

# MTX-T

## Basic 4G/3G Programmable IoT modem

MTX-T is an innovative and powerful all-in-one solution. Thanks to its set of interfaces (RS232, RS485, USB, digital I/O...) and the embedded MTX-Tunnel firmware that provides the MTX-T with a basic router-like functionality, this modem can be used in most of the IoT applications with no need for further hardware, shortening the time-to-market and providing a very cost-effective solution. MTX-T can be also programmed in Java2ME, for those customers who want to embed their own firmware on it.



### MAIN FEATURES



4G/3G/2G



USB 2.0



RS232



RS485



Digital input



Legacy communic.



4G/3G/2G serial gateway



GPIO management



Relays management



DynDNS and No-IP



MQTT/s



Modbus & Datalogger



SMS control

● Hardware features

● MTX-Tunnel software features



### CERVELLO STEM - IOT PLATFORM FREE FOR ONE YEAR WITH MTX DEVICES\*



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

Datasheet subject to changes | 2020/05

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## HARDWARE FEATURES

	MTX-T 4G	MTX-T 3G	MTX-T 2G
	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
	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



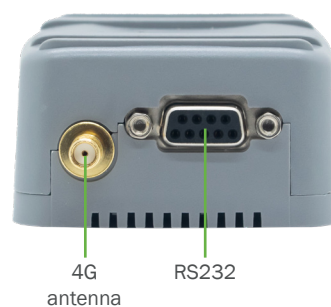
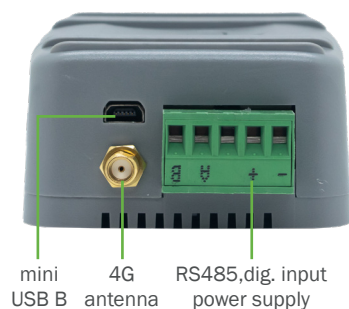
1x digital input



Power supply



Operating status LEDs



## Connectors



2x SMA F antenna connector: 4G



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



Mini USB B



DB9 female connector: RS232





5-way plug-in: RS485, power supply and digital input

## Processor






	4G	3G	2G
<b>Flash</b>	31MB	10MB	10MB
<b>RAM</b>	18MB	10MB	10MB
<b>CPU</b>	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

\*MTX-Tunnel features depending on modem interfaces






## Alarms and Control

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

# ORDERING INFORMATION

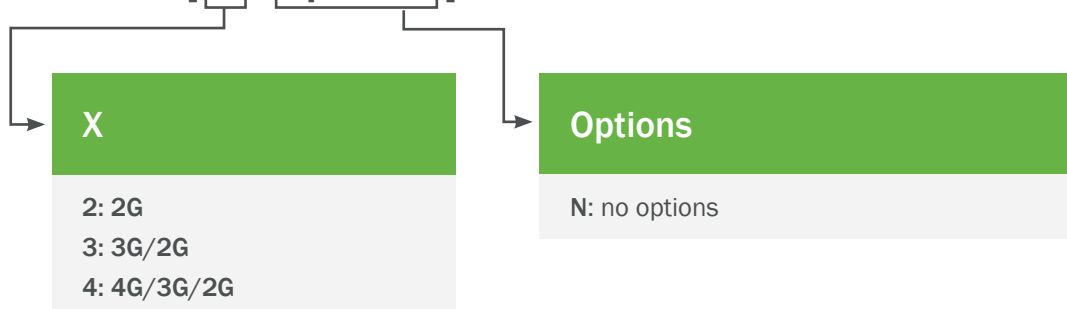
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MTX-T [ 3 N] **199801422**

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

MTX-T [ 4 N] **199801445**

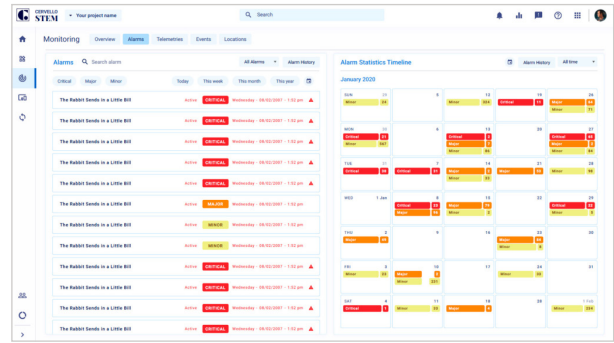
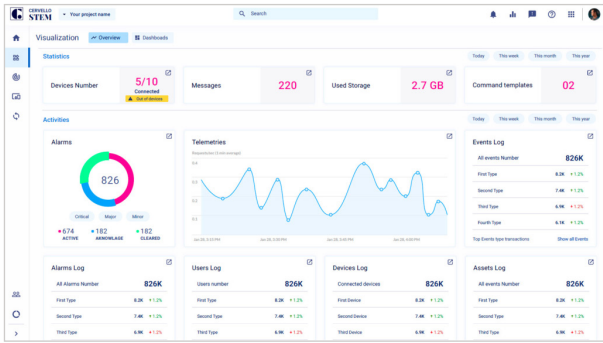
## MTX - T [ X - Options ]



















# 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\*

\*Upgrade required

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