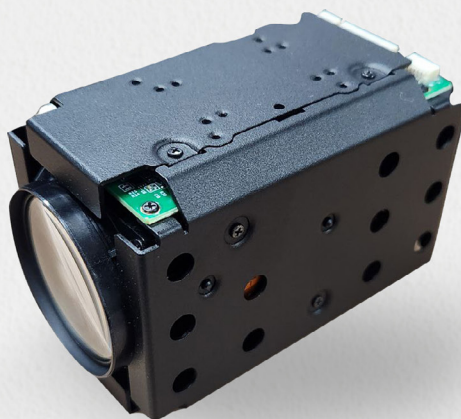**LVDS ZOOM MODULE**

# LZ-R30

Ver.1.0

1/2.8" Sony CMOS Image sensor(Rolling shutter)
2MP Output
60/50 fps, 30/25 fps
Color: 0.03 Lux @ (F.1.63, AGC ON), BW: 0Lux (IR LED)
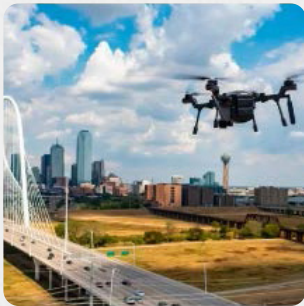Optical 30x, Digital 10x
256 zoom/focus presets

# Business Area

## Network Performance

Network zoom camera module is a fully integrated network block camera including Image sensor, long range zoom lens, video encoding, video analysis and network transmission functions. It is designed to be flexible embedded into PTZ cameras, Machine Vision cameras, Robot systems, Intelligent Surveillance equipment, UAV drones.  MLVision network zoom modules provide standard RJ45 cable and complete SDK/ISAPI protocols. It comes with intuitive WEB GUI and configuration tool.

MLVision, employing the industry-leading imaging technologies accredited in the ITS, Defense/Law Enforcement, Inspection, Machine Vision, Surveillance market and in-house manufacturing technologies for IP-based fast performance, now announces the release of a Compact Zoom Module with imaging enhancement features which assures high-quality image transmission when networked environment is crucial. The realized physical size and weight of the compact module are optimum for an extensive range of customization, including applications as ariel/ground/maritime drones, inspection, ITS, machine vision and security and surveillance applications



## Unmanned Aerial, Ground & Maritime Vehicles

From peace time to war time or simple border surveillance applications, detailed, high-resolution imagery provides critical data for immediate decision support and post-processing

The integration of autonomous drones and robotic technology marks a turning point, heralding a transformative era in daily life

## Inspection Applications



Carry out your inspections and observations independently of the client's requirements in detailed IP HD images. Inspect more coverage per deployment with HD image. Low cost of ownership can be achieved.


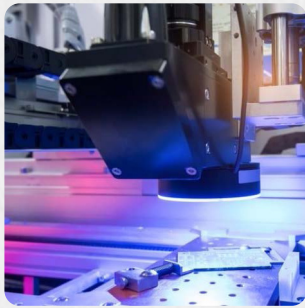
## Military & Law Enforcement

Ensure dominance by delivering the most advanced ground sensors in the world.

Intended for integrators for land, Air and maritime applications. High performance integrated optronic solution, designed for vision from armoured vehicles and site surveillance

## InterTraffic Management

Enables possibilities for seamless traffic control with Intelligent Traffic Management Solutions. Advanced traffic cameras empower incident response, streamline roadwork planning, and optimize traffic flow.

Proactively monitor road hazards such as weather, potholes, wildlife, and flooding with our high-quality network solutions. Empower immediate action with clear visualizations day or night.

## Machine Visions and Robotics

Give industrial equipment the ability to "see" what it is doing and make rapid decisions based on what it sees. From visual inspection and defect detection, positioning and measuring parts, and identifying, sorting to tracking products.

Industrial machine vision is the backbone of smart manufacturing, logistics, and operations. Machine vision cameras, embedded IoT sensors, and industrial PCs can bring intelligence, analysis, and efficiency to every step of the manufacturing process.

