



Fast Connections, Smarter Automation



Industrial Modem and Router

Industrial modems, routers, and RS485 converters play a crucial role in modern industrial networks. These devices enable reliable and efficient communication in challenging environments, ensuring seamless data transmission over long distances. Industrial modems facilitate connectivity between various communication protocols, enhancing interoperability in automation systems. Routers designed for industrial use provide robust security features and high availability, essential for mission-critical applications. On the other hand, RS485 converters bridge the gap between serial communication and modern network protocols, allowing for the integration of legacy devices into contemporary systems. Together, these solutions enhance network performance, reduce downtime, and support the growing demands of Industry 4.0, paving the way for smarter and more connected industrial operations.



PRODUCT FEATURES

- Designed for M2M applications
- Resistance to industrial noise
- Support for multiple RS485/RS232 Ports
- Firewall support and data encryption via VPN
- Support for monitoring protocols like SNMP
- Support for standard DIN rail mounting

KEY FEATURES

The PM-22XX industrial router is a versatile solution designed for modern industrial environments. It supports multiple interfaces, including LTE/3G/GPRS, ensuring reliable connectivity across various mobile scenarios. With a 10/100 Mbps Ethernet port, it provides efficient data transmission, essential for real-time performance.

The router features dual SIM card functionality for backup connectivity, minimizing downtime in industries that require continuous access. Security is prioritized with support for VPN protocols like IPSEC, L2TP, SSTP, and OpenVPN, ensuring secure remote access and protecting transmitted data. A comprehensive firewall further enhances security by blocking unauthorized access.

Advanced routing features such as static routing, port forwarding, NAT, DHCP, and NTP facilitate efficient data management and scalability, ensuring secure communication among devices. User experience is improved by a user-friendly web-based interface (WEB-UI), simplifying configuration and monitoring for users with varying expertise levels.

Additionally, the PM-22xx includes a display that offers real-time information about network components, including the status of the Access Point Name (APN), Wi-Fi connectivity, and RS485/RS232 interfaces. This allows users to quickly monitor SIM card status and overall network health.

ORDERING INFORMATION TABLE

Note: that this table only refers to hardware differences and not all features.

Model	Features	Dimensions	Weight
PM-2208	8 x RS485 1 x RS232	120*80*65	240 gr
PM-2212	12 x RS485 2 x RS232	195*80*62	348 gr

Applications:

- Remote Monitoring
- Data Collection
- Industrial Automation
- Backup Connectivity
- Secure Remote Access
- IoT Applications
- Fleet Management and Telematics



SPECIFICATIONS

HARDWARE FEATURES	
RS485	According to the model, 2 to 12 ports
SIM	2 x asynchronous SIM Card
Ethernet	1x 10/100 Mb
I/O	Depends on the device model
Expansion Port	To expand more, I/O and RS485/RS232 Ports
Buttons	1x Reset factory, 1x Wi-Fi controller
LED	Power, Wi-Fi, GSM Signal strength, Serial RX TX, SIM Cards, APN Bands, WWAN

ANTENNA CONNECTIONS	
SMA	2 x External SMA-50 Ohm

POWER	
Source	8 – 25 VDC
Consumption	Idle – 2.5W GPRS – to 3W UMTS/LTE – to 5W

Wi-Fi	
Antenna type	x2 3dB Indoor
Wi-Fi band	2.4 GHz
Speed	300Mbps
Standards	802.11b/g/n, 802.11v
Channel bandwidth	20/40MHz
Security	WEP64/128, TKIP, AES, WPA, WPA2, WAPI
Other	16 Multiple BSSID, QoS, WMM, WMM-PS, AP, STA and AP, STA mixed

LTE/UMTS/GSM/EDGE	
LTE-FDD	B1/ 3/ 5/ 7/ 8/ 20/ 28
LTE-TDD	B38/ 40/ 41
WCDMA	B1/ 5/ 8
GSM/EDGE	B3/ 8
LTE Cat 4	150 Mbps (DL) / 50 Mbps (UL)
HSPA+	21 Mbps (DL) / 5.76 Mbps (UL)

CPU & MEMORY	
CPU	MIPS24KEc (575/580 MHz)
Flash memory	32MB
RAM	12MB

Configuration	
WEB-UI	You can view the status of all sections or configure everything you need on the secure https platform.
SSH	Remote device configuration using SSH offers enhanced security, streamlining network management tasks.

Network	
Routing	Static routing
Protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SFTP, SSL/TLS, PPP, SSH, DHCP, Telnet, SNMP
Connection check	Ping Reboot, Periodic Reboot
Firewall	Port forward, traffic rules, custom rules, DDos, Syn Flood, fail to ban
Diagnostic	Ping, trace route, Lookup

VPN	
IPsec	XFRM, IKEv1, IKEv2, encryption methods for IPsec (3DES, DES, AES128, AES192, AES256)
PPTP, L2TP	Client/Server instances can run simultaneously
SSTP	Multiple clients (Optional)
OpenVpn	Multiple clients and a server can run simultaneously (Optional)

Security	
Authentication	
Firewall	
Attack prevention	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention)
Access control	Flexible access control of Web interface, SSH
SSL certificate	Let's encrypt support

STANDARDS/REGULATION	
EMC	EN 301 489-1&17, IEC 61000-4-4:2008, IEC 61000-4-4:2012, IEC 61000-4-5:2014
Safety	IEC 60950-1
RF	EN 300 328, CRA DEC 4004-01, 3GPP TS 34.121 (WCDMA), ETSI 301 511511(GSM)
Security	IEC62443-4-2





Payesh Gostar Parmoon

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LTE UMTS/HSPA+ GSM/GPRS/EDGE



PM-2212 Industrial Modem and Routers



PM-2208 Industrial Modem and Routers



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