The LOMT0501 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 LOMT0501 model is intended for MSHA-approved (USA) applications only.

This LOMT0501 model supports data and power cable with O.D. range of 6.6 to 9.5mm. Pempek Gland Part Number: H0MT2801

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: 6.6 to 9.5mm O.D.

Material

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

Fasteners: M6 x 50mm x 4

Mass: 7.5kg (16.5lb)

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nade for mining

Typical Application

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

Datasheet-LOMT0501

LOMT0501 Oracle Data Flameproof Ex d Wi-Fi Oracle Access Point MSHA Cable Gland

Electrical Characteristics

Supply		
Voltage	24VDC	
Wattage MIN	1.2W	
Wattage MAX	2.5W	
Radio Module		
Supply	5.0VDC @ 115mA / 3.3VDC @ 220mA	
Frequency	UHF 2.4GHz / 5.0GHz	
Power	100mW	
Channels	32 (250KHz Spacing) / 16 (3.0MHz Spacing)	
Modulation	Frequency Hopping Spread Spectrum	
Range MIN	100 metres "Line of Sight"	
Range MAX	500 metres "Line of Sight"	
Data Integrity	CCITT CRC (16 Bit)	
Bandwidth	250KHz / 3.0MHz @ 115Kbs / 1.5Mbs	
Antenna	Internal Passive Loop Antenna	
Classification	Transceiver	
Communications		
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 10°C to +55°C	
IP Rating	IP67	
Humidity	T.B.A.	
MTBF	10,000 hours*	
	•	
Certification		

USA

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

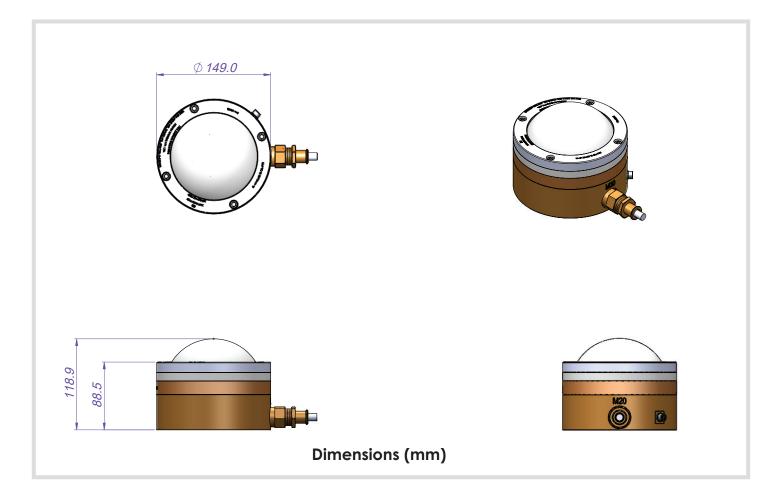
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LOMT0501 Oracle Data Flameproof Ex d Wi-Fi Oracle Access Point MSHA Cable Gland



Wiring Specification

PIN	Connector 19mm Ex id Gland 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

Datasheet-LOMT0501

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