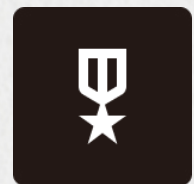# Industries We Specialize In

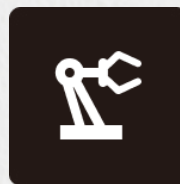Public Safety

Oil & Gas

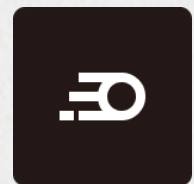Federal Government

Military & Law Enforcement

Agriculture

Construction & Engineering

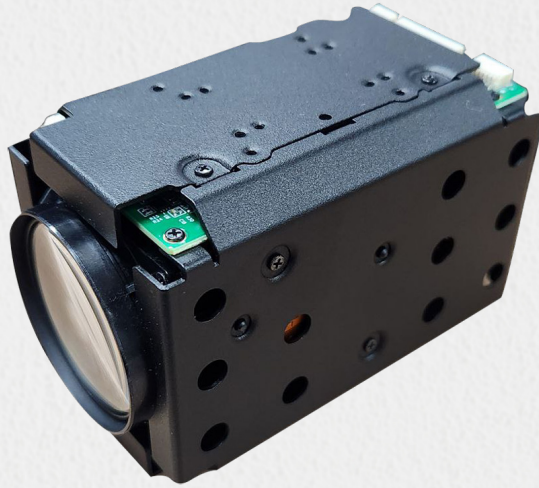Inspection & Manufacturing

Roads & Railways

# LZ-R30



## Image Sensor

| | |
|---|---|
| **Sensor** | 1/2.8" Sony CMOS Image sensor(Rolling shutter) |
| **Total pixels** | 2,014(H) x 1,196(V) = 2.4M Pixels |
| **Effective pixels** | 1,965(H) x 1,113(V) = 2.18M Pixels |
| **Resolution** | 1920 x 1080 |
| **Frame Rate** | 60/50 fps, 30/25 fps |
| **Min. lliumination** | Color: 0.03 Lux @ (F.1.63, AGC ON), BW: 0Lux (IR LED) |

## Lens

| | |
|---|---|
| **Zoom Ratio** | Optical 30x, Digital 10x |
| **Focal Length** | f = 4.6mm ~ 136mm |
| **Aperture ratio** | F1.63(wide) ~ F4.85(tele) |
| **Angle Of View** | H : 65.4°(W) ~ 2.2°(T) / V : 38.3°(W) ~ 1.3°(T) / D : 73.3°(W) ~ 2.6°(T) |
| **Min. Distance** | 0.5m(Wide), 5m(Tele) |
| **Iris** | DC auto iris(TBA) |
| **IR Cut Filter** | On/ Off |

## Function

| | |
|---|---|
| **Focus Control Mode** | - Auto Focus Mode(Zoom Trigger, Timer Trigger, One Push)<br>- Manual Mode(Slide Control, One Push) |
| **Presets** | 256 zoom/focus presets(TBA) |
| **Day & Night** | Auto, Day, Night, Ext-in |
| **D&N Levels** | 10 levels (without Ext-in) |
| **Electronic Shutte Speed** | 1/25(30)/1/50(60) ~ 1/5,000 |
| **White Balance Modes** | Auto, Manual (3 steps or more) |
| **Exposure Modes** | Auto Mode , Manual Mode, Indoor Mode 50Hz / 60Hz(Flicker-Free) |
| **Gain control** | Auto / Manual |
| **WDR** | On/ Off |
| **BLC** | On/ Off |
| **HLC** | On/ Off |
| **DNR** | 2D&3D |
| **Defog** | N/A |
| **DIS** | On/ Off(TBA) |
| **Mirror** | Off, Vertical Flip, Horizontal Flip, H+V Flip (180degree rotation) |
| **Privacy Mask** | Max 8 Zones |
| **Motion detection** | 32 x 18 cell / AI motion detection(TBA) |
| **Output Format** | BT.1120 16-bit YCbCr via LVDS(single or dual) |
| **OSD** | Support |
| **System Mode** | NTSC / PAL |

## General

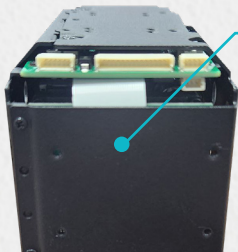| | |
|---|---|
| **External devices** | 1x D&N input(Ext-in)<br>1x PWM output(lighting control)<br>2x UART |
| **External Storage** | Micro SD (TBD) |
| **Power Supply** | 12V |
| **Power consumption** | TBD |
| **Storage Temperature** | -20°C ~ +60°C (Humidity < 90%RH, Non-condensing) |
| **Operating Temperature** | -10°C ~ +50°C (Humidity < 90%RH, Non-condensing) |
| **Dimension** | 50 x 60 x 93(WxHxD) |
| **Weight** | 290g |
| **Certifications** | NA |

## Pictures



**Front**

**Left**

**Rear**

## Optional Add-on Board



RS485 Transceiver can be installed on the rear of the module

## Dimensions



50.0

60.0

88.0

93.0