



M!DGE

BPG RADIO COMUNICAZIONI

BPG Radiocomunicazioni Srl
Via Nazionale, 13
10060 Pinasca TO - Italy
Tel. +390121800669
commerciale@bpg.it - www.bpg.it

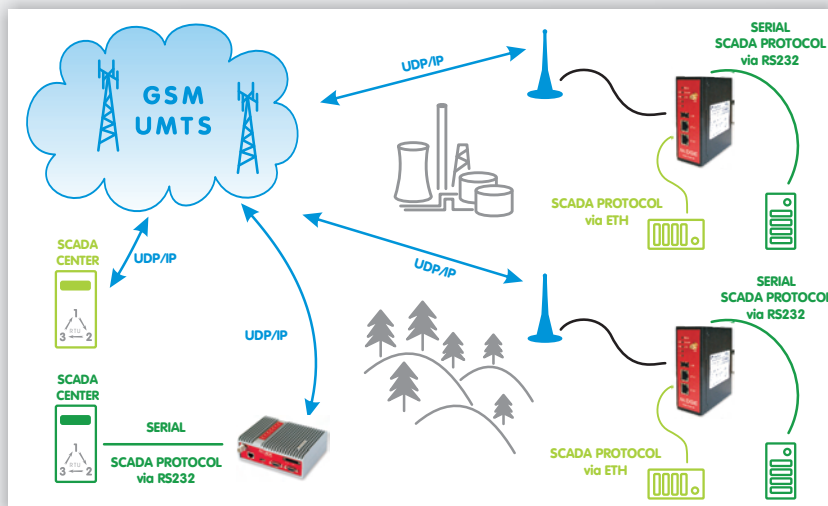
General

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 serial SCADA 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

MIDGE 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
MIDGE 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 Ω, 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

The screenshot displays the M!DGE wireless router web interface. The top navigation bar includes links for HOME, INTERFACES, ROUTING, FIREWALL, VPN, SERVICES, SYSTEM, and LOGOUT. The main content area is divided into two sections: Administration and Configuration.

Administration Section:

- WAN:** Link Management, Maximum Segment Size
- Ethernet:** Link Settings, Port Settings, IP Settings
- Mobile:** Administration, Configuration, SIM
- USB:**
- COM Port:**
- Digital I/O:**

Configuration Section:

- Keep values after restart:** Input 1 status, Input 2 status, Output 1 status, Output 2 status
- Output 1 after restart:**
- Output 2 after restart:**
- TCP server port:**

COM Server / Gateway Section:

- Connection Supervisor
- Administration
- Ping Monitor Configuration
- DHCP Server
- DNS Proxy Server
- Dynamic DNS Client
- E-mail Client
- Event Manager
- Events
- Subscribers
- Event Processor
- SMS
- SSH Server
- SNMP Agent
- Telnet Server
- UDP Message Receiver
- Web Server

COM Server Administration Section:

- COM server status: enabled, disabled

COM Server Configuration Section:

- Protocol on IP port: UDP raw
- Protocol on COM port: Serial raw

UDP Configuration Section:

- Local Port: 2000
- Remote IP: 10.231.12.170
- Remote Port: 2000
- Max Packet Size: 1380
- Max Packet Timeout: 2000 milliseconds (in 10ms steps)
- Max Latency Timeout: 30 milliseconds (in 10ms steps)