Network Mini Dome Full HD Camera - X Series

# Mini Dome1080p/30 fps Camera Powered by IPELA ENGINE EX™

- Maximum resolution of 1920 x 1080 pixels with the Exmor<sup>™</sup> CMOS sensor
- Dynamic range equivalent to 90 dB achieved with View-DR technology
- Minimum illumination of 0.3 lx in Color mode and 0.3 lx in B/W mode at 50 IRE
- IK10-rated vandal-resistant and IP66-rated water-resistant/ dust-tight features
- Three-hinge structure for easy and flexible camera angle adjustment
- Horizontal viewing angel of 113°
- Meets safety regulations for indoor train applications, including EN45545 and EN50155



#### **KEY FEATURES**

- IPELA ENGINE EX signal processing system developed based on Sony's unique signal processing and intelligent video analytics technologies to provide unique features such as View-DR, XDNR, and DEPA™ Advanced technologies
- View-DR Sony's innovative wide dynamic range technology
   to capture objects clearly and adaptively even under very harsh, severe backlight or highlight conditions





OFF



Actual Images

- Visibility Enhancer (VE) to optimize the brightness and color reproduction of an image dynamically on a pixel-by-pixel basis while continuously adapting to the scene within the given dynamic range
- IK10-rated vandal-resistant feature to protect the camera from destructive behaviors
- IP66-rated water-resistant and dust-tight feature for outdoor surveillance and indoor locations where water ingress may pose an issue
- DEPA Advanced Intelligent Video Analytics to trigger an alarm based on user-defined rules



 XDNR (eXcellent Dynamic Noise Reduction) technology for clear images without motion blur under low illumination



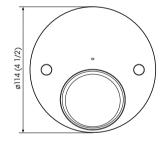
- Three-hinge structure to turn the lens unit in panning, tilting, and rotating directions for easy and flexible camera angle adjustment
- Picture mode selectable from a range of camera scenes in the setting menu to optimize picture quality in various applications
- VBR (variable bitrate) or CBR (constant 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
- Electronic D/N (Day/Night) function to switch to Day or Night mode depending on the light level
- Smartphone viewer to display an image of the camera on the smartphone 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
- Easy initial network settings by supplied SNC Easy IP Setup Guide application
- · Built-in microphone
- Powered by IEEE 802.3af (PoE system) via an M12 connector for easy installation

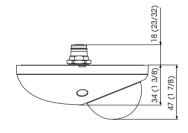
### **SPECIFICATIONS**

|                                  | SNC-XM637   |
|----------------------------------|---|
| Camera                           | 1/0 O hara progressive soon Furney OMCC   |
| Image Sensor                     | 1/2.9-type progressive scan Exmor CMOS sensor   |
| Number of Effective Pixels       | Approx. 2.14 Megapixels   |
| Minimum Illumination (50 IRE)    | Color: 0.3 lx   |
|                                  | B/W: 0.3 lx   |
| Minimum Illumination (30 IRE)    | Color: 0.18 lx  |
|                                  | B/W: 0.18 lx  |
| Dynamic Range                    | Equivalent to 90 dB with View-DR technology   |
| Gain                             | Auto  |
| Shutter Speed                    | 1/1 s to 1/10,000 s   |
| Exposure Control                 | Exposure compensation, AGC, Shutter speed   |
| White Balance                    | ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp,                         |
|                                  | Metal halide lamp, White LED, One push WB, Manual   |
| Lens                             | Fixed lens  |
| Zoom ratio                       | Digital 4x  |
| Horizontal Viewing Angle         | 113°  |
| Vertical Viewing Angle           | 61°   |
|                                  | 151°  |
| Viewing Tilt Angle               |   |
| Focal Length                     | f = 2.8 mm  |
| F-Number                         | F2.2  |
| Pan/Tilt/Rotation Angle (Manual) | Pan: ±30°   |
|                                  | Tilt: 0° to +90°  |
|                                  | Rotation: ±175°   |
| Camera Features                  |   |
| Day/Night                        | Electronic D/N  |
| e-Flip                           | Yes   |
| Wide-D                           | View-DR   |
| Tone Correction                  | Visibility Enhancer (VE)  |
| Noise Reduction                  | XDNR  |
|                                  |   |
| Image Stabilizer                 | Yes   |
| Picture Mode                     | Yes   |
| Privacy Masking (number)         | 20  |
| Privacy Masking (shape)          | Quadrangle formed by any four corner points   |
| Privacy Masking (color/effect)   | Opaque (14 colors: Black, White, Red, Green, Blue, Cyan, Yellow, Magenta,                 |
|                                  | Gray (6 scales)), Mosaic  |
| Edge Storage                     | Yes   |
| Vandal Resistance                | IK10  |
| Ingress Protection               | IP66  |
| Superimpose Number               | 3 independent positions for characters (Codec, Date & time, Event,                        |
|                                  | Text (max. 64 characters)), 1 independent position for logo marks                         |
| Superimpose Language             | English   |
| Menu Language                    | English, Japanese, Chinese (simplified), Chinese (traditional), French, Spanish,          |
|                                  | German, Italian, Korean, Portuguese, Russian, Arabic, Hindi, Vietnamese, Thai             |
| Smartphone viewer                | Yes   |
| Video                            |   |
| Resolution                       | 1920 x 1080, 1280 x 720, 1024 x 576, 720 x 576, 720 x 480, 704 x 576,                     |
| resolution                       | 640 x 480, 640 x 360, 352 x 288, 320 x 184 (H.264, JPEG)                                  |
| Compression Format               | H.264 (High/Main/Baseline Profile), JPEG  |
| Maximum Frame Rate               |   |
| waxiiiani riane kale             | H.264: 30 fps (1920 x 1080)   |
| Ditt- O                          | JPEG: 30 fps (1920 x 1080)  |
| Bitrate Compression Mode         | CBR/VBR (selectable)  |
| Range of Bitrate Setting         | 64 Kbps to 32 Mbps  |
| Solid PTZ                        | Yes   |
| Adaptive Rate Control            | H.264   |
| Bandwidth Control                | JEPG  |
| Multi Streaming Capability       | Triple streaming  |
| Number of Clients                | 20  |
| Intelligent Video Analytics      |   |
|                                  | DEPA Advanced   |
| Analytics Architecture           |   |
| Intelligent Motion Detection     | Yes   |
| Face Detection                   | Yes   |
| Tamper Alarm                     | Yes   |
| Scene Analytics                  | Passing, Intrusion, Left Object Detection, Removed Object Detection                       |
| Audio                            |   |
| Compression Format               | G.711/G.726/AAC (16 kHz, 48 kHz)  |
| System Requirements              |   |
| Operating System                 | Windows XP (32 bit) Professional Edition  |
| Operuning system                 | Windows Vista (32 bit) Ultimate, Business Edition   |
|                                  |   |
|                                  | Windows 7 (32/64 bit) Ultimate, Professional Edition                                      |
|                                  | Windows 8 Pro (32/64 bit)   |
| Processor                        | Intel Corei7 2.8 GHz or higher  |
| Memory                           | 2 GB or more  |
| Web Browser                      | Microsoft Internet Explorer Ver. 7.0, Ver. 8.0, Ver. 9.0, Ver 10.0                        |
|                                  |   |
| Trop Bronce.                     | Firefox Ver. 19.02 (plug-in free viewer only)   |
|                                  | Firefox Ver. 19.02 (plug-in free viewer only)  Safari Ver. 5.1 (plug-in free viewer only) |

