

CSL RugiCam-IP Mk 3

Intrinsically Safe

Full HD network Camera

- Intrinsically Safe ATEX / UKEX / IECEx / QLD Certification.
- Ex ia I Ma (M1 mining).
- Ex ia IIB T3 Ga; Ex ia IICT135°C Da (non-mining).
- Ta = - 20°C to +60°C.
- Full-HD Resolution 1920x1080, others selectable (independent main + sub-streams).
- 1/2.8" SONY STARVIS 2® Latest SONY CMOS 2.9µm High Sensitivity, Backlit, Active Pixel Starlight Sensor with Wide Dynamic Range perfect for standard and low-light operation.
- Configuration by any standard web browser (e.g. Chrome, Edge, Firefox etc...) Replaces the outdated and now unsupported Microsoft IE Internet Explorer and Active-X.
- Backup and Restore of Configuration Settings to a handy PC File.
- Internal Microphone fitted as standard (for audio streaming of surrounding background noise – e.g. Motors/Conveyors etc.)
- Mega-Pixel 4mm f1.6 IR HD Lens (with IR-Cut switchable).
- RTSP Stream with H.264, H.265, H.265+, MJPEG Compression formats, with Adjustable Frame Rate – Allows Full Control of Network Bandwidth Usage (25/30fps max).
- 10/100 Intrinsically Safe (IS) Ethernet LAN Interface supports up to 100m Cat5/6/7 Connection (with PoEx).
- Dual Band Wi-Fi supporting 2.4 / 5GHz 802.11 a/b/g/n standards at up to 150Mbps – with integral omni-directional antenna 'Puck' design.



- LED indication (on rear) – Power / LAN / Wi-Fi
- 12VDC IS Power Supply Input or PoEx® (Power over IS Ethernet) allows single cable operation.
- Rugged IP65/66 rated 316 Stainless Steel Enclosure suitable for harsh environments (ideal for underground mining).
- Compact dimensions W:87 x H:95 x D:165mm (with Wi-Fi) W:87 x H:79 x D:165mm (without Wi-Fi Puck).
- Plug & Socket Connections- shortens installation and maintenance time.

The **CSL RugiCAM-IP MK3** is the latest generation and updated version of the popular Intrinsically Safe (IS) RugiCAM-IP Network Camera ideally suited to critical, Group I Underground Mining applications.

As with previous versions, it connects directly to compatible IS Ethernet Systems via a wired LAN cable or via the **NEW UPGRADED Dual-Band Wi-Fi**. The small, rugged and cost-effective design makes it the ideal choice for many applications:

Petrochem - Drill Rigs, Process Monitoring, Remote Safety Inspections, Hazardous Zone Security etc.

Mining- Conveyor Transfer Points, Bunkers, Fan Sites, Machine Monitoring, Face Roof Supports, etc.

The **CSL RugiCAM-IP MK3** is the new improved version of the earlier MK1 and MK2 models. It features Full HD 1920 x 1080P

resolution and supports video streaming via MJPEG, H.264, H.265 or H.265+ compression standards, with frame rates selectable to reduce network bandwidth, ideal in low ambient light levels and with lower noise images.

All configuration is by any standard web browser and settings can be backed up and restored to a PC file.

The camera body is manufactured from high quality 316 stainless steel to suit harsh Group I Mining applications. A 6mm thick toughened glass window provides optimal protection in harsh environments. As well as adding Dual-Band 2.4 / 5GHz Wi-Fi, this new MK3 version also features a **SONY STARVIS 2®** image sensor offering even sharper low-noise images than before. The Dual-Band Wi-Fi antenna is again integrated into a 'Puck' design on the bottom of the enclosure. reduce network bandwidth. All configuration is by a standard web browser or ONVIF compliant tool (settings can be backed up and restored to file).

The camera body is manufactured from high quality polished 316 stainless steel to suit harsh Group I Mining applications. A 6mm thick toughened glass window provides optimal protection in the harsh environment.

As well as adding H.265 compression and MJPEG support this new MK2 version also features an enhanced low-light image sensor with wide dynamic range ideal for underground use. The Wi-Fi antenna is integrated into a 'Puck' design on the bottom of the enclosure to improve on the ruggedness of the MK1 external antenna connector arrangement

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November 2024

SPECIFICATION

- Sensor**
1/2.8" SONY STARVIS 2® Latest SONY CMOS 2.9µm Active Pixel Starlight Sensor
- Lens**
Mega-Pixel 4mm-focal length f1.6 IR Lens Viewing angle (approx.) 78° (H) x 59° (V) x 89° (D)
- Input power**
12VDC IS Power Supply (10-15V)
Typically, 12V @ 300mA
(inrush < 200mA)
- Cable length**
10/100 IS Ethernet Interface supports up to 100m Cat5/6/7 Connection
- Connector**
M12 or Krott SKK connector options
- Video streaming**
RTSP with H.264, H.265, H.265+, MJPEG with Adjustable Frame Rate - Controls Network Bandwidth Usage (25/30fps max)
- Wi-Fi**
Dual-Band Wi-Fi 2.4 / 5GHz supporting 802.11 a/b/g/n standards at up to 150Mbps – with integral antenna ‘Puck’ design

SAFETY

- Location of Camera**
Zone 0 / Zone 20, IIB T3 hazardous area
- Certification Code**
Ex ia I Ma (M1 mining)
Ex ia IIB T3 Ga
Ex ia IIIC T135°C Da (non-mining)
Ta = -40°C to +60°C
- Certificate numbers**
CML 15ATEX2016X
IECEX CML 15.0008X
IECEX TRA 17.0001X
CML 21UKEX21068X

See certificates for further information

ENVIRONMENTAL

- Operating Temperature**
-20°C to +60°C
- Storage Temperature**
-20°C to +60°C
- Humidity**
0...95% RH, non-condensing
- Ingress Protection**
IP66 (IP65 with Krott connectors)

ELECTRICAL

- Power supplies**
12VDC IS Power Supply Input or PoEx®
(Power over IS Ethernet)
9492-PS-PLUS recommended

MECHANICAL

Width	87mm
Height	95mm
Depth	165mm
Weight	4.5Kg

ORDERING INFORMATION

9459-ETMK3-CSL**	CSL RugiCAM-IP MK3 Camera (M12)
9459-ETMK3-SKK**	CSL RugiCAM-IP MK3 Camera (SKK)

**Standard versions (Stainless Steel 316 / Wi-Fi / Microphone)

Contact factory for other ordering information

Additional accessories

9409-ET5	Camera Ethernet Cat7 Cable 5m* (M12 connector 8-pole, RJ45)
9409-PWR5	Camera Power Cable 5m* (M12 connector 4-pole, Free end)

*Also available in other lengths (subject to MOQ)

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