

# OEM MODEMS

## OEM-GPRS2E

Intelligent GSM/GPRS modem module for monitoring and controlling remote equipment.



\* Cable - 004 SMA Female connector cable (optional extra)

- Wireless mobile GSM/GPRS technology
- Remote monitoring and communication for any machine
- Automated modes to simplify data collection

### overview

Introducing the OEM-GPRS2E embedded modem module, specifically designed for machine-to-machine (M2M) applications. It enables remote equipment with simple I/O or serial protocols to communicate over GSM and GPRS networks and is ideal for standalone applications where there is no external microcontroller. The OEM-GPRS2E is footprint compatible with Comtech M2M's standard modem module footprint and connectors, offering a roadmap for supporting other networks (Ethernet, PSTN) and greater system level functionality. It offers full data and audio in a small low power module.

### solution

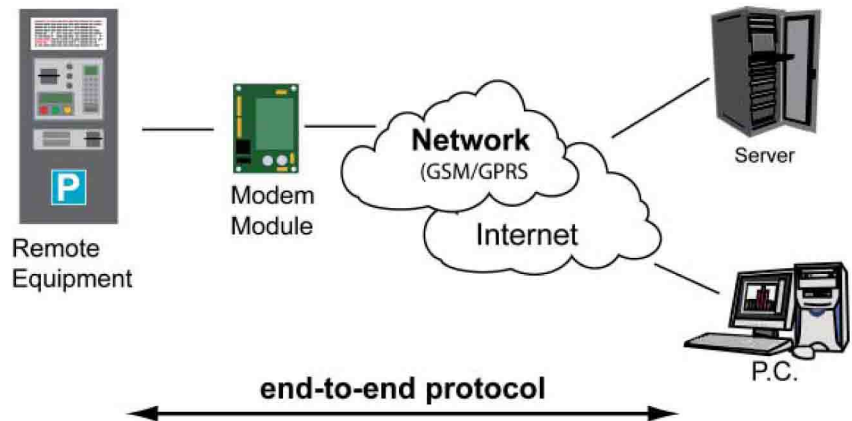
OEM-GPRS2E enables host equipment to communicate over the GSM and GPRS networks. It includes an on-board TCP/IP stack with listening and client sockets enabling legacy protocols to be transported via IP networks such as GPRS and the Internet. Two variants are available, which allow connection to TTL or RS232 compatible equipment interfaces. The OEM-GPRS2E supports extended AT-Commands for establishing and controlling connections. Where the host equipment is unable to control the connection, it supports auto-dial and auto-answer features. OEM-GPRS2E is able to remain in low power sleep mode until a wakeup event occurs. Once awake, the module can perform a number of automated operations before re-entering low power sleep and standby modes. This includes start / monitor timer sequences, SMS and data autodial features. It can wake from an on-board real-time clock (RTC) and host signals (data, DTR).

### benefits

- Fast response to problems
- Reduce downtime
- Increase reliability
- Ease maintenance
- Reduce costs
- Increase revenues
- Improve customer service

### applications

- Security systems
- Remote utility metering
- Remote data collection
- Mobile communications
- Environmental control
- Automated signs
- Battery powered applications



# specifications

## standalone automated modes

- Autoanswer
- Autodial
- Automated operation (Autodial, SMS, timers)
- Configurable power down modes
- Programmable event timers
- Programmable Real Time Clock (RTC)
- External RTC battery back-up
- Configurable wake events (Data, RTC, DTR)
- Autosend SMS upon alarm/event
- Autodial upon alarm/event

## protocols

- Integrated TCP/IP stack
- Listening sockets
- Client sockets
- Extended AT Command

## GSM/GPRS

- GSM (CSD, SMS, voice)
- GPRS (Class B 4+2 Class 10)
- GPRS 57.6 Kbps (down), 28.8 Kbps (up)
- Quad Band (900/1800 Mhz, 850/1900Mhz)
- On-board SIM Holder

## physical interface connectors

- MMCX RF connector, with SMA option (CABLE-004)
- Audio connector
- LED connector
- Small mechanical size approx 59 x 89mm

## DC characteristics

- Sleep mode
- Standby modes
- FR06000200
- TTL interface
- 5-9V power supply
- FR06000201
- RS232 interface
- 5-15v power supply

## conformance

- ROHS Compliant

## environment

|           |                             |
|-----------|-----------------------------|
| Operation | 20°C to +70°C               |
| Storage   | -40°C to +85°C              |
| Humidity  | 95% at +40°C non-condensing |

## tools

A Starter Kit is available for the OEM-GPRS2E module to simplify evaluation and ease design integration. It contains a OEM-GPRS2E TTL modem module together with accessories for rapid evaluation including RS232 board, Power Supply, SMA cell block antenna, MMCX to SMA PCB cable, 9-way serial cable (PC), 10-way TTL header cable (to embedded hardware or RS232 board), step-by-step Getting Started Guide and a CDROM.

## ordering information

| Order code | Description      |
|------------|------------------|
| FR06000200 | OEM-GPRS2E TTL   |
| FR06000201 | OEM-GPRS2E RS232 |
| FR06000232 | Starter Kit      |

## accessories

| Order code  | Description                        |
|-------------|------------------------------------|
| CABLE-004   | PCB mount MMCX to female SMA cable |
| CABLE-006   | MMCX to female SMA "flying lead"   |
| OEM-GSM-A10 | MMCX cellblock patch antenna       |
| OEM-GSM-A9  | Standard MMCX stub antenna         |
| GSM-ANT-001 | Male SMA cellblock patch antenna   |
| GSM-ANT-002 | Standard male SMA stub antenna     |

## related documentation

GPRS2E Getting Started Guide

GPRS2E Manual

µWEBox eRouter Family Brochure

## about Comtech M2M

Comtech M2M is the UK's leading machine to machine (M2M) communication company. M2M is the ability to connect remote devices with central IT systems and business processes without human intervention. Comtech M2M has created a robust communication platform for monitoring, controlling and managing any remote equipment across wide ranging industries. *extra...* is a wireless digital signage application that operates on the proven wireless communication infrastructure.



## contact

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