

M350 Series Industrial Dual SIM 5G/4G Cellular Router



Introduction

Proscend M350 is a series of Industrial Cellular Routers enabling reliable, secured broadband communications over fixed-line and 5G, 4G LTE cellular networks. With the capability of connecting multiple wired and wireless networks, as well as built-in load balancing feature, plus its sophisticated industrial design, the M350 Series broadens its service scopes covering not only conventional smart city and Industrial applications, but also FWA for medium business segments requiring non-stop Internet connectivity. The optional M350 models serve more local network varieties or hotspot applications, with built-in Wi-Fi Access Point supporting 802.11b/g/n/ac standards on selectable 2.4GHz/5GHz radio bands.

As of broadband wireless evolution, devices performing at network edge must be future-proven along with Telco's infrastructure migration to next generation, also sustain the good user experiences on legacy infrastructure. The modular design of M350 Series strengthens the feasibility of deriving more product variety with unified software suite and enables the network edge to continuously achieve Industrial IoT by seamlessly migrating from 3G, 4G LTE CAT6 to 5G FR1 cellular broadband, with optimum bandwidth and cost performance.

Features

- Support multiple band connectivity with 5G NR / FDD LTE / TDD LTE / WCDMA
- Dual-SIM design for connecting to two service providers
- Failover between multiple WAN connectivity for network resilience
- Load balancing to optimize throughput performance between Cellular and Ethernet WAN
- Support IPv6/IPv4 dual stack
- Support MQTT for IIoT
- Industrial design for operation in harsh environments
- Gigabit on all Ethernet WAN and LAN interfaces
- VPN for enhanced security
- GPS tracking and report
- Support 802.11ac Wi-Fi AP with selectable 2.4GHz/5GHz radio bands (M350-W5G, M350-W6 only)

Application



Specifications

Cellular Interface

- 5G: NR
- 4G: FDD/TDD
- 3G: WCDMA

Wi-Fi Interface (M350-W5G, M350-W6 only)

- Compliant with IEEE 802.11 b/g/n/ac
- 2.4 GHz/5 GHz selectable dual radio band
- 2T2R MIMO wireless operation rate
- Wireless security with WPA2-PSK(AES)
- Multiple SSIDs
- Wireless MAC Filtering
- Wireless client isolation

Hardware interface

- 1 x 1000Base-T WAN port compliant with 802.3ab
- 4 x 1000Base-T LAN ports compliant with 802.3ab
- 2 x SIM slots
- 1 x RS-232 (TXD/RXD/GND, Non-Isolated)
- 1 x RS-485 (D+/D-/GND, Non-Isolated)
- 1 x DI (Isolated), 1 x DO (Isolated)
- 4 x SMA connectors for detachable 5G/LTE/GPS Antenna
- 2 x RP-SMA connectors for Wi-Fi Dual Band Antenna (Wi-Fi models)

Physical Characteristics

- Enclosure : Metal Case
- Dimensions (W x H x D) : 138.9 x 38 x 131 mm
- Weight : 643 g
- Installation : DIN-rail mounting, wall mounting, desktop

LED Display

- System operation, user defined indicator
- SIM card presence, cellular signal strengths
- Wi-Fi presence, 2.4GHz/5GHz indication
- Ethernet WAN/LAN link and speed

Power Supply

- Power Inputs : redundant 8 ~ 48 VDC power inputs via terminal block, 12 VDC, 2A power input via DC jack
- Power Consumption (Max): 11W(M350-6), 14W(M350-W6)
13W(M350-5G), 17W(M350-W5G)

Software

■ Load Balancing

Between Cellular and Ethernet WAN

■ Network Protocols

IPv4/IPv6 dual stack, DHCP server and client, PPPoE, SNTP, GPS sync time, DNS Proxy, static route, policy route, RIP-1/2, OSPF, BGP, NAT, MQTT, Modbus RTU, Modbus TCP, UPnP, DDNS

■ Network Security

OpenVPN, IPSec (3DES, AES128, AES196, AES256, MD5, SHA-1, SHA256), GRE, PPTP, L2TP, DMZ, URL/IP/MAC filtering

