

# MTX-JAVA-T2

## Basic 4G/3G 2xRS232 Programmable IoT Modem

MTX-xG-JAVA-T2 is an innovative and powerful all-in-one solution for the most demanding M2M and IoT applications, enabling 2G/3G/4G high speed data transmission, CSD and SMS.

MTX-xG-JAVA-T2 are Java J2ME programmable and have many interfaces (2x RS232, mini USB, 1x digital input) avoiding need for further hardware, shortening time to market and reducing costs.

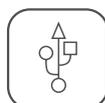
It is also compatible with MTX-Tunnel, an optional firmware that can be executed in our MTX modems to use them as powerful gateways or routers.



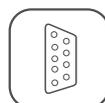
### MAIN FEATURES



4G connectivity



USB 2.0



2x RS232



Digital input



MTX-Tunnel



Java



Legacy communications



AT commands



Firmware update



Internet services

-  DC input: 6.5 to 40 Vdc
-  Temperature range: -30° to +85°C
-  Dimensions: 78.1x66.8x37.2mm
-  Weight: <190gr

Datasheet subject to changes | 2019/2  
MTX © by MATRIX ELECTRONICA S.L.U.  
SUPPORT: [iotsupport@mtx2m.com](mailto:iotsupport@mtx2m.com)  
SALES: [info@mtx2m.com](mailto:info@mtx2m.com)  
[mtx2m.com](http://mtx2m.com)



## HARDWARE FEATURES

	MTX-4G-JAVA-T2	MTX-3G-JAVA-T2	MTX-2G-T2 (MTX-TUNNEL)
	LTE 5 Bands (700, 800, 900, 1800, 2100MHz), GSM/GPRS/EDGE: 2 Bands (900, 1800MHz)	HSPA+: 5 Bands (800, 850, 900, 1900, 2100MHz), GSM/GPRS/EDGE: 4 Bands (850, 900, 1800, 1900MHz)	GSM 4 Bands (850, 900, 1800, 1900MHz), release 6
	LTE Cat.1: DL 10.2Mbps, UL 5.2Mbps		
	HSPA: DL 7.2Mbps, UL 5.7Mbps UMTS PS: DL 384Mbps, UL 384 Mbps, CS: DL 64Mbps, UL 64Mbps	HSPA (3GPP release 7): DL 7.2Mbps, UL 5.7Mbps; HSDPA Cat.8/HSUPA Cat.6	
	EDGE Class 12 data rates, DL: max. 237 kbps, UL: max. 237 kbps GPRS Class 12 data rates, DL: max. 85.6 kbps, UL: max. 85.6 kbps	EDGE Class 12 data rates, DL: max. 237 kbps, UL: max. 237 kbps GPRS Class 12 data rates, DL: max. 85.6 kbps, UL: max. 85.6 kbps	EDGE Class 12 data rates, DL: max. 237 kbps, UL: max. 237 kbps GPRS Class 12 data rates, DL: max. 85.6 kbps, UL: max. 85.6 kbps
	CSD data transmission up to 9.6 kbps, V.110, non-transparent	CSD data transmission up to 9.6 kbps, V.110, non-transparent	CSD data transmission up to 9.6 kbps, V.110, non-transparent
	SMS: text and PDU mode support, point-to-point MO and MT, cell broadcast	SMS: text and PDU mode support, point-to-point MO and MT, cell broadcast	SMS: text and PDU mode support, point-to-point MO and MT, cell broadcast

### Interfaces

-  4G/3G/2G connectivity
-  USB 2.0
-  SIM card interface 1.8V and 3V
-  2x RS232
-  1x digital input
-  Power supply
-  Operating status LEDs
-  Real Time Clock with alarm functionality

### Connectors

-  2x SMA F antenna connector
-  Mini USB 2.0
-  2x DB9 female connector: RS232
-  5-way plug-in: 1x digital input, power supply

