# LineX LXM Series CIS




## 01 Product Model

### INS-LXM-490-10GM-9M

CIS line-scan camera · Monochrome · 10GigE port · Integrated design

## 02 Typical Applications

Battery separator surface inspection; electrode sheet surface inspection; print inspection; print guidance and positioning; fabric inspection; electronic component inspection; display surface inspection; wood surface inspection; leather surface inspection; and other applications.

## 03 Key Features

- All-in-one design integrating the camera, light source, and lens
- 1:1 imaging without distortion from conventional lenses
- Short working distance for use in confined spaces
- Multiple scan widths available, with no multi-camera image stitching required
- 10GigE copper Ethernet interface supporting transmission distances of up to 30 m
- Compliant with the GigE Vision V2.0 standard
- Supports Windows 7/10 (32-bit and 64-bit), Windows 11 (64-bit), and Linux (64-bit)
- Provides SDK libraries for C, C++, and C#
- InsWorks ACI image acquisition software for CIS cameras

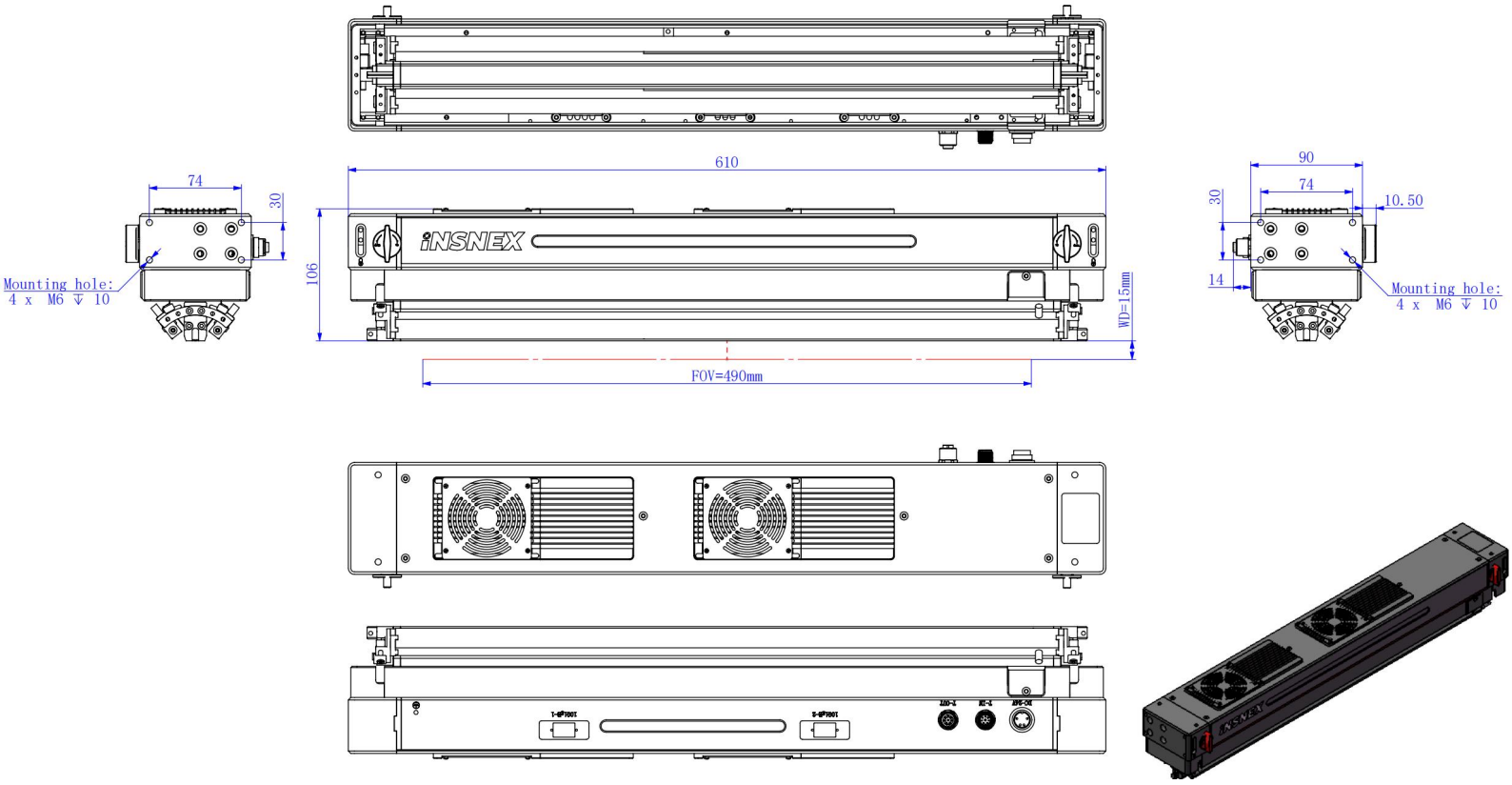
## 04 Standard BOM

- 10GigE dual-port frame grabber: INS-FG-EXGV2-S-2, 1 pc.
- Cable (5 m power cable), straight connector: INS-WIRE-M16-A-S4-5M, 1 pc.
- Cable (5 m trigger input cable), straight connector: INS-WIRE-M12-A1-S8-5M-PUR, 1 pc.
- Cable (5 m Ethernet cable), straight connector: INS-WIRE-LKK-10GE-S-RJ45-RJ45-H-05, 2 pcs.
- Calibration target: INS-LXM-490-10GM-9M-BD, 1 pc.

**NOTE: Optional accessories can be ordered separately based on the application. Contact your sales engineer or technical support for model and specification details.**

| Parameter Category | Parameter | Value |
|---|---|---|
| Performance Specifications | Sensor Type | CMOS |
| | Field of View | 490 mm |
| | Image Mode | Monochrome |
| | Resolution (μm/pixel) | 28μm |
