MINE Xn

5G READY

X18 DN6

Gigabit Ethernet DIN Rail Router

Discover our cutting-edge industrial router, engineered to transform your network connectivity. Featuring a 5G/LTE module, Wi-Fi capabilities, and six Gigabit Ethernet ports, this router delivers exceptional performance and reliability tailored for demanding industrial settings.

Incorporating Gigabit Ethernet in an industrial router provides several key benefits that elevate network performance and reliability. With Gigabit Ethernet and SFP capabilities, our industrial routers facilitate ultra-fast data transfer speeds, ensuring smooth and swift communication and data exchange among connected devices. This rapid connectivity is especially beneficial in industrial environments where large quantities of data must be transferred swiftly to support real-time monitoring, control systems, and automation processes.

Base System

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

Network

Ethernet	6 x Gigabit Ethernet 1 x SFP Gigabit Module
Mobile	1 x 5G/LTE Advanced
Wi-Fi	1 x 802.11a/b/g/n/ac (Wi-Fi 5)
GPS/GNSS	1 x Receiver

Environment

Dimensions	35 x 132 x 130 (W x H x D)
Temp	-25 °C to +80 °C
Ingress	IP40
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

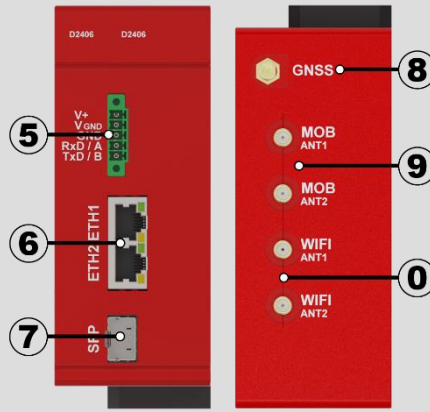|	
Interface	1
Standards	RS-232/485
Modes	Modem, Pair Connection, Reverse Telnet, RFC2217, TCP Client, TCP Server, UDP, Console

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)

The DN6 router, equipped with a high-speed 5G/LTE module, delivers lightning-fast cellular connectivity, keeping you connected even in remote areas where wired options might be unavailable. Supporting high data transfer rates, this router enables seamless communication and real-time data exchange, empowering you to monitor and control critical processes effortlessly.

Featuring six dedicated Gigabit Ethernet ports and a modular SFP port that can accommodate either an optical or copper Gigabit Ethernet SFP module, our router offers exceptional performance. These high-speed ports facilitate rapid data transfer and efficient integration with existing wired infrastructure. Gigabit Ethernet ensures reliable and stable connections for your industrial devices, minimizing downtime and maximizing productivity.

A key advantage of using an SFP fiber module is its electrical isolation. This isolation is crucial in environments prone to electromagnetic interference (EMI) or radio frequency interference (RFI), such as industrial settings or areas with high-voltage equipment. Utilizing fiber optics helps prevent signal degradation and maintains reliable data transmission.

1 Micro SD Card Reader
2 Dual Micro SIMs
3 4x Gigabit Ethernet
4 USB Type A
5 Power / IO Terminal Block
6 2x Gigabit Ethernet
7 1x SFP Gigabit Port
8 Positioning GNSS GPS (SMA)
9 WWAN 5G/LTE Primary / Secondary (SMA)
0 WLAN Dual-band Wi-Fi (SMA)

Interfaces

Mobile / Cellular

Interfaces	1
Modem	Sierra Wireless, Telit
Technology	3G, 4G-LTE, 5G
Network	5G Rel 16 LTE Cat 20

RF Antenna Cross Switch Module

Interfaces	1
Technology	DPDT
Frequency	100 MHz to 6 GHz

Wi-Fi / WLAN

Interfaces	1
Standards	802.11a/b/g/n/ac (Wi-Fi 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
Services	Standalone, Assisted GPS, Data server with JSON, NMEA data stream
Antenna	Active, Passive

RF Connectors

Mobile	SMA Female
WIFI	SMA Female
GPS/GNSS	SMA Female

Modems

FN980 5G

Technology	4G Cat 20 and 5G Rel 16
5G bands	n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79
4G bands	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71

LN920 LTE

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

MC7430 4G-LTE

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

Ordering

MX-18-DN6-N-G	MINEx 18 DN6 | 6 x GbE + 1 x 5G/LTE (FN980) + GNSS
MX-18-DN6-Lp-G	MINEx 18 DN6 | 6 x GbE + 1 x LTE (LN920) + GNSS
MX-18-DN6-LpW-G	MINEx 18 DN6 | 6 x GbE + 1 x LTE (LN920) + 1 x WiFi + GNSS
MX-18-DN6-Lc-G	MINEx 18 DN6 | 6 x GbE + 1 x LTE (MC7430) + GNSS
MX-18-DN6-LcW-G	MINEx 18 DN6 | 6 x GbE + 1 x LTE (MC7430) + 1 x WiFi + GNSS
MX-18-ANT-RF-SWITCH	Antenna redundancy module - Dual-pole double-throw switch (DPDT)