

MTX-65i modem

Intelligent Java enabled application GSM/GPRS M2M Modem



Java programmable



GSM/GPRS Quad Band



RS232 port



USB 2.0 High Speed Port



Analog inputs & outputs



I2C
SPI
GPIO



Extended Temperature Range



Automatic restart after shutdown



RoHS

RoHS & WEEE compliant
Pb-free



Audio handset connector



The MTX-65i modem is an all-in-one 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 such: TCP, UDP, HTTP, FTP, SMTP, and POP3.

The MTX-65i modem is a powerful GSM/GPRS radio system with **USB + RS232 + I2C** serial communication ports. It also 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 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.

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
 - Speech mode and GPS tracking: 109mA
 - GPRS class 12 and GPS tracking: 202mA
- Operating temperature range: -30°C to +80°C
- Dimensions, excluding connectors: 78.1 x 66.8 x 37.2mm
- Weight: <190 g
- IP30 enclosure
- Powered by Cinterion TC65i FW2.0 module

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
- **Voice**
 - Triple-rate codec for HR, FR and EFR
 - Adaptive multi-rate AMR
 - Basic hands-free operation
 - Echo cancellation
 - Noise reduction

Interfaces

- GSM FME M antenna connector
- USB 2.0 High Speed port up to 480Mbps
- SIM card interface 1.8V/3V
- DB9 female connector: complete 8-wires RS232 modem interface
- HD-Dsub15 female connector:
 - 1x RS232 (2-wire) port
 - 1x I2C/SPI port
 - 4x GPIO
 - 1x TTL input/output GPIO
 - 2x analog inputs
 - 1x analog output (PWM)
- 2 status LEDs (GSM status and user programmable)
- Handset audio interface
- Plug-in RJ12 power supply connector

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

Ordering information

MTX-65i: 199801311

Over-the-air update

- Application SW: OTAP