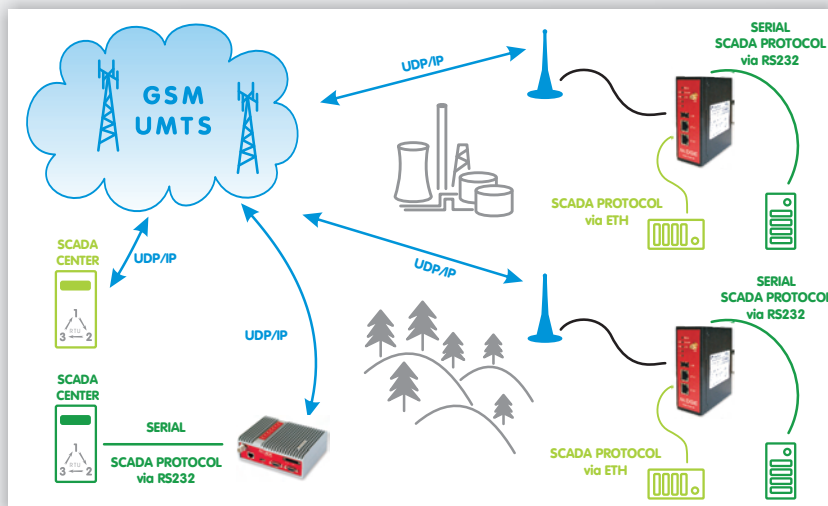# M!DGE

General

M!DGE wireless routers have been specially designed for **SCADA and Telemetry**, nevertheless are 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. Both standard Ethernet/IP and serial interfaces are 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 the two independent **Ethernet** ports. These can be configured to either support two independent LANs (e.g. **LAN** and **WAN** settings), or simply connect two devices within one LAN (effectively replacing an Eth switch). M!DGE software is based on well proved components, including an Embedded Linux operating system and standard IP communication protocols.

M!DGE combined with an **MG102i** two-SIM router in one network is quite easy to do because of fully compatible interface settings and behaviour on all HW interfaces. Thanks to compact size and versatility, M!DGE wireless 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 **GPRS** and **UHF/VHF** licensed radio in a single network. Even a single RipEX in the centre of a M!DGE network allows for efficient use of addressed serialSCADA protocols.

Wireless router

- **LTE/HSPA+/UMTS/EDGE/GPRS**
- **2x ETH, switch or router**
- **1x COM, 1x USB**
- **2x digital output**
- **2x digital input**
- **Failover for fixed line**
- **Redundant dual power inputs**
- **-25 to 70 °C**
- **10.2 - 57.6 VDC**
- **SDK - software development kit**

Applications

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

RACOM
www.racom.eu

Technical parameters

Mobile Interface Parameters

M!DGE UMTS -	HSDPA/HSUPA/UMTS: 850/900/1900/2100 MHz	
	EDGE/GPRS: 850/900/1800/1900 MHz	
	Data rates: max. 7.2 Mbps downlink / 5.76 Mbps uplink	
M!DGE LTE -	LTE: 800/900/1800/2100/2600 MHz, UMTS/HSPA+: 900/2100 MHz	
	GSM/GPRS/EDGE: 900/1800/1900 MHz	
	Data rates: max. 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

DHCP server, DNS proxy server, DNS update agent
Telnet server, SSH server, Web server
COMserver, Modbus gateway
Port Forwarding
Fallback Management
Connection supervision
Automatic connection recovery
OpenVPN, IPsec, PPTP, NAPT
Firewall, Access Control Lists
NTP
VRRP

Approvals

CE, FCC

Interfaces

2x Ethernet 10/100 Base-T, Auto MDX, 2xRJ45 bridged or routed
RS232 interface 3 wired
2x Digital Input, 2x Digital Output
USB Host – USB type A
GSM Antenna 50 Ù, SMA connector

Environmental

Temperature range:	-25 to +70 °C (-13 to +158 °F)
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