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Connecting. Converting. Leading!

# M2M 3G/4G Industrial Router, Model GSF M2M 100R



M2M Gateway is an intelligent cellular router designed for industrial applications requiring faultless connectivity. It provides a secure, reliable, real-time, remote connectivity for SCADA, distribution management systems, metering etc. Software-defined, multi-carrier networking, dual SIM models, 802.11n and global 2.5G/3G/HSPA+/LTE options make it easy to get connected. With DIN-rail mounting, wide operating temperature range, and IP30 metal housing, the M2M GATEWAY is a convenient yet reliable solution for any industrial wireless applications.

#### **Benefits**

- Advanced Failover: Maximizes uptime by seamlessly switching between the multiple Internet interfaces (Cellular, WAN, WIFI, Dual-SIM).
- Multiple Tunneling Schemes: Secure your data using a variety of VPN tunneling schemes, including IPSec, L2TP, PPTP, OpenVPN and GRE.
- Flexible WIFI: 802.11 b/g/n, configurable WIFI as WAN or access point, WIFI Security (WEP / WPA / WPA2 Mixed Mode) and multiple SSID.
- Ethernet, serial and I/O for connecting diverse field assets.
- Remote Management provides mass configuration, device management, OTA update, and troubleshooting tools.
- 4 Ethernet Port, 1 WAN port and 1 WiFi port
- 1 Serial RS232/RS485 port
- Support Modbus RTU, Modbus TCP Conversion and DNP3 Protocols.

# Specifications CELLULAR WAN

Supported Frequency Bands

- LTE: B1, B2, B3, B4, B5, B7, B8, B20, B28
- WCDMA: 2100(B1), 1900(B2), 850(B5)
- EV-DO/CDMA: 800(BC0)
- GSM/GPRS/EDGE: 850/900/1800/1900
- Automatic SIM based network operator switching

# **HOST INTERFACES**

- 5 of 10/100 Base-T Ethernet port. RJ45 Connectors. 1.5KV Magnetic Isolation
- 1 of RS232/RS485 Serial Console port. RJ45 Connector. 1.5KV ESD Protection
- 3 SMA antenna connectors (WI-FI and Double-cellular)
- Active GPS antenna support (option)
- Micro SD Memory Card

### INPUT/OUTPUT

- (2) DI, (1) DO, (1) Relay.
- Input ON Voltage: 5 to 30 VDC.
- Input OFF Voltage: 0 to 3 VDC.
- Output < 50mA @ 30VDC.</li>
- Relay:1A 250VAC/30VDC

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#### LAN

- TCP/IP, UDP, ICMP, Telnet, ARP
- DNS, DNS Proxy, DHCP Server
- SNMP, HTTP, HTTPS, SMTP, SNTP, IP Pass through (option)
- VLAN
- Host Interface Watchdog
- PPPoE
- Modbus RTU, Modbus TCP, DNP3 (optional)

#### **SERIAL**

- TCP/UDP PAD Mode
- Modbus (ASCII, DTU, Variable)
- PPP
- Reverse Telnet

# WiFi

- IEEE802.11 b/g/n, AP and Client mode.
- WiFi Security WEP, WPA-PSK, WPA2-PSK etc. Security
- Adjustable output power (Max: 26dBm)
- Access point for up to 30 clients
- Simultaneous access point/client mode

# **NETWORK AND ROUTING**

- · Network Address Translation (NAT)
- Port Forwarding
- Host Port Routing
- VRRP
- Reliable Static Route
- Dynamic DNS

#### **VPN**

- IPSec, GRE, and OPENVPN Client
- Up to 10 concurrent tunnels
- Split Tunnel
- Dead Peer Detection (DPD)
- · Multiple Subnets
- VPN Failover

#### **SECURITY**

- Remote Authentication
- DMZ
- Inbound and Outbound Port filtering
- Inbound and Outbound Trusted IP
- MAC Address Filtering.

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# **MANAGEMENT INTERFACES**

- Web-Based User Interface
- Device Configuration Templates
- · Software and radio module firmware updates
- AT Command Line Interface (Telnet/SSH/Serial)
- SNMP
- SMS Commands (Option)
- Support different LAN IP Address (Optional)

# **GPS (Option)**

- Antenna Interface: SMA Female, 50 ohms impedance
- Tracking Sensitivity: better than -144 dBm
- Horizontal position accuracy: 2.5 m
- Time-To-First-Fix: 29 s
- Protocol: NMEA-0183 V2.3

#### POWER

- 24VDC supported. Range 5-35VDC
- 12V/1.5A (standard), 8W. Communication consumption: <700mA @ 12V</li>
- Reverse Polarity, Over Voltage Protection & 2KV Surge Protection
- Connectors: 2 Pin. 3.5mm Terminal Block

#### **PHYSICAL**

- Housing & Weight: Metal, 520g
- Dimension : (L x W x H): 133 x 115.7 x 45 mm
- Installation : 34.6 mm Din-Rail or wall mounting or desktop
- Ingress Protection: IP30

# **OPERATION ENVIRONMENT**

Operating Temperature : -35°C to +75°C / -31°F to +167°F
Storage Temperature : -40°C to 85°C / -40°F to 185°F

Humidity : 90% RH @ 60°C

Ordering Code : GSF M2M 100R W/FL/L 1/2 RS485 D

GSF M2M 100R : Base Model for M2M Gateway with 10/100 M Ports

W/FL/L : 3G/WCDMA/LTE 1/2 : Single or Dual SIM

RS485 : Fixed. RS232/RS485 Selectable

D : DNP3

**Note**: WiFi, IO fixed: 2\*DI, 1\*DO & 1\*Relay as default

: GPS as an option is available in all the models

: All the 1 SIM card versions can be expandable to 2

: In Dual SIM mode, there are 2 Cellular modules & both SIM work together