

# PIX-HDF203MI

## 2MP HDCVI IR Miniature Eyeball Camera



- Max 30fps@1080p
- CVI/CVBS/AHD/TVI switchable
- Built-in Mic
- 3.6 mm fixed lens (2.8 mm optional)
- Max. IR length 20 m, Smart IR
- IP67, DC12V

### System Overview

Experience 1080p full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The Micro-size series 1080p HDCVI camera features a compact design and offers a high quality image at a friendly price. It offers various motorized/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

### Functions

#### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the XVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

\* Audio input is available for some models of HDCVI cameras.

#### Long Distance Transmission

HDCVI technology guarantees real-time transmission at long distance without any loss. It supports up to 800 m (1080p) /1200 m (720p) transmission via coaxial cable, and up to 300 m (1080p) /450 m (720p) via UTP cable.\*

\*This function is available for select models.

#### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself the best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.



#### Smart IR

The camera is designed with IR LED illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. Pixvideo's unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

#### Multi-language OSD

OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

#### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments. With working temperature range of -40°C to +60°C (-40°F to 140°F), the camera is designed for extreme temperature environments. Supporting ±30% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

| Technical Specification    |        |                                                                                                                                                                     |                     |                    |                    |  |
|----------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|--------------------|--|
| Camera                     |        |                                                                                                                                                                     |                     |                    |                    |  |
| Image Sensor               |        | 1/2.7 inch CMOS                                                                                                                                                     |                     |                    |                    |  |
| Max. Resolution            |        | 1920 (H) x 1080 (V)                                                                                                                                                 |                     |                    |                    |  |
| Pixel                      |        | 2MP                                                                                                                                                                 |                     |                    |                    |  |
| Scanning System            |        | Progressive                                                                                                                                                         |                     |                    |                    |  |
| Electronic Shutter Speed   |        | PAL: 1/25 s–1/100000 s<br>NTSC: 1/30 s–1/100000 s                                                                                                                   |                     |                    |                    |  |
| S/N Ratio                  |        | >65 dB                                                                                                                                                              |                     |                    |                    |  |
| Min. Illumination          |        | 0.02 Lux/F2.0, 30IRE, 0 Lux IR on                                                                                                                                   |                     |                    |                    |  |
| Illumination Distance      |        | 20 m (65.6 ft)                                                                                                                                                      |                     |                    |                    |  |
| Illuminator On/Off Control |        | Auto; manual                                                                                                                                                        |                     |                    |                    |  |
| Illuminator Number         |        | 1 (IR)                                                                                                                                                              |                     |                    |                    |  |
| Pan/Tilt/Rotation Range    |        | Pan: 0°–360°<br>Tilt: 0°–78°<br>Rotation: 0°–360°                                                                                                                   |                     |                    |                    |  |
| Lens                       |        |                                                                                                                                                                     |                     |                    |                    |  |
| Lens Type                  |        | Fixed-focal                                                                                                                                                         |                     |                    |                    |  |
| Mount Type                 |        | M12                                                                                                                                                                 |                     |                    |                    |  |
| Focal Length               |        | 2.8 mm; 3.6 mm                                                                                                                                                      |                     |                    |                    |  |
| Max. Aperture              |        | 2.8 mm: F2.0<br>3.6 mm: F2.0                                                                                                                                        |                     |                    |                    |  |
| Field of View              |        | 2.8 mm: H: 101°; V: 54°; D: 119°<br>3.6 mm: H: 84°; V: 45°; D: 100°                                                                                                 |                     |                    |                    |  |
| Iris Type                  |        | Fixed iris                                                                                                                                                          |                     |                    |                    |  |
| Close Focus Distance       |        | 2.8 mm: 0.5 m (1.64 ft)<br>3.6 mm: 0.8 m (2.62 ft)                                                                                                                  |                     |                    |                    |  |
| DORI Distance              |        | Detect                                                                                                                                                              | Observe             | Recognize          | Identify           |  |
|                            | 2.8 mm | 38.6 m<br>(126.6 ft)                                                                                                                                                | 15.4 m<br>(50.5 ft) | 7.7 m<br>(25.3 ft) | 3.9 m<br>(12.8 ft) |  |
