

X18 MINI S

Advanced LTE WiFi Mining Router

Introducing the Industrial-Grade Mobile Router, the ultimate networking solution for mining operations that require high reliability and uptime. With advanced features such as ruggedised design, redundant power supplies, and mobile connectivity, this router provides fast and secure connectivity for all your critical mining equipment and devices.

Engineered for harsh mining environments, with a durable casing that withstands extreme temperatures, vibrations, and shocks. It ensures the router remains operational and reliable even in the most demanding conditions. The Industrial-Grade mobile router also features redundant power supplies, ensuring continuous operation in case of a power outage or equipment failure. It is essential in mining operations where downtime can result in significant financial losses.

Base System

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

Network

Ethernet	2 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
Mode	RS232 adapter, RS-485 adapter, CAN adapter, Ethernet adapter

Serial / Fieldbus

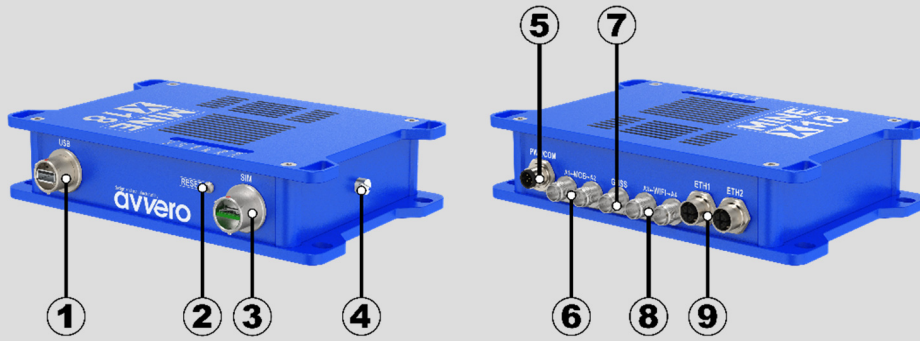
Interface	1
Standards	RS-232/485
Modes	Modem, Pair Connection, Reverse Telnet, RFC2217, TCP Client, TCP Server, UDP, Console

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)

In addition, the router's mobile connectivity provides a secure and reliable way to connect your critical mining equipment and devices to your network. This is particularly useful in remote mining sites where wired connectivity may not be available or feasible. The Industrial-Grade mobile router also includes advanced security features such as VPN, firewall, and intrusion prevention, ensuring your network is protected against cyber threats and attacks.

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 Industrial-Grade mobile Router is the perfect networking solution for mining operations that require high reliability and uptime. 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 USB Type A
- 2 Reset Button
- 3 Micro SIM
- 4 Vent
- 5 Power / IO (M12 5-pin A-coded female)
- 6 WWAN LTE Primary / Secondary (TNC)
- 7 Positioning GNSS GPS (TNC)
- 8 WLAN WiFi (TNC)
- 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

RF Antenna Cross Switch Module

Interfaces	1
Technology	DPDT
Frequency	100 MHz to 6 GHz

WiFi / WLAN

Interfaces	1
Standards	802.11a/b/g/n/ac (WiFi 5)
Bands	Dual-band 2.4 / 5 GHz
Data rate	144 Mbps 2.4 GHz 300 Mbps 5 GHz
MIMO Mode	2.4 GHz 2x2 MIMO 5 GHz MIMO
Modes	Client, Mesh, Access Point, Bridge

GPS/GNSS

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

RF Connectors

Mobile	TNC Female
WIFI	TNC 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-S-LcW-G	X18 Mini S - 2xGe + 1xLTE (MC7430) + 1xWLAN + GNSS
MX-18-M-S-LpW-G	X18 Mini S - 2xGe + 1xLTE (LN920A12-WW) + 1xWLAN + GNSS
MX-18-ANT-RF-SWITCH	Antenna redundancy module - Dual-pole double-throw switch (DPDT)