

L0MT0404 Oracle Data Flameproof Wi-Fi Access Point IEC Ex Cable Gland 9mm to 11.9mm

The L0MT0404 model Wi-Fi Oracle Data is an industrial, flameproof (Ex d) Wi-Fi Data Transceiver Module designed for reliable, high-speed data access in underground mining applications.

The L0MT0404 model is suitable for applications requiring IEC Ex flameproof certification.

This L0MT0404 model supports data and power cable with O.D. range of 9 to 11.9 mm.
Pempek Gland Part Number: CWR02137

Deployment-ready Wi-Fi solution for underground mining

No external antenna cable required

Antenna is built into the housing of the product

Flexible power supply options (PoE or 24VDC)

Single gland entry for power and data cable

Simple way to add Wi-Fi connectivity

Cost effective (one product solution)

Easy maintenance

Easy configuration

Heavy Duty Enclosure: Self-contained, certified, flameproof (Ex d) housing, stainless steel engraved facia

Wi-Fi Compliance: IEEE 802.11 b/g (2.4GHz)

Power Supply: 24VDC or PoE (IEEE 802.3af) (5W Max)

Ambient Temperature: -10°C to +60°C

Ingress Protection: IP65

Default Cable Gland: 9 to 11.9 mm O.D.

Fasteners: M6 x 50mm x 4



Material

Enclosure is free machining brass.
Enclosure retainer is stainless steel.
Radome is Teflon.

Mass: 7.5kg (16.5lb)

Typical Application

- Underground mining vehicles
- Longwall face equipment
- Telemetry relay networks
- Mesh networks

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Electrical Characteristics

| Supply | |
|------------------------|--|
| Supply | PoE or 16-48VDC |
| Power Method | PoE (Data pairs; Spare pairs) / External +24V DC |
| Wattage ^{MAX} | 5W |

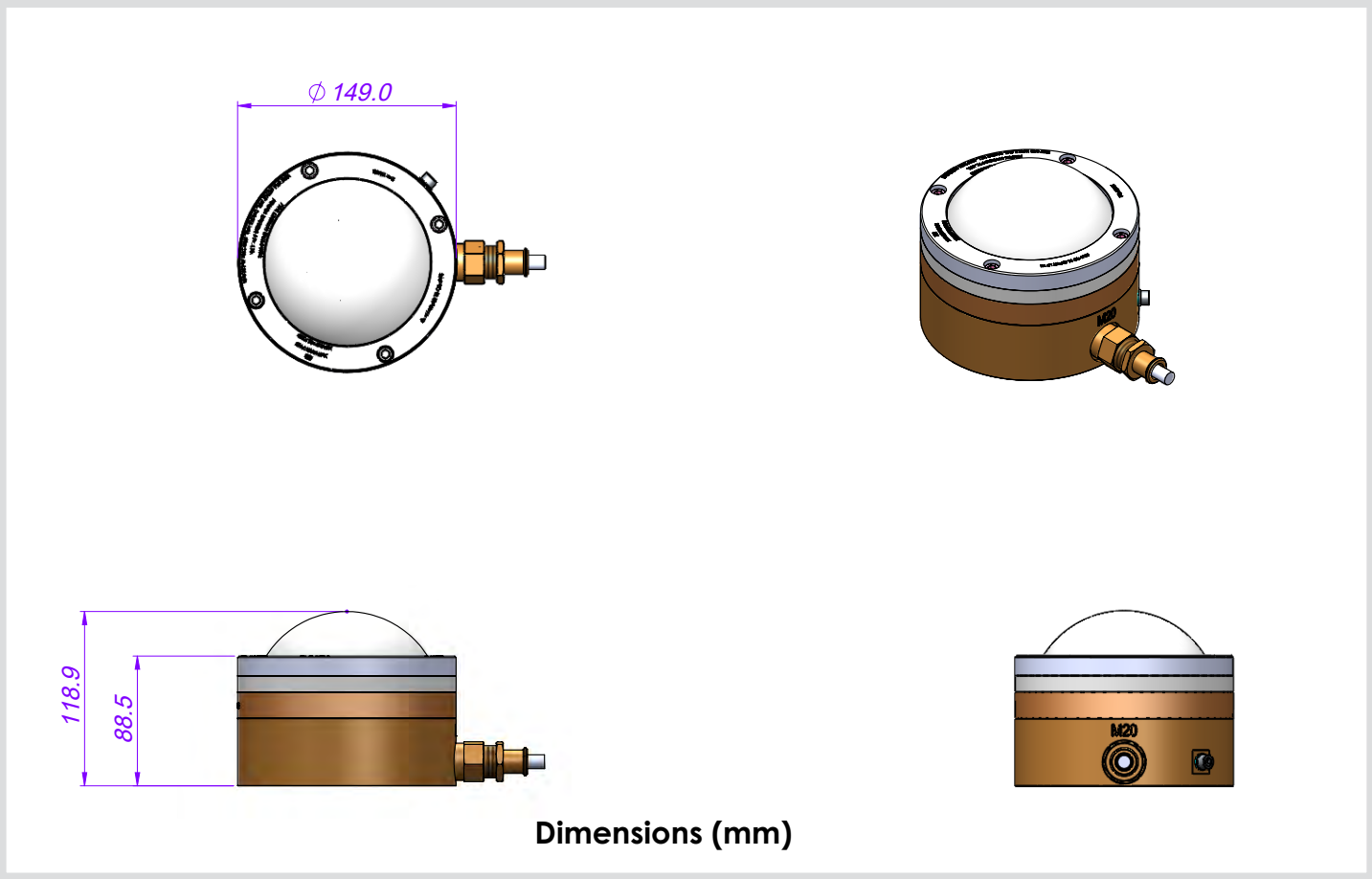
| Radio Module | |
|----------------------|-----------------------------------|
| Frequency | ISM 2.4GHz |
| Deviation | +/-20KHz |
| Transmit Power | Programmable up to +26dBm |
| Channels Spacing | 125kHz |
| Modulation | OFDM |
| Range ^{MIN} | 200 metres "Line of Sight" |
| Range ^{MAX} | 1000 metres "Line of Sight" |
| Data Integrity | CCITT CRC (16 Bit) |
| Bandwidth | 250KHz / 3.0MHz @ 115Kbs / 1.5Mbs |
| Antenna | Internal Passive Loop Antenna |
| Classification | Transceiver |
| Bit Rate | 1Mbit 54Mbps |
| Receive Sensitivity | -97dBm @ 1Mbps |

| Communications | |
|----------------|----------------------------|
| Baud | 115Kbs / 1.5Mbs RS-422 |
| Format | 8N1 |
| CRC | CCITT 16-bit |
| Frame | Packet Oriented, Bit Masks |
| Throughput | T.B.A. |

| Environmental | |
|-----------------------|--------------------|
| Operating Temperature | Minus -20°C + 50°C |
| Temperature Class | T6 |
| Ingress Protection | IP65 |

*Figure cited on usage rate equaling 16 hours per day, 6 days per week, 52 weeks per year where failures are due to manufacturing.

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Wiring Specification

| Connector 19mm Ex id Gland | | |
|-------------------------------|---------------------|---------------------|
| PIN | Description | Signal |
| 1 | 24VDC Supply | 24VDC Supply |
| 2 | 24VDC Supply Return | 24VDC Supply Return |
| 3 | RS-422 TX+ | Communications |
| 4 | RS-422 TX- | Communications |
| 5 | RS-422 RX+ | Communications |
| 6 | RS-422 RX- | Communications |