



UMTS/HSPA+: Five band 800/850/900/ 1900/2100MHz DL 7.2Mbps, UL 5.7Mbps

Quad band GPRS 850/900/1800/1900MHz Class 12

1 RS485+ 1 RS232 Or 2 RS232

USB port

Wide and useful range of I/O

GPRS receiver optional

Hardware watchdog and internal battery optional

Ultra Low Power mode version

Automatic restart after shutdown

Integrated TCP/IP Stack

JAVA applications and internal NV memory storage

# MTX-3G-JAVA TERMINAL

The MTX-3G-JAVA terminal is an innovative powerful JAVA programmable 3G-UMTS/HSPA modem terminal with complete set of interfaces (serial bus RS232/485, GPIO...) avoiding need for further hardware components and makes it easy to integrate.

MTX-3G-JAVA has flexible options allowing use it in infinite M2M applications:

- Ultra Low Power. Means use only 2.5uA power consumption. Ideal in remote-battery opperated
- GPS module inside. CSR-SIRF IV module allow track & tracing, location applications.
- o Hardware Watchdog and internal IoLi battery
- RS485 port. Isolated input/output for industrial use.
- RF Card. A RF card can be installed inside and then develop RF gateways in a easy way. We have choose the best of every radio technology:
  - o Wavenis Bluetooth 2.1/LE
    - Wifi Wireless MBUS/KNX
  - o ISM 868/915 ZigBee

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<u>JAVA featured:</u> The MTX-3G-JAVA unit can host your Java J2ME application allowing developing and embedding your code directly shortening time to market and reducing costs. MTX-3G-JAVA can operate with AT commands as a normal modem.

MTX-3G-JAVA features power restart in case of power faulty conditions.

The RS485, RS232 or I2C ports allow connectivity to PC's, control boards, displays or other peripherals (like RFID) or devices

The MTX-3G-JAVA terminal is an all-in-one solution enabling voice, SMS, fax and data at high speed HSPA (also GPRS) with its powerful TCP-IP stack communication with Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3.

The Quad Band functionality allows operation in all relevant GSM frequencies. Local European and America economic variants are available.

MTX-3G-JAVA is RoHs & WEEE compliant. It is manufactured with the ISO 9001 & ISO 14001 Quality certifications. A full list of antennas, cables and supplies accessories are available.

Powered by CINTERION Wireless Module EHS5/EHS6.

#### General features:

## • World Wide Version:

UMTS/HSPA+: Five band 800/850/900/1900/2100MHz GSM/GPRS/EDGE: Quad band 850/900/1800/1900MHz • European Version:

UMTS/HSPA+: Dual band UMTS 900/2100MHz GSM/GPRS/EDGE: Dual band GSM 900/1800MHz • American Version:

GSM/GPRS/EDGE: Dual band GSM 850/1900MHz UMTS/HSPA+: Dual band UMTS 850/1900MHz

3GPP Release 6, 7
 DL 7.2Mbps, UL 5.7Mbps

HSDPA Cat.8 / HSUPA Cat.6 data rates

- Control via AT commands
- (Hayes 3GPP TS 27.007 and 27.005)
- SIM Application Toolkit (release 99)
- TCP/IP stack access via AT commands
- Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range: 6 ... 30 V
- Power modes
  - Power down
  - Sleep mode
  - Idle mode
  - Airplane mode
- Temperature range
  - Operation: -30°C to +85°C
  - Extended\*: -40°C to +90°C
- Dimensions. Excluding connectors: 78,1 x 66,8 x 37,2 mm
- Weight: < 190 g

#### Interfaces:

- DB9 DSUB: RS232 8-Wire modem interface
- 15-way HD-Dsub:
  - 4 GPIO or opto-isolated IN+OUT
  - o 2 Analog Inputs
  - o 1 x I2C bus
  - o 1 x 4-wires RS232 RS485 optional
- USB 2.0 port High Speed (480Mbit/s)
- · Operating status LED
- SIM card interface 3 V, 1.8 V
- Audio interface RJ connector
- Plug-in RJ power supply
- FME M 50 Ohm antenna connector

## Models:

# MTX-3G-JAVA+GPS

CSR-SIRFIV GPS receiver attached inside. SMA connector MTX-3G-JAVA-ULP Ultra Low Power Mode (2,5uA) power consumptioin MTX-3G-JAVA-RS485

# 1 RS485 port. 1 RS232 port.

MTX-3G-JAVA+RF

Radio Frecuency card inside (ASC1 connected). SMA connector.

Wavenis	Bluetooth 2.1/LE
Wifi	Wireless MBUS/KNX
ISM 868/915	ZigBee

## HSPA features 3GPP Release 6, 7

- DL 7.2Mbps, UL 5.7Mbps
- HSDPA Cat.8 / HSUPA Cat.6 data rates
- Compressed mode (CM) supported according to 3GPP TS25.212

# UMTS features 3GPP Release 4

- PS data rate 384 kbps DL / 384 kbps UL
- CS data rate 64 kbps DL / 64 kbps UL

## **GPRS/EGPRS** features:

GPRS class 12

- Mobile station class B
- PBCCH support
- Coding schemes CS 1-4
- EGPRS:
  - Multislot Class 12
  - EDGE E2 power class for 8 PSK
- CSD:
  - V.110, RLP, non-transparent
  - 9.6kbps
  - USSD

#### SMS Features:

- Point-to-point MO and MT
- SMS cell broadcast
- Text and PDU mode

# JAVA

Oracle Java ME Embedded 3.2 Compliant to CLDC 1.1 HI (JSR139) and IMP-NG (JSR228) Java standards. Capable of running multiple midlets in parallel with inter-midlet communication.

- Additional Java standard APIs:
  - JSR75 (FileConnection)
  - JSR177 (CRYPTO)
  - JSR280 (XML)
- Additional Java proprietary APIs: - AT Command API
  - Watchdog API
- Additional accessible periphery for Java applications

   I/O pins- 12C Interface, SPI interface, DAC, ADC
   Serial interfaces (API): (ASC0, ASC1, USB\*)
   can be used to connect external devices.
- Memory space for Java programs: -Flash File System: around 8 MB. -RAM: around 6MB
  - -Just-in-Time Compiler execution optimization.

# MTX-TERMINALS

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