|                            | 3.6 mm | 49.7 m<br>(163.1 ft)                                                                                                                                                | 19.9 m<br>(65.3 ft) | 9.9 m<br>(32.5 ft) | 5.0 m<br>(16.4 ft) |  |
| Video                      |        |                                                                                                                                                                     |                     |                    |                    |  |
| Frame Rate                 |        | CVI: 1080p@25/30fps; 720p@25/30fps;<br>720p@50/60fps;<br>AHD: 1080p@25/30fps; 720p@25/30fps;<br>TVI: 1080p@25/30fps; 720p@25/30fps;<br>720p@50/60fps;<br>CVBS: 960H |                     |                    |                    |  |
| Resolution                 |        | 1080p (1920 × 1080); 720p (1280 × 720); 960H (960 × 576/960 × 480)                                                                                                  |                     |                    |                    |  |
| Day/Night                  |        | Auto switch by ICR                                                                                                                                                  |                     |                    |                    |  |
| BLC                        |        | BLC/HLC/DWDR                                                                                                                                                        |                     |                    |                    |  |
| WDR                        |        | DWDR                                                                                                                                                                |                     |                    |                    |  |
| White Balance              |        | Auto; manual                                                                                                                                                        |                     |                    |                    |  |
| Gain Control               |        | Auto; manual                                                                                                                                                        |                     |                    |                    |  |
| Noise Reduction            |        | 2D NR                                                                                                                                                               |                     |                    |                    |  |
| Smart IR                   |        | Yes                                                                                                                                                                 |                     |                    |                    |  |
| Mirror                     |        | Off/On                                                                                                                                                              |                     |                    |                    |  |
| Privacy Masking            |        | Off/On (8 area, rectangle)                                                                                                                                          |                     |                    |                    |  |
| Certifications             |        |                                                                                                                                                                     |                     |                    |                    |  |
| Certifications             |        | CE/FCC, UL, IP6K9K, EN50155                                                                                                                                         |                     |                    |                    |  |
| Port                       |        |                                                                                                                                                                     |                     |                    |                    |  |
| Audio Interface            |        | Built-in Mic                                                                                                                                                        |                     |                    |                    |  |
| Video Output               |        | Video output choices of CVI/TVI/AHD/CVBS by one BNC port                                                                                                            |                     |                    |                    |  |
| Power                      |        |                                                                                                                                                                     |                     |                    |                    |  |
| Power Supply               |        | 12V ±30% DC                                                                                                                                                         |                     |                    |                    |  |
| Power Consumption          |        | Max 2.3W (12V DC, IR on)                                                                                                                                            |                     |                    |                    |  |
| Environment                |        |                                                                                                                                                                     |                     |                    |                    |  |
| Operating Temperature      |        | –40°C to +60°C (–40°F to 140°F); <95% (non-condensation)                                                                                                            |                     |                    |                    |  |
| Storage Temperature        |        | –40°C to +60°C (–40°F to 140°F); <95% (non-condensation)                                                                                                            |                     |                    |                    |  |
| Protection Grade           |        | IP67                                                                                                                                                                |                     |                    |                    |  |
| Structure                  |        |                                                                                                                                                                     |                     |                    |                    |  |
| Casing                     |        | Metal                                                                                                                                                               |                     |                    |                    |  |
| Dimensions                 |        | Φ62.0 mm × 61.7 mm (Φ2.44" × 2.43")                                                                                                                                 |                     |                    |                    |  |
| Net Weight                 |        | 0.17 kg (0.37 lb)                                                                                                                                                   |                     |                    |                    |  |
| Gross Weight               |        | 0.27 kg (0.6 lb)                                                                                                                                                    |                     |                    |                    |  |

## Dimensions (mm[inch])

