

M!DGE Cellular Router

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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.

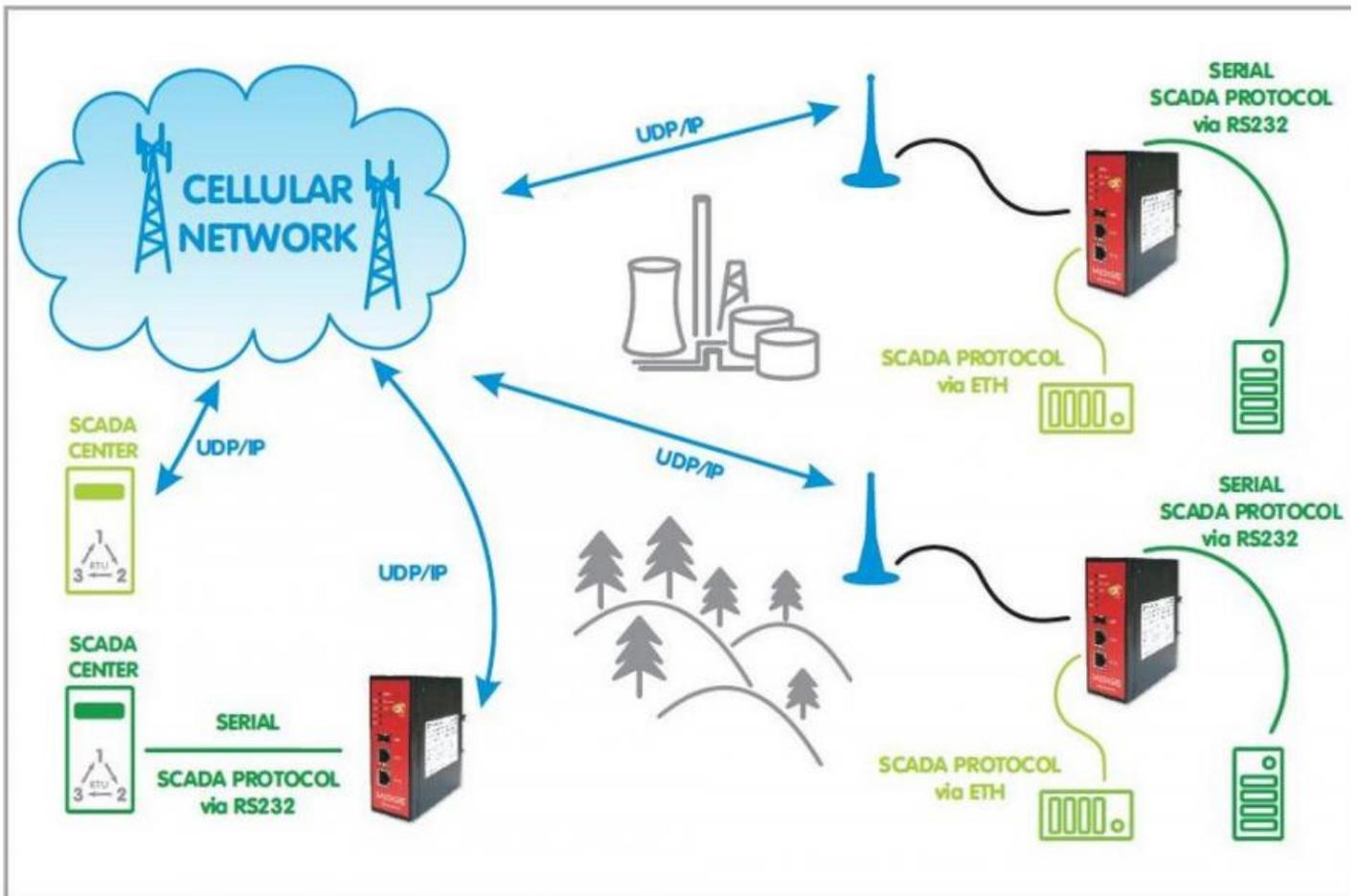
M!DGE provides a unique feature for serial SCADA protocols when SCADA addresses are mapped to M!DGE IP addresses thus making remote-to-remote communication possible. Thanks to their compact size and versatility, M!DGE cellular routers prove indispensable in many SCADA and Telemetry, as well as POS, ATM,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

- ✓ 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°C to +70°C
- ✓ 10.2 - 57.6 VDC
- ✓ SDK
- ✓ SCADA protocols

A



Applications

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

OpenVPN

Administration
Tunnel Configuration
Client Management

IPsec

Administration
Tunnel Configuration

PPTP

Administration
Tunnel Configuration

GRE

Administration
Tunnel Configuration

Dial-in Server

Tunnel 1 Tunnel 2 Tunnel 3 Tunnel 4

OpenVPN Tunnel 1 Configuration

Operation mode: disabled client standard expert

Server port:

Type:

Protocol:

Network mode:

Cipher:

Authentication:

Options:

Apply Erase Download

MIDGE



Administration Port Settings Protocol Server Help

Protocol Server

Protocol: IEC101

Async Link
C24
Cactus
Com8
DF 1
DNP3
IEC101
ITT Flygt
Modbus

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(882)

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

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)

Power Supply

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

Environmental

Temperature range: -25 to +70°C (-13 to +158°F) – M!DGE LTE
Humidity: 0 to 95 % non condensing
IP40

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

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

Diagnostic 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

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