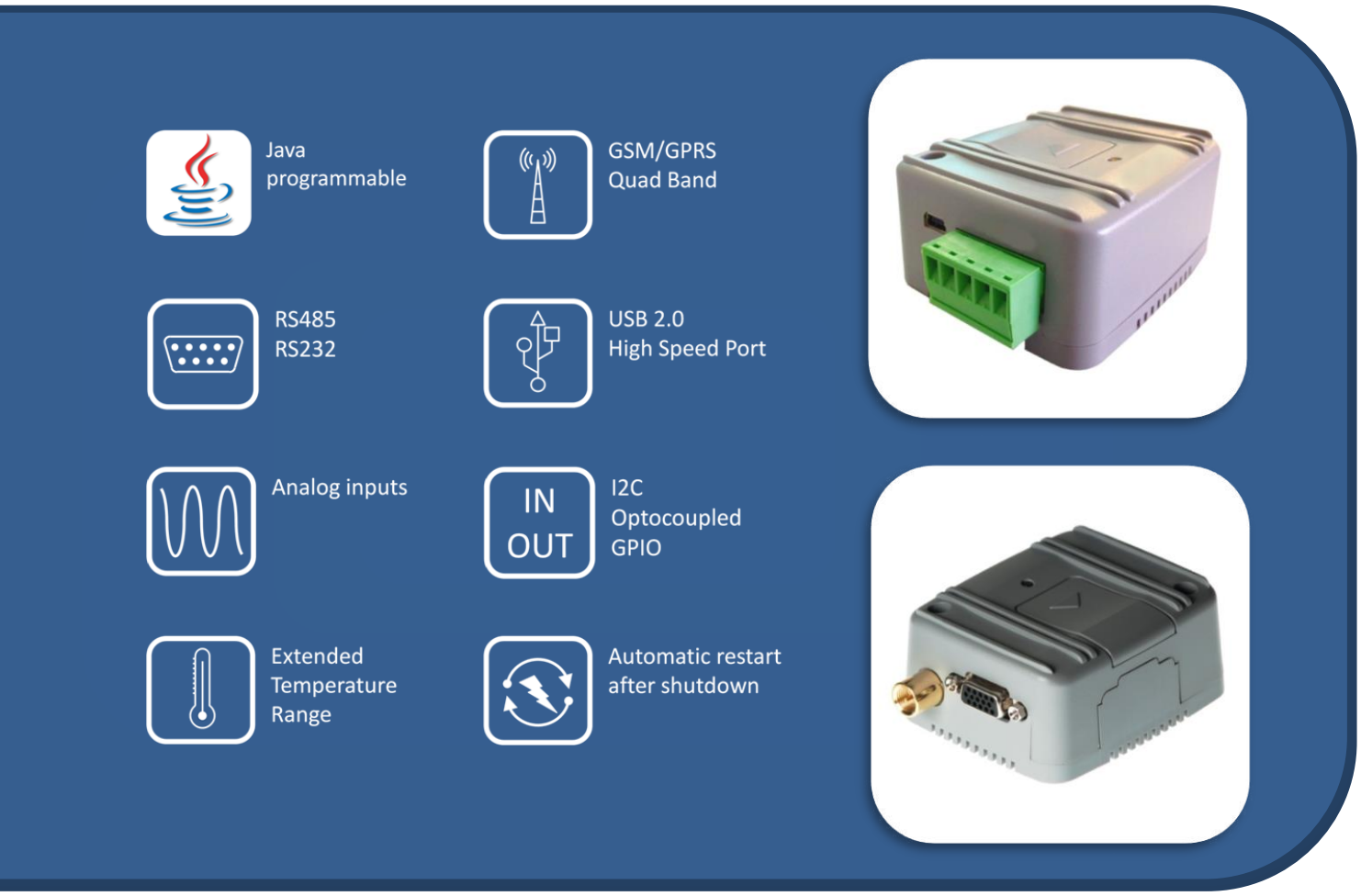
MTX-65i-RS485 modem

Intelligent Java enabled application RS485 GSM/GPRS M2M Modem



The MTX-65i-RS485 modem is an all-in-one solution consisting of a **Java J2ME programmable** modem that enables **GSM** 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 such: TCP, UDP, HTTP, FTP, SMTP, and POP3.

The MTX-65i-RS485 modem is a powerful GSM/GPRS radio system with **USB + RS485 + RS232 + I2C** serial communication ports. It also includes **Analog-to-Digital** converters and **optoisolated IOs**. 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-RS485 modem can also operate with standard AT commands like a normal modem.

Industrial features: the modem can be used in industrial applications due to its extended operating temperature range. It also features an automatic restart after shutdown in case of faulty power conditions.

It is manufactured following ISO-9001 & ISO-14001 Quality certifications and it is RoHS/WEEE compliant.

MTX-65i-RS485 modem

General features

- Quad-Band GSM 850/900/1800/1900MHz
- GPRS multi-slot class 12
- SIM Application Toolkit, 3GPP release 99
- Control via AT commands (Hayes, TS 27.007, TS 27.005)
- TCP/IP stack access via AT commands
- Internet services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range:
  - Maximum: 6.5 to 40VDC
  - Recommended: 7 to 35VDC
- Average power consumption (at 12V) modes:
  - Power down: 10mA
  - Sleep mode (registered DRX=6): 12mA
  - Idle mode (registered DRX=6): 17mA
  - GPRS class 12 and GPS tracking: 202mA
- Operating temperature range: -30ºC to +80ºC
- Dimensions, excluding connectors: 78.1 x 66.8 x 37.2mm
- Weight: <190 g
- IP30 enclosure
- Powered by Cinterion TC65i FW2.0 module

Interfaces

- GSM FME M antenna connector
- USB 2.0 High Speed port up to 480Mbps
- SIM card interface 1.8V/3V
- HD-Dsub15 female connector:
  - 1x RS232 (4-wire) port
  - 1x I2C port
  - 4x Optoisolated IOs
  - 1x TTL input/output GPIO
  - 2x analog inputs
- 2 status LEDs (GSM status and user programmable)
- 1x RS485 (5-way plug-in terminal block)

Ordering information

- **MTX-65i-RS485 FW2.00** : 199801133
  1xRS485, 1x RS232, USB, I2C, 2xADC, 4xOptoIO, Sleep mode

- **MTX-65i-RS485 FW2.00 (AUTO-ON)**: 199801394
  1xRS485, 1x RS232, USB, I2C, 2xADC, 4xOptoIO, Sleep mode, **no AUTO-ON-disable terminal**

- **MTX-65i-RS485-LC**: 199801123
  1xRS485, 1x RS232, USB, I2C, 2xADC

Specification

- **GPRS**
  - GPRS class 12
  - Mobile station class B
  - PBCCH support
  - Coding schemes CS 1-4
- **CSD data transmission**
  - Up to 14.4kbit/s
  - V.110
  - Non-transparent mode
  - USSD support
- **SMS**
  - Point-to-point MO and MT
  - SMS cell broadcast
  - Text and PDU mode
- **Fax**
  - Group 3, class 1,2

Open application resources

- ARM© Core, Blackfin© DSP
- Memory: 400KB (RAM) and 1.7MB (Flash)
- Improved power-saving mode

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

Over-the-air update

- Application SW: OTAP