### Processor

	4G	3G	2G
Flash	31MB	10MB	10MB
RAM	18MB	10MB	10MB
CPU	ARM11	ARM11	ARM11

## SOFTWARE FEATURES

### General Features

-  SIM application toolkit, 3GPP release 99
-  Control and TCP/IP stacks access via AT commands
-  Internet services: TCP, UDP, HTTP, FTP, SMTP, POP3

### Special Features

-  USB interfaces support composite modes and Linux/Mac compliant mode
-  Firmware update via USB/RS232
-  Multiplexer according 3GPP TS 27.010
-  RLS monitoring and informal network scan

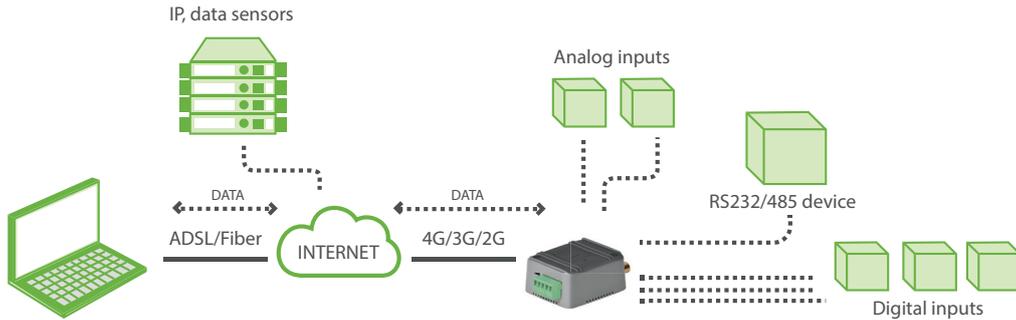
### Java Features

-  Oracle Java ME embedded 3.2
-  Compliant to CLDC 1.1 HI and IMP-NG standards
-  Capable of running multiple MIDlets in parallel with inter-MIDlet communication
-  Java standard APIs: JSR75 (FileConnection), JSR177 (CRYPTO), JSR280 (XML)
-  Accessible periphery for Java applications
-  Memory space for Java applications

## ORDERING INFORMATION

MTX-2G-T2	<b>199801455</b>
MTX-3G-JAVA-T2	<b>199801406</b>
MTX-4G-JAVA-T2	<b>199801438</b>

# TUNNEL SOFTWARE FEATURES



## MAIN FEATURES

- Serial to 4G/3G/2G
- GPIO control
- GPS management
- DynDNS and No-IP
- MQTT/MQTTs/ HTTP/HTTPs
- RF mesh concentrator
- Modbus master datalogger
- SMS control

### Connectivity

- 4G/3G/2G serial gateways: TCP client, TCP server, UDP client/server, accept incoming CSD calls, up to 2 simultaneous tunnel
- IP connectivity mode: permanent 100% time, under request (SMS, missed call), change on a digital input, analog input out of level, serial data on RS232/RS485 port, scheduled date/hour/time

### TCP Services

- Web server, Telnet, SNMP, Tacacs+, NTP
- Datalogger: MQTT, MQTTs, HTTP, HTTPs, FTP
- Shows the status of digital and analog inputs
- Change digital output level and relays
- Execute AT commands remotely

### Security

- Authorized phone numbers
- Firewall IP, SSL connections, encrypted config.
- Secure OTAP (remote FIU upgrade)
- Watchdog hardware

### SMS Alarm and Control

- Send SMS alarm when the level of digital input change
- SMS can be sent to up to 10 remote users
- Execute remote AT commands
- Change the status of digital outputs & relays
- Customizable SMS commands

### Solutions for Dynamic IP

- IP session using a SMS or missed call
- DynDNS and NoIP
- Private DNS

### Metering, Modbus, Sensors...

- 868 MHz remote monitoring sensors (Wavenis)
- Master for modbus RTU devices, Modbus TCP slave, Modbus TCP to RTU gateway
- Relays control
- Access to serial devices using GPRS and GSM
- Astronomical clock

\*Firmware compatibility subject to hardware version