

# MTX-65i

## Intelligent Java enabled application GSM/GPRS M2M Modem

The MTX-65i modem is a solution consisting of a Java J2ME programmable modem that enables GSM Voice, SMS, Fax and Data (GPRS class 12). The quad band functionality allows it to operate at all relevant GSM frequencies. It has an intrinsic and powerful TCP/IP communication stack with Internet Services.

A powerful GSM/GPRS radio system with USB, RS232 and I2C serial ports. It includes Analog-to-Digital converters and GPIOs. You can develop and embed your Java J2ME code directly onto the modem to shorten time to market and reduce costs by avoiding external components. The MTX-65i can operate with standard AT commands like a normal modem.

It is also compatible with MTX-Tunnel, an optional firmware that can be executed in our MTX modems to use them as powerful GPRS or 3G gateways.



### MAIN FEATURES



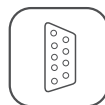
Java



GSM/GPRS  
quad band



I2C, SPI,  
GPIO



RS232



USB 2.0



Analog  
I/Os



Industrial  
temperature



Automatic  
restart



MTX-Tunnel

- ⚡ DC input: 6.5-40 Vdc
- 🌡️ Temperature range: -30° to +85°C
- 📏 Dimensions: 78.1x66.8x37.2mm
- 🐦 Weight: <190gr

Preliminary Datasheet. Subject to changes | 2017/09  
MTX © by MATRIX ELECTRONICA S.L.U.  
[mtxm2m.com](http://mtxm2m.com)



# HARDWARE FEATURES

## MTX-65i-2G



Quad band GSM: 850, 900, 1800, 1900MHz



GPRS class 12 data rates: DL max. 86 kbps, UL max. 86 kbps



SMS text messages

### General Features



SIM application toolkit, 3GPP release 99



Control via AT commands



TCP/IP stacks access via AT commands



Internet services: TCP, UDP, HTTP, FTP, SMTP, POP3

### Special Features



USB interfaces support composite modes and Linux/Mac compliant mode



Firmware update via USB/RS232



Real Time Clock with alarm functionality



Multiplexer according 3GPP TS 27.010



RLS monitoring (jamming detection)



Informal network scan

### Java Features



CLDC 1.1 HI



J2ME profile IMP-NG



Software watchdog for applications



Additional accessible periphery for Java applications: I/O pins, I2C, SPI interfaces, ADC/DAC; serial interfaces (API): ASC0, ASC1

### Interfaces



GSM FME M antenna connector



USB 2.0



SIM card interface 1.8V and 3V



DB9 female connector



HD-Dsub15 female connector: RS232 (2-wire), I2C/SPI, 4x GPIO, TTL IOs GPIO, 2x analog inputs, analog output



Operating status LEDs



Plug-in power supply, handset audio interface (RJ12 connector)

### Open Application Resources



ARM Core, Blackfin DSP



Memory: 400KB (RAM) and 1.7MB (Flash)



Improved power-saving mode

### Over-the-air Update



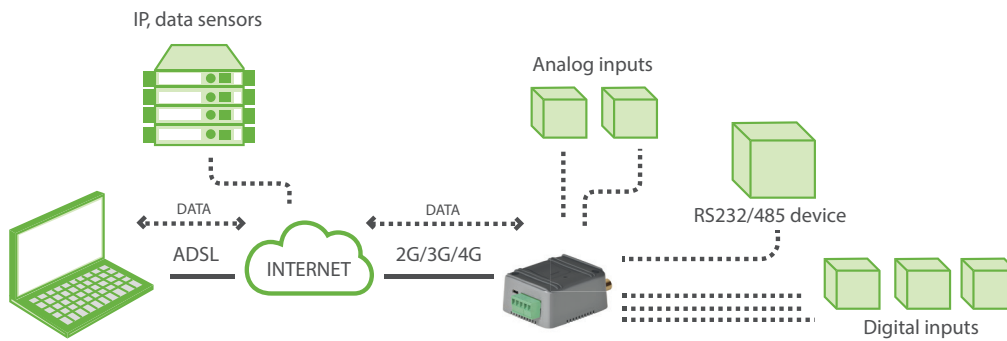
Applications SW: OTAP

### Ordering Information

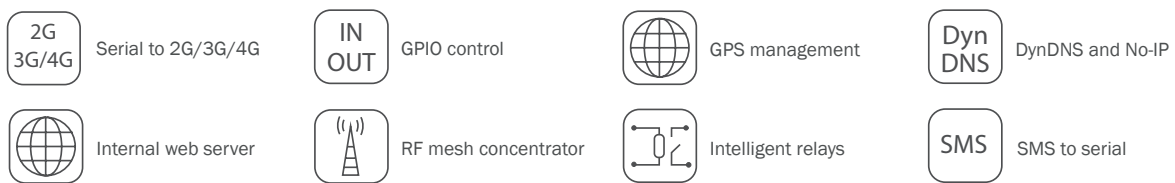
MTX-65i

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## TUNNEL SOFTWARE FEATURES



## MAIN FEATURES



### Connectivity

- 2G/3G/4G serial gateways: TCP client, TCP server, UDP client/server, accept incoming CSD calls, up to 2 simultaneous tunnel
- GPRS connectivity mode: permanent 100% time, under request (SMS, missed call), change on a digital input, analog input out of level, serial data on RS232/RS485 port, scheduled date/hour/time

### TCP Services

- Web server and Telnet
- Remote access by web browser
- Shows the status of digital and analog inputs
- Change digital output level and relays
- Execute AT commands remotely

### Security

- Authorized phone numbers
- Firewall IP
- SSL connections

### SMS Alarm and Control

- Send SMS alarm when the level of digital input change
- SMS can be sent to up to 10 remote users
- Execute remote AT commands
- Change the status of digital outputs & relays
- Alias method is allowed

### Solutions for Dynamic IP

- GPRS session using a SMS or missed call
- DynDNS and NoIP
- Private DNS

### Metering, Modbus, Sensors...

- 868 MHz remote monitoring sensors (Wavenis)
- Modbus RTU devices
- Relays control
- Access to serial devices using GPRS and GSM