



# **X18 PRO**

# **Advanced LTE WiFi Mining Router**

Introducing the Pro LTE Mining Router, the ultimate networking solution for mining companies that require reliable and secure connectivity in harsh environments. Equipped with 6 Gigabit Ethernet ports and LTE cellular connectivity, this router provides fast and efficient communication between your critical mining equipment and devices

Built to withstand the demanding conditions of mining operations, the Pro LTE Mining Router is designed with a ruggedised casing that can withstand extreme temperatures, vibrations, and shocks. It is engineered to operate reliably in harsh environments where dust, water, and other contaminants are present. With its 6 Gigabit Ethernet ports, the Pro LTE Mining Router can connect multiple devices and equipment, enabling seamless communication and data transfer. This ensures that your mining operations can run smoothly and efficiently without interruptions or downtime.

#### **Base System**

CPU	1.3GHz Dual Core ARM
Memory	1 GB
Extension	2 x Mini-PCle
Extension	2 x Shields
Power	12 – 48 VDC
SIM	1x Micro SIM
	1x Embedded

## Network

Ethernet	6 x Gigabit Ethernet
Mobile	1 x LTE Advanced
WiFi	1 x 802.11a/b/g/n/ac (WiFi 5)
GPS/GNSS	1 x Receiver

## Environment

Dimensions	139 x 77 x 219 (W x H x D)
Temp	-25 °C to +80 °C
Ingress	IP66, IP67, IP68
MTBF	35.4 years (310,000 hours)

## Power

Voltage	12 VDC, 24 VDC, 48 VDC
Tolerance	15%
Avg/Max	6 W, 15W

#### USB

Interface	USB 2.0
	RS232 adapter, RS-485 adapter, CAN adapter, Ethernet adapter
Mode	adapter, CAN adapter,
	Ethernet adapter

## Serial / Fieldbus

	Interface	1
	Standards	RS-232/485
		Modem, Pair Connection, Reverse Telnet, RFC2217, TCP Client, TCP Server,
	Modes	Reverse Telnet, RFC2217,
ivioues	ivioues	TCP Client, TCP Server,
		UDP, Console

#### Software

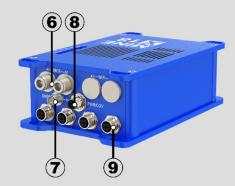
Management (CLI, WEB, SNMP, Telnet, SSH)
Routing (RIP, OSPF, BGP, Virtual router)
Multicast (IGMP, PIM)
Advanced (GRE, IP-IP, VxLAN, L2TPv3)
Network Services (DHCP, QOS, HotSpot, DNS)
NAT (static, SNAT, DNAT)
VPN (IPSec, OpenVPN)
Automation (Scripting, Auto-Installation)
L3 VPN, pseudo-wires
Advanced Features (GNSS)
Advanced Features (OpenVPN, DynDNS)
Voice Gateway
CAN Bus (FMS)

The router's LTE cellular connectivity provides a reliable and secure way to connect your mining equipment and devices to your network, even in remote locations with poor wired connectivity or network outages. This ensures that your mining operations can continue running smoothly and efficiently without interruptions or downtime. The Pro LTE Mining Router also features advanced security features such as VPN capabilities and firewall protection, ensuring your network is protected against cyber threats and attacks. This is particularly important for mining operations that handle sensitive data and require high levels of security.

Easy to install and configure, the router has a user-friendly web interface that allows quick and simple setup. It also includes advanced management tools, such as remote monitoring and diagnostics, that allow you to monitor and manage your network performance in real time. Overall, the Pro LTE Mining Router is the perfect networking solution for mining companies that require reliable and secure connectivity in harsh environments. Its advanced features and ruggedised design make it a valuable investment for any mining operation looking to enhance its network performance and security while minimising downtime and maximising productivity.







- 1 Gigabit Ethernet (M12 X-coded female)
- 2 Vent
- 3 Micro SIM
- 4 USB Type A
- **5** Reset Button
- 6 WWAN LTE Primary / Secondary (N-Type)
- **7** Positioning GNSS GPS (TNC)
- 8 Power / IO (M12 5-pin A-coded female)
- 9 Gigabit Ethernet (M12 X-coded female)

# **Interfaces**

## Mobile / Cellular

Interfaces	1
Modem	Sierra Wireless, Telit
Technology	3G, 4G-LTE, 5G
Network	Up to LTE Cat. 18 3GPP Rel. 12

# **GPS/GNSS**

Receiver	BeiDou, Galileo, GLONASS GPS/QZSS
Sensitivity	Up to -167 dBm
Accuracy	Up to 2.5 m CEP
Services	Standalone, Assisted GPS, Data server with JSON, NMEA data stream
Antenna	Active, Passive

## RF Antenna Cross Switch Module

Interfaces	1
Technology	DPDT
Frequency	100 MHz to 6 GHz

# **RF Connectors**

Mobile	N-Type Female
WIFI	N-Type Female
GPS/GNSS	N-Type Female

# Modems

## MC7430

Technology LTE - cat 6
B1, B3, B5, B7, B8, B18, 4G bands B19, B21, B28, B38, B39, B40, B41
4G bands B19, B21, B28, B38, B39,
B40, B41
3G bands B1, B5, B6, B8, B9, B19

## LN920A12-WW

Technology	LTE - cat 12
4G bands	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B38, B39, B40, B41, B42, B43, B48, B66, B71
3G bands	B1, B2, B19, B8, B4, B5,B9

# Ordering

MX-18-P-Lc-G	X18 Pro Max - 6xGe + 1xLTE (MC7430) + 1xWLAN + GNSS
MX-18-P-Lp-G	X18 Pro Max - 6xGe + 1xLTE (LN920A12-WW) + 1xWLAN + GNSS
MX-18-ANT-RF-SWITCH	Antenna redundancy module - Dual-pole double-throw switch (DPDT)