

M330 / M330-W Industrial 4G LTE Cellular Router

Introduction



M330



M330-W

PROSCEND M330 and M330-W, compact, lightweight and cost-effective **Industrial 4G LTE Cellular Routers**, are built in 2-port fast Ethernet connection as well as support 2G/3G/4G mobile networks for wired and wireless communication in harsh environments. Equipped with RS232 serial port and digital input/output interfaces, the **M330** and **M330-W** are simple to configure and collect real-time data transmission quickly for Industrial IoT and machine-to-machine applications. The **M330-W** is also compliant with IEEE 802.11b/g/n Wi-Fi connectivity.

Featuring VPN Tunnels, Firewall, TR069, and SNMP Trap, **PROSCEND M330 and M330-W Industrial 4G LTE Cellular Routers** enhance highly secure authentication, encryption and management to protect your data efficiently between public and private networking. Supporting -30~+70°C wide temperature operation and flexible input voltage range of 8-48VDC for diverse environments and various applications.

PROSCEND M330 and M330-W Industrial 4G LTE Cellular Routers are suitable and reliable choices for fast deployment and easy configuration to simplify your complicated solutions and fit your services for industrial networking and smart city.

Features

- Highly reliable and secure for mission-critical cellular communications
- Compact and lightweight design with 2-port Ethernet interfaces
- Support multi-band connectivity with FDD LTE/ TDD LTE/ WCDMA/ GSM/ LTE Cat4
- Provide IEEE 802.11b/g/n Wi-Fi standards (M330-W Model)
- Built-in micro SIM connector, RS232 serial port, and DI/DO interfaces
- Integrated detachable antenna against radio interference
- LED indicators for connection and data transmission status
- Industrial rated from -30 to +70°C for use in harsh environments
- IPv6/IPv4 dual stack and all applications are IPv6 ready
- Support serial communication protocols for rich connectivity
- Enhance security and encryption for authentication and transmission

Specifications

Cellular Interface

- Standards: (Please see ordering information for optional band)
 - 4G: FDD LTE, TDD LTE
 - 3G: WCDMA
 - 2G: GSM/EDGE
- LTE Data Rate: Cat 4, 150Mbps (DL), 50Mbps (UL)

Wi-Fi Interface (M330-W Model)

- Compliant with IEEE 802.11 b/g/n Wi-Fi standards
- 2.4 GHz radio band for wireless
- 2T2R 300 Mbps wireless operation rate
- Wireless security with WPA2-PSK(AES)
- Multiple SSIDs
- Wireless MAC Filtering
- Wireless client isolation

Hardware Interface

- High Performance 550 MHz SoC with 128MByte Flash
- 1 x Micro SIM Connector (push-push type)
- 1 x LAN 10/100 Mbps Ethernet port
- 1 x WAN 10/100 Mbps Ethernet port
- WPS / RESET Button
- 1 x RS232 (TXD/RXD/GND)
- 1 x DI (Non-Isolated), 1 x DO (Non-Isolated)
- 2 x SMA connectors for detachable LTE Antenna
- 2 x RP-SMA connectors for detachable Wi-Fi Antenna (M330-W Model)
- 1 x SMA connector for detachable GPS antenna

Physical Characteristics

- Enclosure : Metal Case
- Dimensions (W x H x D) : 91mm x 28mm x 74mm
- Weight : 250 g (0.5512 lb)
- Installation : DIN Rail / Wall Mount

LED Display

- 1 x Power LED
- 1 x Ethernet LED for each port (LAN/WAN)
- 1 x RSSI LTE LED
- 1 x Function LED (User define by Web)

Power Supply

- Power Consumption 7 Watts(Max)
- Power Input 8 ~ 48VDC

Software

- **Network Protocols:**
IPv4, IPv6, IPv4/IPv6 dual stack, DHCP server and client, PPPoE, Static IP, SNTP, GPS sync time, DNS Proxy, VRRP, OSPF, Message Queue Telemetry Transport (MQTT Broker), BGP, Flow (Modbus master ↔ MQTT client)
- **Routing/Firewall:**
NAT, Virtual Server, DMZ, MAC Filter, URL Filter, IP Filter, VLAN, Static Routing and RIP-1/2, IPS, Policy Route
- **VPN:**
OpenVPN, IPsec (3DES, AES128, AES196, AES256, MD5, SHA-1, SHA256), GRE, PPTP, L2TP
- **Wireless Connectivity:**
WAN WiFi Client
- **Others:**
DDNS, QoS, UPnP, SMS Action, GPS Track Drawing, GPS TCP Push
- **Alarm:**
DI, DO, SMS, VPN/WAN Disconnect, SNMP Trap, E-mail, TR069

Management Software

- Web GUI for remote and local management, CLI
- Syslog monitor
- SNMP, TR069
- FOTA (Firmware over the Air)
- Remote management via SSH v2, HTTPS
- Local management via Telnet, SSH v2, HTTP/HTTPS

Environment

- Operating Temperature -30 ~ +70°C
- Storage Temperature -40 ~ +85°C
- Ambient Relative Humidity 10 ~ 95% (non-condensing)
- Humidity 0 ~ 95% (non-condensing)

Standards and Certifications

- **EMC** : CE, FCC
- **EMI** : EN 301489 , FCC Part 15B Class B
- **EMS** : EN 301489
- **Vibration** : IEC60068-2-6
- **Radio** : EN 301511, EN 301908-1, EN 301908-2, EN 301908-13, EN 300328, EN 303413, EN 62311

Ordering Information

Model Name	Description
M330	Compact Industrial 4G LTE Cellular Router (1 x WAN, 1 x LAN, 1 x RS232 , 1 x DI, 1 x DO, 1 x micro SIM Slot, 1 x GPS, -30 ~ +70°C)
M330-W	Compact Industrial 4G LTE Wi-Fi Cellular Router (1 x WAN, 1 x LAN, 1 x RS232 , 1 x DI, 1 x DO, 1 x micro SIM Slot, 1 x GPS, Wi-Fi, -30 ~ +70°C)

Options of Bands/Frequencies (MHz)

Option	4G		3G	2G	Region
	FDD LTE	TDD LTE	WCDMA	GSM / EDGE	
E	B1(2100), B3(1800), B5(850), B7(2600), B8(900), B20(800)	B38(2600), B40(2300), B41(2500)	B1(2100), B5(850), B8(900)	B3(1800), B8(900)	Europe Africa Middle East Korea Thailand India
A	B2(1900), B4(1700), B12(700)		B2(1900), B4(1700), B5(850)		North America
AU	B1(2100), B2(1900), B3(1800), B4(1700), B5(850), B7(2600), B8(900), B28(700)	B40(2300)	B1(2100), B2(1900), B5(850), B8(900)	B2(1900), B3(1800), B5(850), B8(900)	Australia New Zealand South Africa Taiwan
J	B1(2100), B3(1800), B8(900), B18(850), B19(850), B26(850)	B41(2500)	B1(2100), B6(850), B8(900), B19(850)		Japan

* Features and specifications are subject to change without prior notice.