| | Resolution (DPI) | 900DPI |
| | Pixels per Line | 17500 |
| | Maximum Line Rate | 80kHz |
| | Transmission Interface | 10GigE |
| | Dynamic Range | 67.7 dB |
| | Signal-to-Noise Ratio | 48.4 dB |
| | Working Distance | 15 mm |
| | Depth of Field (DOF) | ±1.3mm |
| | Gain | 1.0 x |
| | Exposure Time | 4.5 μs ~ 17 s |
| Functional Specifications | Shutter Mode | Auto Exposure |
| | Pixel Format | Mono 8 |
| | Image Flip | Supports horizontal flip |
| | Trigger Mode | External trigger, internal trigger |
| | External Trigger Mode | Line trigger, frame trigger, hybrid trigger |
| Electrical Specifications | Data Interface | 10GigE*2 |
| | Digital I/O Connectors | CAM_PWR: 4-pin camera power connector; I/O: 8-pin M12 signal connector |
| | Supply Voltage | Camera: 24 VDC; light source: 24 VDC |
| | Typical Power Consumption | Camera: 96 W @ 24 VDC; light source (continuous illumination): 72 W @ 24 VDC |
| Mechanical Specifications | Dimensions | Including light source: 610 mm × 90 mm × 106 mm (camera body dimensions exclude the focus adjustment mechanism and connector length) |
| | Weight | Approx. 5.2 kg |
| | Ingress Protection Rating | IP54 (with the lens and cables properly installed) |
| | Operating Temperature | 0~40°C |
| | Storage Temperature | -30~80°C |
| | Operating Humidity | 5%–90% RH, non-condensing |
| General Specifications | Software | InsWorks ACI |
| | Supported Operating Systems | Windows 7/10 (32-bit and 64-bit), Windows 11 (64-bit), and Linux (64-bit) |
| | Communication Protocol | GigE Vision 2.0 |
| | Certifications | CE、FCC、RoHS |

## Dimensions





## CONTACT US

Insnex Technologies Co.,Ltd

Address: Building R, No. 218 Xingming Street, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone

Postal Code: 215000

Website: http://www.insnex.com/

Telephone: (86) 0512-67159489

E-mail: Services@Insnex.com