrusion, Left Object Detection, Removed Object Detection

**Intelligent Motion Detection:** Yes

**Analytics Architecture:** DEPA Advanced

**Number of Clients:** 20

**Multi Streaming Capability:** Triple streaming

**Bandwidth Control:** JPEG

**Adaptive Rate Control:** H.264

**Solid PTZ:** Yes

**Range of Bitrate Setting:** 64 Kbps to 32 Mbps

**Bitrate Compression Mode:** CBR/VBR (selectable)

**Maximum Frame Rate:**
- H.264: 60 fps (1920 x 1080)
- JPEG: 60 fps (1280 x 720)

**Compression Format:**
- H.264 (High/Main/Baseline Profile), JPEG

**Resolution:**
- 1920 x 1080, 1280 x 720, 1024 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 360, 352 x 288, 320 x 184 (H.264, JPEG)

**Video:**

- Smartphone viewer
- Superimpose

**Wide-D View-DR:**

**Day/Night:** True D/N

**Camera Features**

- **White Balance:** ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp
- **Exposure Control:** Exposure compensation, AGC, Shutter speed, Iris
- **Shutter Speed:** 1/1 s to 1/10,000 s
- **Gain:** Auto
- **S/N Ratio (Gain 0 dB):** More than 50 dB
- **Dynamic Range:** Equivalent to 90 dB with View-DR technology
- **Minimum Illumination (30 IRE):**
  - Color: 0.02 lx (F1.2, View-DR OFF, OFF, AGC ON, 1/100, 30 fps)
  - B/W: 0.03 lx (F1.2, View-DR OFF, OFF, AGC ON, 1/100, 30 fps)

**Camera:**

- **Lens:** C-mount varifocal lens (option)
- **White Balance:** ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp
- **Exposure Control:** Exposure compensation, AGC, Shutter speed, Iris
- **Shutter Speed:** 1/1 s to 1/10,000 s
- **Gain:** Auto
- **S/N Ratio (Gain 0 dB):** More than 50 dB
- **Dynamic Range:** Equivalent to 90 dB with View-DR technology
- **Minimum Illumination (30 IRE):**
  - Color: 0.02 lx (F1.2, View-DR OFF, OFF, AGC ON, 1/100, 30 fps)
  - B/W: 0.03 lx (F1.2, View-DR OFF, OFF, AGC ON, 1/100, 30 fps)

**Dimension:**

- **Weight:** 1 lb 4 oz (570 g)
- **Dimensions (W x H x D):** 3 1/8 inches x 3 inches x 5 3/4 inches
- **Operating Humidity:** 20% to 80%
- **Storage Temperature:** -4°F to +140°F (-20°C to +60°C)
- **Cold Start Temperature:** Higher than 32°F (0°C)
- **Operating Temperature:** 14°F to 140°F (-10°C to +60°C)
- **Power Consumption:** Max. 6 W
- **Power Requirements:** IEEE802.3af compliant (PoE system)
- **Confirmed SD Card Type:** 4/8/16/32 GB SDHC (no support for SDXC)
- **Power Requirements:** DC 12 V ±10% or 24 V ±20%, 50 Hz/60 Hz
- **Connectors:** DC 12 V/AC 24 V connector (1) 12 V DC ±10%
- **Input:** Mini jack (monaural)
- **Output:** BNC

**Interface**

- **Video Output:** BNC (x1)
- **Alarm Monitor Output:** Phone jack (x1)
- **Line Input:** Mini jack (x4)
- **Line Output:** Mini jack (x2)
- **Network Port:** 10BASE-T/100BASE-TX (RJ-45)
- **Alarm Input:** (Sensor Input) Yes (x2)

**Camera Features**

- **White Balance:** ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp
- **Exposure Control:** Exposure compensation, AGC, Shutter speed, Iris
- **Shutter Speed:** 1/1 s to 1/10,000 s
- **Gain:** Auto
- **S/N Ratio (Gain 0 dB):** More than 50 dB
- **Dynamic Range:** Equivalent to 90 dB with View-DR technology
- **Minimum Illumination (30 IRE):**
  - Color: 0.02 lx (F1.2, View-DR OFF, OFF, AGC ON, 1/100, 30 fps)
  - B/W: 0.03 lx (F1.2, View-DR OFF, OFF, AGC ON, 1/100, 30 fps)

**Network Interface:**

- **Protocols:** IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, HTTPS, SSN (v1, v2c, v3), SSL
- **Line Output:** Mini jack (monaural)
- **Line Input:** Mini jack (monaural)
- **Network Port:** 10BASE-T/100BASE-TX (RJ-45)
- **Alarm Input:** (Sensor Input) Yes (x2)

**Safety Regulations:**

- **JATE Technical Standard (LAN):**
- **Fire Retardant:** UL2044

**Emission:**

- **EN55022 (Class A) + EN55024
- **VCCI (Class A), FCC (Class A), IC (Class A)
- **EMC-TR:**
- **KCC:**
- **Emission:**
  - EN55022 (Class A) + EN50130-4
  - EN61000-4-3
  - EN61000-4-4
  - EN61000-4-5
  - EN61000-4-6
  - EN61000-4-8

**Rear panel:**

- **Makeup:**
  - Top panel: Munsell 4.4BG 8.4/0.2
  - Front panel: ADC12
  - Bottom cover: SECC-CF

**Weights and measurements are approximate.**