|                             | SNC-XM637   |
|-----------------------------|---|
| Network                     |   |
| Protocols                   | IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, RTSP over HTTP, SMTP, IPv6, HTTPS, SNMP (v1, v2c, v3), SSL   |
| QoS                         | DSCP  |
| Multicast Streaming Support | Yes   |
| ONVIF Conformance           | Profile S   |
| Authentication              | IEEE 802.1X   |
| Interface                   |   |
| Microphone Input            | Built-in microphone   |
| Network Port                | 10BASE-T/100BASE-TX (M12)   |
| Card Slots                  | SD Card x1  |
| Confirmed SD Card Type      | SDHC (no support for SDXC)  |
| General                     |   |
| Power Requirements          | IEEE 802.3af compliant (PoE system)   |
| Power Consumption           | 10.0 W max. (heater ON) 3.8 W max. (heater OFF) (equivalent to PoE Class 1)   |
| Operating Temperature       | -25°C to +50°C (-13°F to +122°F)  |
| Cold Start Temperature      | Higher than -20°C (-4°F)  |
| Storage Temperature         | -30°C to +60°C (-22°F to +140°F)  |
| Operating Humidity          | 20% to 80%  |
| Storage Humidity            | 20% to 80%  |
| Built-in Heater             | Yes   |
| Dimensions (W x H x D)      | Approx. øl 14 mm x 47 mm (ø4 1/2 inches x 1 7/8 inches)   |
| Mass                        | Approx. 275 g (9.7 oz)  |
| External Material           | Top cover/Dome cover: PC (polycarbonate)  |
| External Color              | Top cover: Munsell 4.4BG 8.4/0.2  |
| Fire Retardant              | UL2044  |
| Safety Regulations          | UI.2044, UI.50, IEC60529, IEC62262, EN45545 (fire protection on railway vehicles EN50155 (electronic equipment used on rolling stock), EN55022, EN61000-3-2 EN61000-3-3, EN55024, EN50130-4, FCC/RC (Class B), AU/RZ EMC, KN2Z/MY4Z (Class B), EN50121, VCCI (Class B), EAVE, CROSTR) |
| Supplied Accessories        | CD-ROM (supplied programs) (1)  |
|                             | Installation Manual (1)   |
|                             | Template (1)  |
|                             | Safety regulations (1)  |
|                             | Warranty Booklet (1)  |
|                             | Lens Adjusting Tool (1)   |
|                             | Wrench (1)  |

### **DIMENSIONS**





Unit: mm (inches)

## Distributed by

©2014 Sony Corporation. All rights reserved.

Reproduction in whole or in part without permission is prohibited.

The values for mass and dimension are approximate.

SONY, IPELA, IPELA ENGINE EX, Exmor, and DEPA are trademarks of Sony Corporation.

All other trademarks are the property of their respective owners.