

Product overview

The best performance in any environment

M!DGE

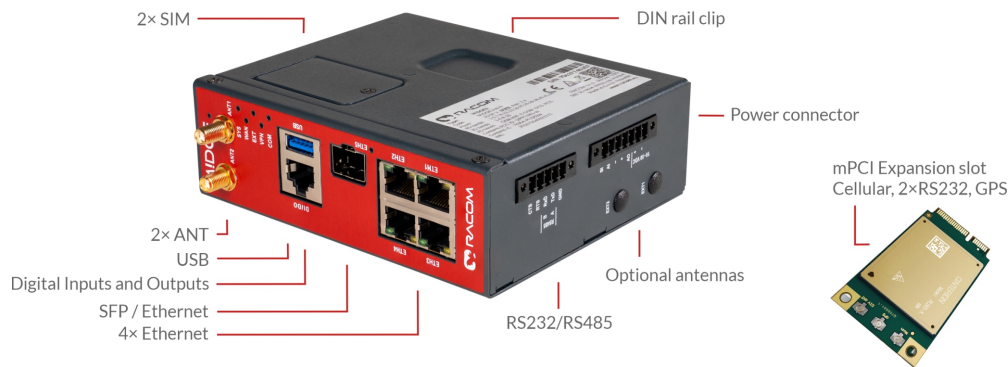
Description

M!DGE is a range of **industrial grade cellular routers**, well suited for use in many different wireless applications, as the main means of **SCADA communication**. It has been designed with attention to detail, **performance, quality and reliability**. All relevant state-of-the-art concepts have been carefully implemented, **meeting current and future market needs**.

RACOM entered the cellular market in 2005 and the first generation **M!DGE** was introduced to the market in 2012, now being **used in thousands of applications** and providing 24/7 reliable service.

The latest, third generation of the **M!DGE router** was introduced in 2022. Its FW and fully responsive web management are based on the same core as **RipEX2**. With one **SFP** and **four 1 Gb/s Ethernet**, the **M!DGE3** is a **top-of-the-line** device when a cellular network is required.

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



M!DGE networks

- Industrial design
- Advanced security
- Flexibility
- Expansion ready
- Hybrid networks



Product details

Applications

M!DGE was developed for use within **mission critical SCADA & Telemetry applications** for the Utilities and Oil & Gas industries. However, such is the versatility of M!DGE, it is well suited for use in applications such as **POS, ATM, Lottery, Network monitoring** and **Security/Surveillance**.

M!DGE, together with RACOM's **RipEX** radio modem in a **hybrid network** provides an **early warning system** covering nine cities and over 30,000 inhabitants, for **Exxon Mobil's SEVESO classified refinery plant in France**.

In **Vietnam**, **several hundred M!DGE** routers are used in a **SCADA & Telemetry** network to monitor and control **power distribution** sub stations over a large geographical area. There is a unique combination of many protocols and serial and Ethernet interfaces used in this network.

Our customers are delighted with the levels of **performance and reliability** that M!DGE provides. This coupled with **excellent technical support** makes M!DGE their product of choice.

Typical Applications

- SCADA & Telemetry
- Utilities management
- Oil & Gas distribution
- Security/Surveillance
- Early warning systems
- POS, ATM, Lottery
- Backup lines
- Network monitoring

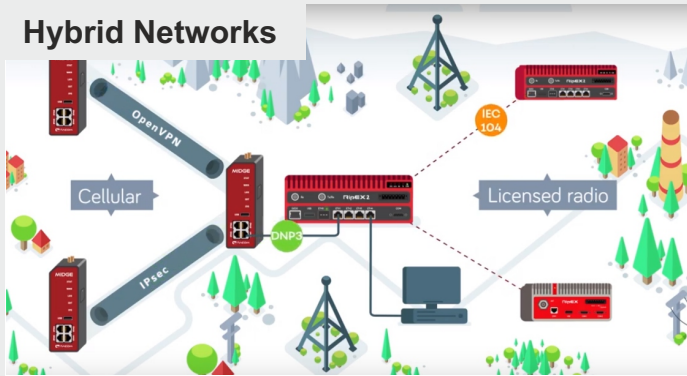


References



Customer Benefits

Hybrid Networks



MIDGE, together with RACOM RipEX radio modems, offers an **unrivalled solution** for **combining Cellular and UHF/VHF licensed radio** in a **single hybrid network** without the need for any special hardware. Both units use the **same SW drivers for protocols**; the application sees no difference between them. Each unit can be used to perform tasks most suitable for it: **cellular for non-mission critical**, very remote or large data volume sites and the **radio for critical sites** where dependence on the third party service is not an option.

Flexibility

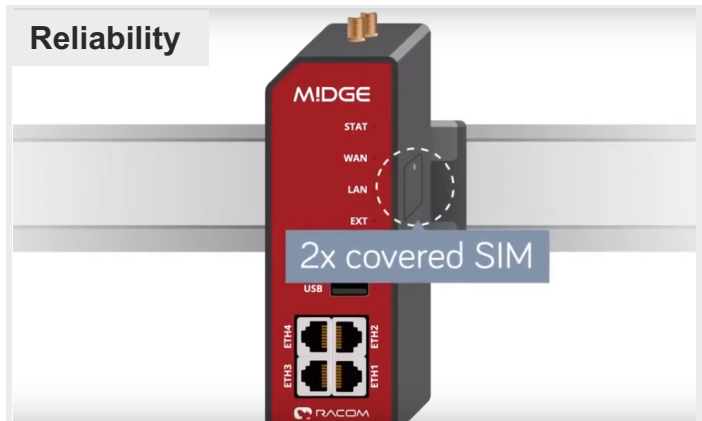


MIDGE has **many different interfaces** that can handle independent **applications in parallel**. Proprietary and standard mPCI slots allow a high number of **hardware expansions**. These can be used for the **second cellular module, GPS or interface expansion**. There are tools for **SW customization integrated** within MIDGE. SW features can be easily and quickly customised by either **the user** or by RACOM.

Security

Advanced Physical, Management, Access control and Data security mechanisms maintain network integrity in line with the robust demands of cyber security. Management access options are available, based on customer preferences and allowing **different levels of secure access** to be set. **Cryptographic end-to-end tunneling** secures data transmissions and the **firewall blocks all unwanted traffic** at the network boundary.

Reliability



MIDGE comes with a rugged metal case, **industrial hardened design** and the option of **DIN rail mounting**, using only **heavy-duty industrial components**. All units are tested to operate comfortably between **-40 and +70 °C**. By using **two SIM card slots**, MIDGE immediately switches over to a **second network if the first one fails**.

Management and diagnostics

MIDGE has been designed with the user in mind. **Basic IP knowledge is sufficient** to configure the device which comes with an **intuitive web interface**. Remote and automatic Firmware upgrades are possible over the air. **SMS management** is also available. Every part of the network can be **remotely monitored and analysed** using **industry leading software**, in **real time** and with **save to file analysis capability**, **alarms** can be set where appropriate with **reports** and notifications generated.