

## M330 Series

### Compact Industrial 4G LTE Cellular Router



#### Introduction

Proscend M330 Series Compact Industrial 4G LTE Cellular Router is built in 2-port fast Ethernet connection as well as supports 2G/3G/4G mobile networks for wired and wireless communication in harsh environments. Equipped with serial port (RS-232 or RS-485) and digital input/output interfaces, the M330 Series is simple to configure and collect real-time data transmission quickly for Industrial IoT and machine-to-machine applications. The M330-W and M330-W5 are also compliant with IEEE 802.11b/g/n Wi-Fi connectivity.

Featuring VPN Tunnels, Firewall, TR069, and SNMP Trap, the M330 Series Industrial 4G LTE Cellular Router enhances highly secure authentication, encryption, and management to protect your data efficiently between public and private networking. The M330 Series offer  $-30\sim+70^{\circ}\text{C}$  wide operating temperature and a flexible input voltage range of 8-48 VDC for diverse environments and various applications. The M330 Series Industrial 4G LTE Cellular Router is your suitable and reliable choice for fast deployment and easy configuration to simplify your complicated solutions and fit your services.

#### 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.
- Built-in micro SIM connector, serial port (RS-232 or RS-485), and DI/DO interfaces.
- Integrated detachable antenna against radio interference.
- LED indicators for connection and data transmission status.
- Industrial rated from  $-30$  to  $+70^{\circ}\text{C}$  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

<p><b>Cellular Interface</b></p> <ul style="list-style-type: none"> <li>■ 4G: FDD LTE, TDD LTE</li> <li>■ 3G: WCDMA</li> <li>■ 2G: GSM/EDGE</li> <li>■ LTE Data Rate: CAT 4, 150Mbps (DL), 50Mbps (UL)</li> </ul> <p><b>Hardware Interface</b></p> <ul style="list-style-type: none"> <li>■ 1 x Micro SIM Connector (push-push type)</li> <li>■ 1 x LAN 10/100 Mbps Ethernet port</li> <li>■ 1 x WAN/LAN 10/100 Mbps Ethernet port (Configurable)</li> <li>■ 1 x WPS / RESET Button</li> <li>■ 1 x RS-232 (TXD/RXD/GND) (M330-W)</li> <li>■ 1 x RS-485 (D+/D-/GND) (M330-W5)</li> <li>■ 1 x DI (Non-Isolated), 1 x DO (Non-Isolated)</li> <li>■ 2 x SMA connectors for detachable LTE Antenna</li> <li>■ 2 x RP-SMA connectors for detachable Wi-Fi Antenna</li> <li>■ 1 x SMA connector for detachable GPS antenna</li> <li>■ 1 x DC jack</li> </ul> <p><b>Wi-Fi Interface</b></p> <ul style="list-style-type: none"> <li>■ Compliant with IEEE 802.11 b/g/n Wi-Fi standards</li> <li>■ 2.4 GHz radio band for wireless</li> <li>■ 2T2R 300 Mbps</li> <li>■ Wireless security with WPA2-PSK(AES)</li> <li>■ Multiple SSIDs</li> <li>■ Wireless MAC Filtering</li> <li>■ Wireless client isolation</li> </ul> <p><b>Physical Characteristics</b></p> <ul style="list-style-type: none"> <li>■ Enclosure : Metal Case</li> <li>■ Dimensions (W x H x D) : 91 x 28 x 74 mm</li> <li>■ Weight : 250 g (0.5512 lb)</li> <li>■ Installation : DIN-rail / Wall mounting</li> </ul> <p><b>LED Display</b></p> <ul style="list-style-type: none"> <li>■ 1 x Ethernet LED for each port (LAN/WAN)</li> <li>■ 1 x Power LED</li> <li>■ 1 x RSSI LTE LED</li> <li>■ 1 x Function LED (User define by Web)</li> </ul> <p><b>Power Supply</b></p> <ul style="list-style-type: none"> <li>■ Power Consumption : 7 Watts (Max)</li> <li>■ Terminal block power Input : 8 ~ 48 VDC</li> <li>■ DC Jack power Input : 12 VDC</li> </ul>	<p><b>Software</b></p> <ul style="list-style-type: none"> <li>■ <b>Network Protocols:</b> 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)</li> <li>■ <b>Routing/Firewall:</b> NAT, Virtual Server, DMZ, MAC Filter, URL Filter, IP Filter, VLAN, Static Routing and RIP-1/2, IPS, Policy Route</li> <li>■ <b>VPN:</b> OpenVPN, IPSec (3DES, AES128, AES196, AES256, MD5, SHA-1, SHA256), GRE, PPTP, L2TP</li> <li>■ <b>Wireless Connectivity:</b> Wi-Fi AP / Client Mode</li> <li>■ <b>Others:</b> DDNS, QoS, UPnP, SMS Action, GPS Track Drawing, GPS TCP Push</li> <li>■ <b>Alarm:</b> DI, DO, SMS, VPN/WAN Disconnect, SNMP Trap, E-mail, TR069</li> </ul> <p><b>Management Software</b></p> <ul style="list-style-type: none"> <li>■ Web GUI for remote and local management, CLI</li> <li>■ Syslog monitor</li> <li>■ SNMP, TR069</li> <li>■ FOTA (Firmware over the Air)</li> <li>■ Remote management via SSH v2, HTTPS</li> <li>■ Local management via Telnet, SSH v2, HTTP/HTTPS</li> </ul> <p><b>Environment</b></p> <ul style="list-style-type: none"> <li>■ Operating Temperature -30 ~ +70°C</li> <li>■ Storage Temperature -40 ~ +85°C</li> <li>■ Ambient Relative Humidity 10 ~ 95%HR (non-condensing)</li> <li>■ Humidity 0 ~ 95%HR (non-condensing)</li> </ul> <p><b>Standards and Certifications</b></p> <ul style="list-style-type: none"> <li>■ EMC: CE, FCC</li> <li>■ EMI: EN 301489, FCC Part 15B Class B</li> <li>■ EMS: EN 301489</li> <li>■ Vibration: IEC60068-2-6</li> <li>■ Radio: EN 301511, EN 301908-1, EN 301908-2, EN 301908-13, EN 300328, EN 303413, EN 62311</li> </ul>
---	--

## Options of Bands

Option	4G		3G	2G	Region
	FDD LTE	TDD LTE	WCDMA	GSM/EDGE	
<b>EU</b>	B1, B3, B5, B7, B8, B20	B38, B40, B41	B1, B5, B8	B3, B8	Europe, Africa, Middle East, Korea, Thailand, India
<b>US</b>	B2, B4, B12		B2, B4, B5		North America
<b>AU</b>	B1, B2, B3, B4, B5, B7, B8, B28	B40	B1, B2, B5, B8	B2, B3, B5, B8	Australia, New Zealand South Africa, Taiwan
<b>JP</b>	B1, B3, B8, B18, B19, B26	B41	B1, B6, B8, B19		Japan

## Ordering Information

Model Name	Description
M330-W	Industrial 4G LTE Cellular Router w/RS-232
M330-W5	Industrial 4G LTE Cellular Router w/RS-485

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