

4G Industrial Indoor Router

MII4242

The MII4242 gateway is designed for mission-critical, industrial application and equipment connectivity, with dual micro-SIM card slots provide reliable high bandwidth backhaul connectivity to the customer's private 4G network, while also providing failover to a public cellular network.

An integrated dual band Wi-Fi 6 support provides greater flexibility in connecting Wi-Fi clients within the industrial premise.

The MII4242 is equipped with a high-performance CPU and memory, enabling localized data analytics and real time statistics.

The MII4242 is equipped with one Gigabit WAN port and four Gigabit LAN ports, making it easy for users to connect various IoT devices such as HD cameras and sensors. It also features high-precision GNSS positioning, providing accurate GPS location information for IIoT devices to meet remote real-time monitoring needs.

The MII4242 router is built with a RS-485 interface and supports the Modbus RTU (Remote Terminal Unit) protocol, facilitating the integration and data transfer across various industrial devices and sensors, significantly enhancing the flexibility of industrial applications.

Additionally, MII4242 can operate stably within an extreme temperature range from -30°C to +70°C, making it suitable for harsh industrial environments and climatic conditions. The router is equipped with multiple LED indicators that display data transmission and network connection status.

With its advanced technologies, outstanding performance and flexible design features, MII4242 can provide stable and reliable operation in various industrial application scenarios.

Features

- High-performance wireless network SoC processor enabling localized data analytics and processing
- Dual Micro SIM card slots for enhancing network connection stability
- Supports dual-band Wi-Fi 6 (802.11ax) 2T2R 2.4GHz/5GHz providing enhanced wireless broadband connectivity
- GNSS support provides accurate location information to support positioning needs of various IIoT devices
- Multi-functional interface ports: RS-485, Digital Input/ Digital Output (DI/DO)
- Compatible with M.gear detachable SMA LTE/Wi-Fi/GNSS antennas for expanded coverage and greater reliability
- Stable operation in extreme temperature range from -30°C to +70°C
- LED indicators display signal strength and network connection status in real-time for easy monitoring.

Specifications

General

Cellular Interface

- 4G: LTE FDD/ TDD
- GNSS: L1

Band (Sierra Wireless RC7620)

- LTE FDD : B1/B3/B7/B8/B20/B28

Hardware Interface

- 1 x 10/100/1000 Base-T WAN port with LED
- 4 x 10/100/1000 Base-T LAN ports with LED
- 2 x Micro SIM slots
- 1 x USB 2.0
- 1 x Reset button
- 1 x RS-485 (D+/D-/GND)
- 1 x DI (Isolated), 1 x DO (Isolated)
- Terminal Block Power Input : 8~26 VDC

Wireless Interface

- 2T2R IEEE 802.11ax 2.4GHz/5GHz
- Wireless security with WPA2/WPA3 mixed mode
- Wireless MAC filtering
- Wireless client isolation

Antenna

- 2 x SMA connectors for detachable LTE antenna
- 2 x SMA connectors for detachable Wi-Fi antenna
- 1 x SMA connector for detachable GNSS antenna

Physical Characteristics

Enclosure : Metal case

Dimensions (W x H x D) : 138.9mm x 131mm x 38mm

Weight : 600g

Installation : Wall mounting, DIN-rail mounting, Desktop

LED Display :

- 1 x Power status
- 1 x LTE
- 1 x Wi-Fi
- 3 x Signal status

Power Supply

Power Input : AC 100 ~ 240 V

DC Output : 12V/ 2A(MAX)

Software

Network Protocols

- IPv4, IPv6, IPv4/IPv6 dual stack, DHCP server and client
- Static IP, SNTP, DNS proxy, Modbus TCP to Modbus RTU
- Static routing and RIP v1/v2

VPN

OpenVPN, IPSec(DES, 3DES, AES128, AES196, AES256, MD5, SHA1, SHA128, SHA192, SHA256) , L2TP, PPTP

Firewall

- NAT, Virtual server, Port trigger, DMZ
- MAC and URL filter, Stateful packet inspection, DOS attack

Alarm: SMS, VPN/WAN disconnect, SNMP trap

Others: DDNS, QoS(SCM), SMS action, Diagnostics

Management: Web GUI with HTTPS/HTTP, Dual image, Syslog, SNMP, SSH v2

Environment

Operating Temperature: -30 ~ +70°C

Storage Temperature: -40 ~ +85°C

Ambient Relative Humidity: 10 ~ 95% (Non-condensing)

Humidity: 0 ~ 95% (Non-condensing)

Enclosure Drawing

