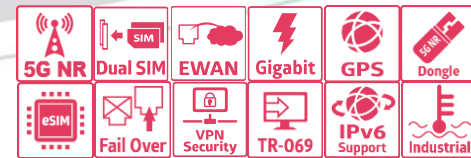




# MX-250e

Advanced Industrial 5G Router (eSIM)



## MX-250e – Advanced Industrial 5G Router (eSIM)

### Features & Specifications

#### ■ Availability and Resilience

- Dual SIMs (Dual SIM Single Standby)
- eSIM\*2 + micro-SIM(3FF)
- Dual-WAN Interfaces (5G NR, GbE WAN)

#### ■ Embedded 5G NR sub-6GHz\*1

- 5G NR sub-6 GHz (3GPP Rel-16)
  - Band(NA&NSA): n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n76, n77, n78
  - Supports MIMO:
    - DL 4x4: n1, n3, n7, n38, n40, n41, n77, n78
    - UL 2x2 (5G SA mode only): n38, n40, n41, n77, n78
  - Modulation: DL 256QAM / UL 256QAM
  - Maximum Transmission Data Rate:
    - SA: DL 2.4 Gbps / UL 900 Mbps
    - NSA: DL 3.4 Gbps / UL 550 Mbps
- 4G LTE (DL CAT 19 / UL CAT 18)
  - Band(FDD&TDD): B1, B3, B5, B7, B8, B20, B28, B32, B38, B40, B41, B42, B43
  - Supports MIMO:
    - DL 4x4: B1, B3, B7, B38, B40, B41, B42, B43
  - Modulation: DL 256QAM / UL 256QAM
  - Maximum Transmission Data Rate:
    - DL 1.6 Gbps / UL 200 Mbps

#### ■ Network Protocols and Features

- Dual WAN Failover/ Failback
- Dual WAN Load Balancing
- IPv4, IPv6, IPv4/IPv6 dual stack\*2
- Dual APN\*2
- Keep Alive
- IP Pass-Through
- NAT, Virtual Server and DMZ
- Static Routing, Dynamic Routing (RIP v1/v2, OSPF, BGP)
- SNTP, DNS relay and DDNS
- Universal Plug and Play (UPnP) compliant
- Supports DHCP server/client/relay

#### ■ Virtual Private Network (VPN)

- IPSec
- PPTP
- L2TP
- GRE
- OpenVPN

#### ■ Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc.
- Access Control
- IP Filtering, MAC Filtering, URL Filtering
- VPN Pass-through

#### ■ USB Slave

- 5G NR dongle
- USB 3.0, Type A

#### ■ Global Navigation Satellite System (GNSS)\*3

- Embedded multi-GNSS engine for GPS or GLONASS system

#### ■ Management

- Password protection for system management
- Web-based GUI for remote and local management
- Firmware upgrade and configuration data upload and download via web-based GUI
- CWMP(TR-069)\*2, SNMP
- Cellular data usage allowance
- Remote System Log monitoring
- Scheduling Auto-Reboot
- Physical layer/protocol diagnostic test tool
- BECentral® Cloud-Based Remote Management

#### ■ Hardware Specifications

##### Physical Interface

- WAN: 5G NR (and/or GbE WAN)
- Ethernet LAN: 10/100/1000Mbps auto-crossover
- eSIM: Embedded eSIM compatible\*2
- SIM Slot: micro-SIM(3FF)
- USB Port: Slave device (5G NR dongle)
- Reset Button: System reboot, System reset.
- Power Connector: 1x2 terminal block
- LED Indicators: Power(System), Internet, WWAN, LAN
- Antenna: 5G NR detachable wideband antennas  
GPS detachable active antenna

##### External Connector

- 5G NR Antenna: SMA x four (4)
- GPS Antenna: SMA x one (1)
- Gigabits Ethernet: RJ-45 x two (2)
- SIM Slot: micro-SIM(3FF) slot with cover x one (1)
- USB Slave port: USB 3.0, Type A x one (1)
- Reset Button: x one (1)
- Power Connector: 1x2 terminal block x one (1)

##### Power Specifications

- Power Input: DC 9V~56V

##### Physical Specifications

- Dimensions: 109.3 x 85.7 x 28.9 mm (without antenna connector protrusion included)

##### IP Rating

- IP30

##### Operating Requirements

- Operating: -20°C to 60°C
- Humidity: 20 ~ 95% non-condensing

#### Notes:

1. The 5G NR/ 4G LTE is dependent on your local service provider.
2. Only upon request for Telco/ ISP tender projects.
3. The support for GPS and/or GLONASS functions depends on the equipped module's capabilities.
4. Specifications in this datasheet are subject to change without prior notice.  
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