

MTX-IND-2G Terminal

Outdoor industrial applications GSM/GPRS M2M Modem



Java programmable



GSM/GPRS Quad Band



I2C Optocoupled GPIO



USB 2.0 RS232/485/422



Analog inputs



Relay outputs



Extended Temperature Range



Outdoor IP65 compliant



Automatic restart after shutdown



RoHS & WEEE compliant Pb-free



The MTX-IND-2G terminal is a new **GSM/GPRS** terminal designed for **industrial environments** due to its extended operating temperature range and **IP65 enclosure**. 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, POP3.

The MTX-IND-2G is contains all the necessary interfaces used in industrial applications: **USB**, **SPI/I2C**, 2 configurable **RS232/RS422/RS485** buses, **4 relays** 1P1C, **optoisolated inputs/outputs**, **0-2.4V** or **0-20mA** analog **inputs**, etc. Together with the SIM card reader, it minimizes the need for further hardware components and facilitates integration. The auto power-on feature allows it to restart in any power-fault condition.

WiFi, Bluetooth, ZigBee or ISM RF (Wavenis) optional modules (among others) can be installed internally in the MTX-IND-2G terminal.

The MTX-IND-2G includes Java embedded programmability and a full range of I/Os. The unit can host and control your **Java J2ME application** allowing you to develop and embed your code directly inside the terminal to shorten time to market and reduce costs by avoiding external components.

MTX-IND-2G Terminal

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:
 - DC: 9 to 30VDC (typ. 24VDC)
 - AC: 90-264VAC/120-370VDC (typ. 230VAC)
- Average power consumption (at 12V)
 - Idle mode (registered DRX=2): 17mA
 - Speech mode (average): 250mA
 - GPRS class 12 (average): 570mA
- Operating temperature range: -30°C to +80°C
- Dimensions, excluding connectors: 200 x 120 x 77mm
- Weight: <500 g
- Powered by Cinterion TC65i module

Interfaces

- GSM FME F antenna connector
- Optional internal 5 bands 2.5dBi antenna under request
- USB 2.0 High Speed port up to 480Mbps
- SIM card interface 3V, 1.8V
- Plug-in 52-way (45 usable) 5mm pitch terminal block:
 - 2x digital input/outputs
 - 4x optoisolated inputs
 - 2x analog inputs
 - 1x analog output (PWM)
 - 1x I2C/SPI bus
 - 2x RS232/RS422/RS485 configurable ports
 - 4x form C switching contact relays
 - Speaker and microphone signals available (not amplified)
- 4 status LEDs (GSM status and user programmable)
- 6x IP68 cable glands

Open application resources

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

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 odec for HR, FR and EFR
 - Adaptive multi-rate AMR
 - Basic hands-free operation
 - Echo cancellation
 - Noise reduction

Java™ features

- CLDC 1.1 HI
- J2ME™ profile IMP-NG
- Secure data transmission with HTTPS, SSL and PKI

Over-the-air update

- Application SW: OTAP
- Firmware: FOTA (OMA compliant)

Ordering information

- MTX-IND-2G**
 - Ordering code: 199801329
- MTX-IND-2G-WC25**
 - Ordering code: 199801117
- MTX-IND-2G-WC500**
 - Ordering code: 199801127
- MTX-IND-2G-BT-WT12**
 - Ordering code: 199801355
- MTX-IND-2G-BLE**
 - Ordering code: 199801356
- MTX-IND-2G-GPS**
 - Ordering code: 199801321

Other RF modules available under request: XBEE (Digi), ISM 868/900MHz (Amber), WMBUS, WiFi