■ Management

Web GUI, Telnet, CLI, SNMP, TR069, Syslog, FOTA, SSH V2, HTTPS, E-mail notification, SMS

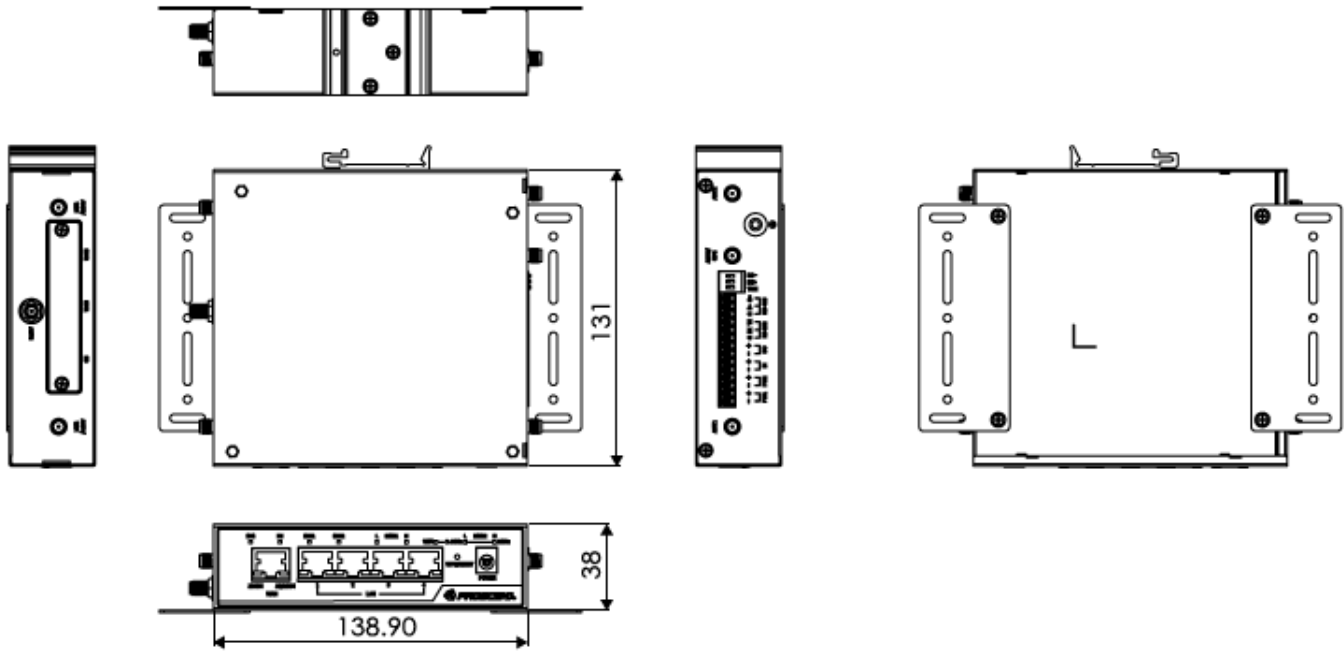
Environment

- Operating Temperature -40 ~ +70°C (M350-6, M350-5G)
-40 ~ +60°C (M350-W6, M350-W5G)
- Storage Temperature -40 ~ +85°C
- Ambient Relative Humidity 10 ~ 95% (non-condensing)
- Humidity 0 ~ 95% (non-condensing)

Certification

- CE EN 55032, EN 301 489, EN 300 328, EN 301 893, EN 301 908-1, EN 62368
- FCC Part 15
- NCC CNS 13438, BSMI CNS 14336

Dimensions



Ordering Information

Model Name	Description
M350-5G	Industrial Dual SIM 5G Cellular Router
M350-W5G	Industrial Dual SIM 5G Cellular Router w/Wi-Fi
M350-6	Industrial Dual SIM CAT6 Cellular Router
M350-W6	Industrial Dual SIM CAT6 Cellular Router w/Wi-Fi

NOTE: Features and specifications are subject to change without prior notice.