MINE X N

X18 MINI

Advanced Gigabit Ethernet Router

Introducing the LTE Mobile Router for Mining Operations, the ultimate networking solution for mines that require reliable connectivity in remote locations. With advanced features such as LTE mobile connectivity, ruggedised design, and wide range power DC supply, this router provides fast and secure connectivity for all your critical mining equipment and devices.

Designed to form the centrepiece of your communications infrastructure, providing seamless connectivity for all aspects of mining. Equipped with industry-leading LTE technology, Mine X hardware provides ultra-reliable high-speed/high-throughput data communications across all applications, including autonomous vehicles, excavation, processing and more. Built in Australia to comply with national mining standards, the Mine X is a powerful and robust industrial router designed for use in the most severe and challenging environments, including but not limited to extreme temperature, dust, vibration, and pressure water jets.

Base System

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

Network

Ethernet	2 x Gigabit Ethernet
Mobile	1 x LTE Advanced
GPS/GNSS	1 x Receiver

Environment

Dimensions	139 x 48 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
Mode	RS232 adapter, RS-485 adapter, CAN adapter, Ethernet adapter

Serial / Fieldbus

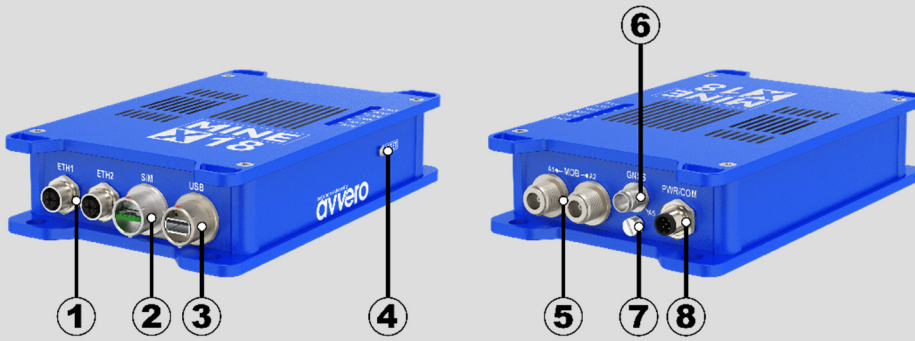|	
Interface	1
Standards	RS-232/485
Modes	Modem, Pair Connection, Reverse Telnet, RFC2217, TCP Client, TCP Server, UDP, Console

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)

This small form factor router packs a powerful punch, delivering high-speed LTE connectivity in even the most rugged environments. The platform is built to withstand harsh mining conditions, and this router boasts a durable, rugged design that can withstand extreme temperatures, moisture and dust. It is specifically designed and built for mining applications, ensuring reliable connectivity in remote locations, even when traditional wired connections are unavailable.

Our LTE Mining Router is easy to install and set up, with a simple and intuitive user interface that allows for quick configuration and deployment. It has advanced security features to protect your network and data, including firewall, VPN, and authentication protocols. This router supports multiple LTE bands, ensuring compatibility with various carriers and networks. It also features built-in redundancy, with failover capabilities to ensure uninterrupted connectivity, even in network or equipment failures.

The LTE Mining Router is a robust and reliable solution for critical mining equipment. Its rugged design, advanced security features, and high-speed LTE connectivity make it the perfect choice for mining applications that require reliable and secure connectivity.

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

Modems

MC7430

Technology	LTE - cat 6
4G bands	B1, B3, B5, B7, B8, B18, 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-M-Lc-G	X18 Mini - 2xGe + 1xLTE (MC7430) + GNSS
MX-18-M-Lp-G	X18 Mini - 2xGe + 1xLTE (LN920A12-WW) + GNSS
MX-18-ANT-RF-SWITCH	Antenna redundancy module - Dual-pole double-throw switch (DPDT)