



# X18 DN3

## Gigabit Ethernet DIN Rail Router

Introducing our state-of-the-art industrial router, equipped with advanced features to revolutionize your network connectivity. With a 5G/LTE module, Wi-Fi capabilities, and three Gigabit Ethernet ports, this router is designed to provide unparalleled performance and reliability in industrial environments.

Using Gigabit Ethernet, in an industrial router, offers numerous product highlights and advantages that enhance network performance and reliability. With Gigabit Ethernet and SFP our industrial routers can provide lightning-fast data transfer speeds allowing seamless communication and rapid data exchange between your connected devices. This high-speed connectivity is particularly advantageous in industrial settings where large volumes of data need to be transmitted quickly for instantaneous real-time monitoring, control systems and automation processes.

### Base System

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

### Network

Ethernet	2 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 Modem, Pair Connection, Reverse
Modes	Telnet, RFC2217, TCP Client, TCP Server, UDP, Console

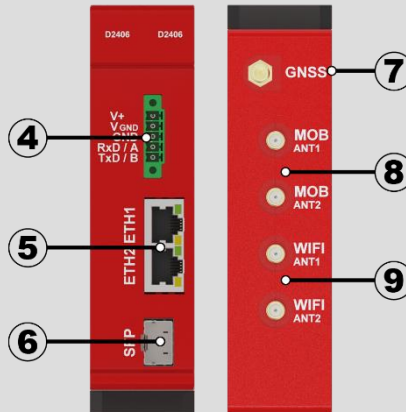
### Software

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 DN3 router, with high speed 5G/LTE module, ensures lightning-fast cellular connectivity, allowing you to stay connected even in remote areas where wired connectivity may be unavailable. With support for high data transfer rates this router enables seamless communication and real-time data exchange, empowering you to easily monitor and control critical processes.

Our router boasts two dedicated Gigabit Ethernet ports plus a modular SFP port, which can be populated with an optical or copper Gigabit Ethernet SFP module. These high-speed ports deliver exceptional performance, allowing for rapid data transfer and efficient integration with existing wired infrastructure. With Gigabit Ethernet you can ensure reliable and stable connections for your industrial devices, minimising downtime and maximising productivity.

One of the primary benefits of using an SFP fibre module is its electrical isolation. The isolation is especially crucial in environments where electromagnetic interference (EMI) or radio frequency interference (RFI) is expected, such as industrial settings or areas with high-voltage equipment. By using fibre optics, you can prevent signal degradation and maintain reliable data transmission.



- 1 Micro SD Card Reader
- 2 Dual Micro SIM
- 3 USB Type A
- 4 Power / IO Terminal Block
- 5 2x Gigabit Ethernet
- 6 1x SFP Gigabit Port
- 7 Positioning GNSS GPS (SMA)
- 8 WWAN 5G/LTE Primary / Secondary (SMA)
- 9 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 Standalone, Assisted GPS, Data server with JSON, NMEA data stream
Services	
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

<b>MX-18-DN3-N-G</b>	MINex 18 DN3   3 x GbE + 1 x 5G/LTE (FN980) + GNSS
<b>MX-18-DN3-Lp-G</b>	MINex 18 DN3   3 x GbE + 1 x LTE (LN920) + GNSS
<b>MX-18-DN3-LpW-G</b>	MINex 18 DN3   3 x GbE + 1 x LTE (LN920) + 1 x WiFi + GNSS
<b>MX-18-DN3-Lc-G</b>	MINex 18 DN3   3 x GbE + 1 x LTE (MC7430) + GNSS
<b>MX-18-DN3-LcW-G</b>	MINex 18 DN3   3 x GbE + 1 x LTE (MC7430) + 1 x WiFi + GNSS
<b>MX-18-ANT-RF-SWITCH</b>	Antenna redundancy module - Dual-pole double-throw switch (DPDT)