



# MTX-T

# Basic 4G/3G Programmable IoT modem

MTX-T is an innovative and powerful all-inone solution for the most demanding M2M and IoT applications, enabling 2G/3G/4G high speed data transmission, CSD and SMS. MTX-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, a firmware that can be executed in our MTX modems to use them as powerful gateways or routers.





#### MAIN FEATURES



4G/3G/2G

4G

3G/2G



USB 2.0

IN

**OUT** 

**GPIO** 

management



RS232

Relays

management



RS485

Dyn

**DNS** 

**DynDNS** 

and No-IP



Digital input

MQTT/s



Legacy communic



Modbus & Datalogger



SMS control



Hardware features

MTX-Tunnel software features





Autoprovisioning



Alarms and Alerts



Remote Control



Real time Dashboards



Rules engine



Monitoring engine



Analytics



Remote update

\*Available with compatible devices that have MTX-Tunnel or MTX-Titan

DC input: 6.5 to 40 Vdc

Temperature range: -30° to +85°C

**□** Dimensions: 78.1x66.8x37.2mm

Weight: <190gr</p>









# HARDWARE FEATURES

	MTX-T 4G	MTX-T 3G	MTX-T 2G
('A)	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**



2x SMA F antenna connector: 4G



1x SMA F antenna connector: 3G/2G



1x SMA F antenna connector: GPS



Mini USB B



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



#### • MTX-TUNNEL SOFTWARE FEATURES

#### 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: Telnet, MQTT/MQTTS, SMS, HTTP

#### **Security**



Authorized phone numbers



Firewall IP, SSL/TLS connections, encrypted config



Secure OTAP (remote FIU upgrade)



Watchdog hardware

#### **Alarms and Control**



Send SMS/MQTT alarm when the level of digital or analog 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 2G/3G/4G and GSM

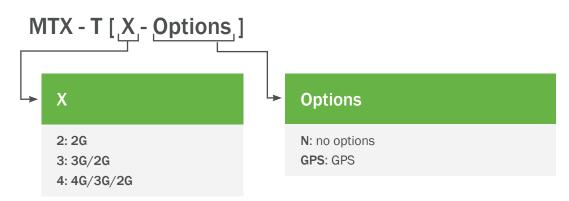


Astronomical clock

# ORDERING INFORMATION

MTX-T [2 N]	199801421
MTX-T [3 N]	199801422

MTX-T [4-N] (4G/2G)	199801424
MTX-T [4 N]	199801445

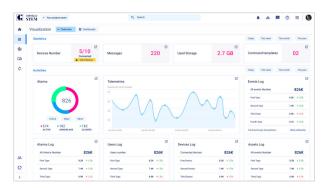


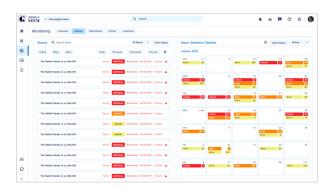




# **CERVELLO STEM - IOT PLATFORM**

FREE FOR ONE YEAR WITH MTX DEVICES\*\*





#### **General Features**



Up to unlimited devices



Autoprovisioning



Real time dashboards



Remote control



Monitoring engine



Alarms and alerts



Rules engine



Remote update



Connect engine\*





API Keys\*



Analytics\*



Multi-tenant\*



White labeling\*



Custom admin role\*

#### Monitor



Alarms, Events and Incidents



Tracking\*

#### **Control**



Command template



OTA

#### **Devices Inventory**



Add single and single from template



Add Bulk from template and from autoprovisioning



Manage: Device template, Groups, Assets and Bulk actions

#### Connect



Topics\*



Transformation\*



Integration keys\*

#### **Visualize**



Dashboards



Reports

#### **Automate**



Rules Engine



Actions



Triggers

#### **Security**



2-factor authentication



SSL for end user application



Custom admin roles\*



<sup>\*</sup>Upgrade required

<sup>\*\*</sup>Available with compatible devices with MTX-Tunnel or MTX-Titan