MTX-JAVA-T

Basic 4G/3G Programmable IoT Modem

MTX-xG-JAVA-T 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-T are Java J2ME programmable and have many interfaces (RS232, RS485, 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.
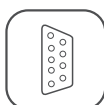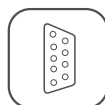
MAIN FEATURES

4G 3G/2G	USB	RS232	RS485	IN OUT
4G connectivity	USB 2.0	RS232	RS485	Digital input
MTX-Tunnel	Java	CSD SMS	>_	Firmware update	Internet services
MTX-Tunnel	Java	Legacy communications	AT commands	Firmware update	Internet services

⚡ DC input: 6.5 to 40 Vdc
🌡 Temperature range: -30º to +85ºC
⬜ Dimensions: 78.1x66.8x37.2mm
🔌 Weight: <190gr

CE FC PTCRB RoHS compliant ISO 9001

HARDWARE FEATURES

	MTX-4G-JAVA-T	MTX-3G-JAVA-T	MTX-2G-T (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
4G	LTE Cat.1: DL 10.2Mbps, UL 5.2Mbps		
3G	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	
2G	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	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	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
- SIM card interface 1.8V and 3V
- RS232
- RS485
- 1x digital input
- Power supply
- GPS module (optional)
- Operating status LEDs

Connectors

- SMA F antenna connectors
- Mini USB 2.0
- DB9 female connector: RS232
- 5-way plug-in: RS485, power supply and digital input

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
- Real Time Clock with alarm functionality
- 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-T	**199801421**	MTX-4G-JAVA-T (4G/2G)	**199801424**
MTX-3G-JAVA-T	**199801422**	MTX-4G-JAVA-T (4G/3G/2G)	**199801445**
MTX-3G-JAVA-T-G (GPS)	**199801423**		

TUNNEL SOFTWARE FEATURES

MAIN FEATURES

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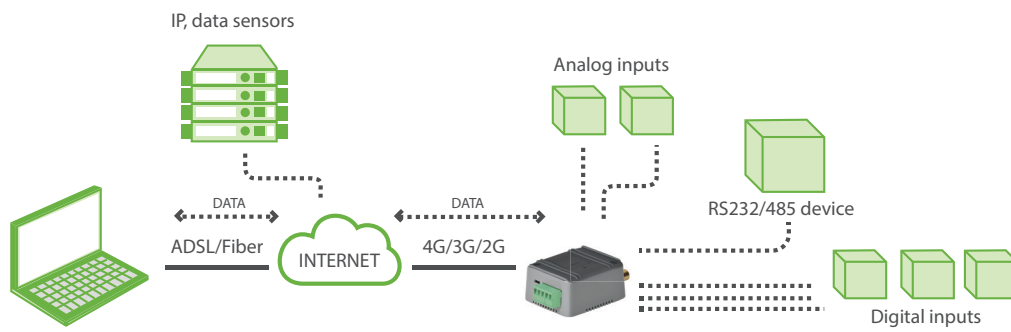
Connectivity

4G/3G/2G serial gateways: TCP client, TCP server, UDP client/server, accept incoming CSD calls, up to 2 simultaneous tunnel

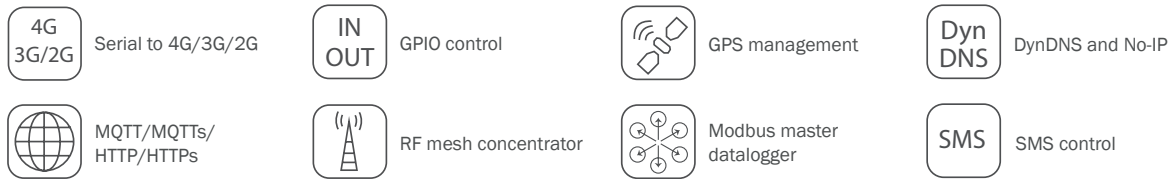IP connectivity mode: permanent 100% time, under request (SMS, missed call), change on a digital input, analog input out of level, serial data on RS232/RS485 port, scheduled date/hour/time

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 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