MTX-T2
Basic 4G/3G 2xRS232 programmable IoT modem

MTX-T2 is an innovative and powerful all-in-one solution. Thanks to its set of interfaces (RS232, USB, digital I/O...) and the embedded MTX-Tunnel firmware that provides the MTX-T2 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-T2 can be also programmed in JavaJ2ME, for those customers who want to embed their own firmware on it.

MAIN FEATURES

4G 3G/2G — 4G/3G/2G	**USB 2.0**
2x RS232	**IN OUT** — Digital input
CSD SMS — Legacy communic.	

4G 3G/2G — 4G/3G/2G serial gateway	**IN OUT** — GPIO management
Relays management	**Dyn DNS** — DynDNS and No-IP
>_ — MQTT/s	**Modbus & Datalogger**
SMS — 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

CE FC PTCRB RoHS compliant ISO 9001

HARDWARE FEATURES

	MTX-T2 4G	MTX-T2 3G	MTX-T2 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
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
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
- USB 2.0
- SIM card interface 1.8V and 3V
- 2x RS232

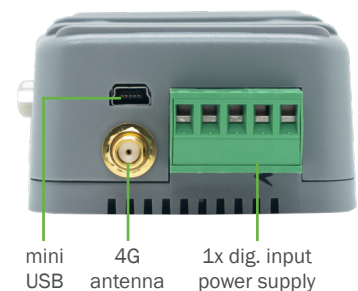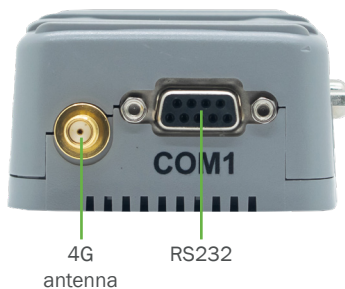- 1x digital input
- Power supply
- Operating status LEDs
- Real Time Clock with alarm functionality

4G antenna   RS232

RS232

mini USB   4G antenna   1x dig. input power supply

Connectors

- 2x SMA F antenna connector: 4G
- 1x SMA F antenna connector: 3G/2G
- 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

● ORDERING INFORMATION ●

MTX-T2 [2 N]	199801455
MTX-T2 [3 N]	199801406

MTX-T2 [4 N]	199801438

MTX - T2 [X - Options]

X

2: 2G
3: 3G/2G
4: 4G/3G/2G

Options

N: no options
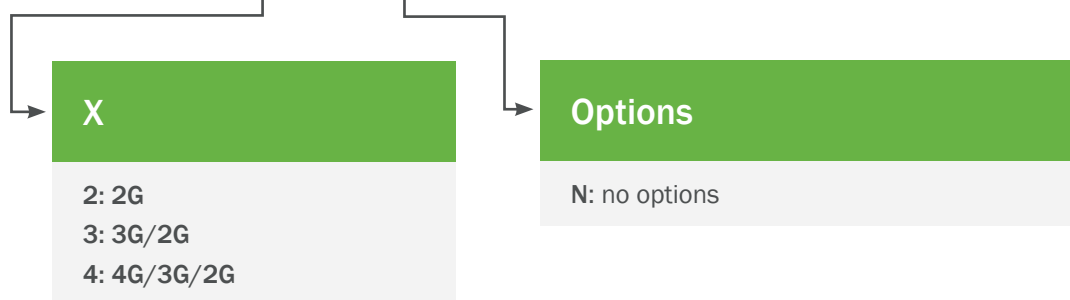
MTX-TUNNEL SOFTWARE FEATURES

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 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
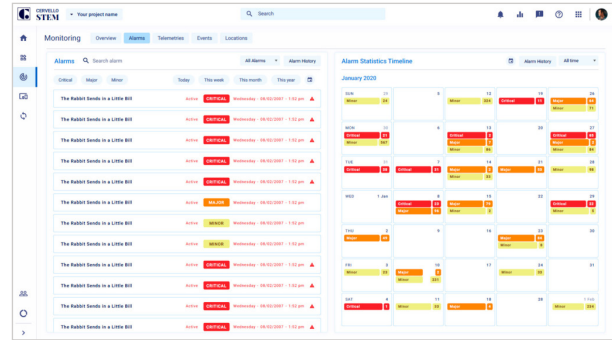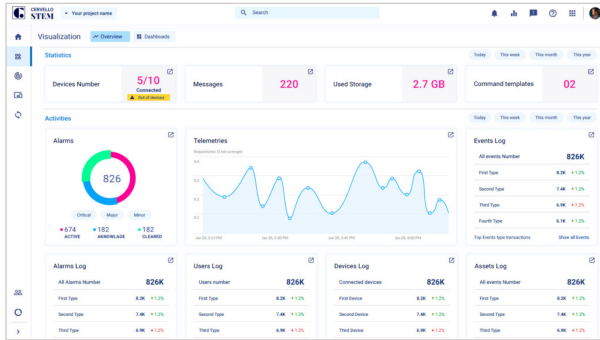
General Features

- 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