MTX-IND-DIN Terminal

Industrial applications DIN rail 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
- DIN rail housing
- Automatic restart after shutdown
- RoHS & WEEE compliant Pb-free

The MTX-IND-DIN terminal is a new **GSM/GPRS** terminal designed for **industrial environments** due to its extended operating temperature range. 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-DIN is sized in DIN 9 modules for DIN rail housing, containing all the necessary interfaces used in industrial applications: 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. The **USB**, **SPI/I2C** and serial ports allow it to be connected to PCs, control boars and other peripherals like GPS, Bluetooth, RFID or other devices.

The MTX-IND-DIN 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.

It is manufactured using SMD technology following ISO-9001 & ISO-14001 Quality certifications and it's RoHS/WEEE compliant.

MTX-IND-DIN 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. 12VDC)
  - AC: 12 to 24VAC (typ. 24VAC)
- Average power consumption (at 12V)
  - Idle mode (registered DRX=2): 17mA
  - Speech mode (average): 250mA
  - GPRS class 12 (average): 570mA
- Operating temperature range: -30ºC to +80ºC
- Dimensions, excluding connectors: 157 x 86 x 58mm
- Weight: <300 g
- Powered by Cinterion TC65i module

Interfaces

- GSM FME M antenna connector
- 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)
- 2 status LEDs (GSM status and user programmable)

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-DIN
- Ordering code: 199801103