



- 4G / 3G / 2G
- 2x ETH, Switch or Router
- 1x COM, 1x USB
- 2x Digital Output
- 2x Digital Input
- Failover for fixed line
- Redundant power inputs
- -25 to +70 °C
- 10.2 - 57.6 VDC
- SDK
- SCADA protocols

General

M!DGE cellular routers have been designed for **SCADA and Telemetry**, and are also well suited to many different wireless applications. M!DGE HW and SW is ready to maintain reliable and secure connections from an unlimited number of remote locations to a central server. Standard Ethernet/IP and serial interfaces are both available. Moreover, two digital inputs and two digital outputs can be used for direct monitoring and control of application devices.

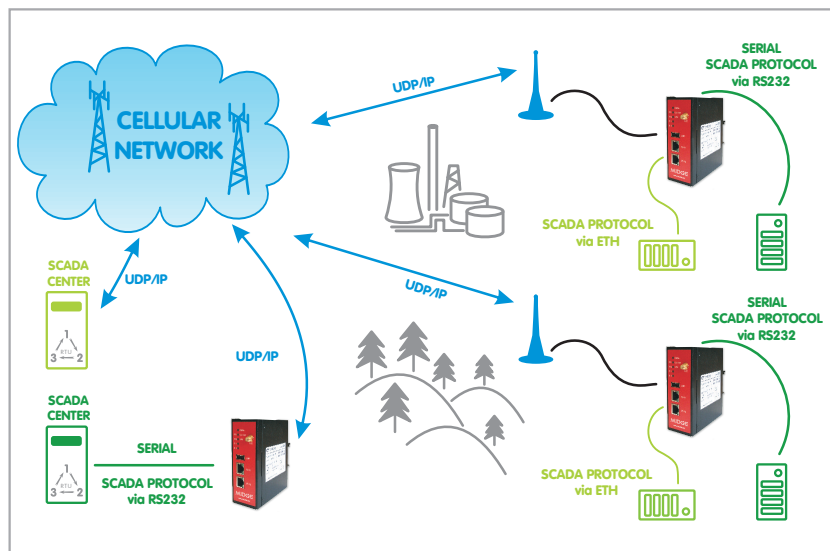
M!DGE versatility is further enhanced by two independent **Ethernet** ports. These can be configured to either support two independent LANs (working as Router), or simply connect two devices within one LAN (working as Switch). M!DGE is based on well proven components, including an embedded Linux operating system and standard IP communication protocols.

M!DGE provides a unique feature for serial SCADA protocols when SCADA addresses are mapped to M!DGE IP addresses thus making remote-to-remote communication possible. Thanks to their compact size and versatility, M!DGE cellular routers prove indispensable in many SCADA and Telemetry, as well as POS, ATM, Lottery and Security/Surveillance applications.

M!DGE together with the RACOM **RipEX** radio router offers an unrivalled solution for combining **Cellular** and **UHF/VHF** licensed radio in a single hybrid network.

Applications

- SCADA & Telemetry
- Points of Sale, ATMs
- Security and Surveillance
- Land line backup



OpenVPN Tunnel 1 Configuration

Operation mode: disabled

Server port:

Type:

Protocol:

Network mode:

Cipher:

Authentication:

Options:

Apply Erase Download

- WAN
 - Link Management
 - Supervision
 - Settings
- Ethernet
 - Port Assignment
 - VLAN Management
 - IP Settings
- Mobile
 - SIMs
 - Interfaces
- USB
- Serial
- Digital I/O

Protocol Server

Protocol: IEC101

Parameters

Mode of Connected device

Broadcast

Advanced parameters

Address mode: IEC101

Address translation

Address translation: Mask

Base IP: 10.0.0.1

Mask: 255.255.255.0

UDP port (Interface): COM(8882)

Apply

Technical parameters

Cellular Interface

- LTE - 4G - LTE: B1(2100), B2(1900), B3(1800), B5(850), B7(2600), B8(900), B20(800), all bands with diversity
- 3G - WCDMA, HSPA, HSPA+: B1(2100), B2(1900), B5(850), B8(900), all bands with diversity
- 2G - GPRS, EDGE, GSM: 850, 900, 1800, 1900
- Data rates up to 100 Mbps downlink / 50 Mbps uplink
- LTE450 - 4G - LTE: B3(1800), B7(2600), B20(800), B31(450) all bands with diversity
- 3G - WCDMA, HSPA, HSPA+: B1(2100), B8(900) all bands with diversity
- 2G - GPRS, EDGE, GSM: 900, 1800
- Data rates up to 100 Mbps downlink / 50 Mbps uplink

Power supply

- Input voltage: 10.2 - 57.6 VDC (12 - 48 VDC -15%/+20%)
- Max. power consumption: 5 W
- Dual power connector

Services / Networking

- Fallback Management
- Connection supervision, Automatic connection recovery
- Quality of Service (QoS)
- OpenVPN, IPsec, PPTP, GRE, Dial-In
- VRRP
- DHCP server, DNS proxy server, DNS update agent
- Telnet server, SSH server, Web server
- NTP
- Device server, Protocol server, SDK
- Port Forwarding (NAPT)
- Firewall, Access Control Lists

Interfaces

- 2x Ethernet 10/100 Base-T, Auto MDX, 2x RJ45 bridged or routed
- RS232 interface 3 wired
- 2x Digital Input, 2x Digital Output
- USB Host – USB type A
- GSM Antenna 50 Ω, SMA connector (LTE: 2x SMA)

Environmental

- Temperature range: -25 to +70°C (-13 to +158°F) – M!DGE LTE
- Humidity: 0 to 95 % non condensing
- IP 40

Mechanical

- Casing: Metal
- Dimensions: 45 W × 110 D × 125 H mm (1.77 × 4.33 × 4.92 in)
- Weight: 450 g (0.99 lbs)
- DIN rail mounting kit included

Diagnostics and Management

- Web interface, CLI available
- File configuration
- OTA SW update
- Advanced troubleshooting
- SMS remote control, SMS and E-mail notification
- SNMPv1/v2c/v3

Approvals

- CE, FCC

