



# MTX-StarSensor

# 4G IoT modem for sensor control with IP67, Ultra Low Power and primary batteries with 10 years autonomy

The MTX-StarSensor is an innovative and powerful solution for the most demanding monitoring applications.

The IP67 enclosure allows it to be used in any environment regardless of dust, humidity or water. Thanks to MTX-Tunnel firmware with improved Ultra Low Power and power management features, the device can handle up to 2 analog sensors for years, without the need for external power. The modem has the ability to record data, which can be stored locally or sent remotely via 4G.







4G/3G/2G communications



**USB** 



RS232/485



4x GPIOs



/0-10Vdc



Up to 2x 4-20mA Up to 2x sensor power supply



batteries



Ultra Low Power





4G/3G/2G serial gateway



management



Sensor management



**DynDNS** and No-IP



MOTT/s



Modbus & Datalogger



SMS control



MTX-Tunnel software features

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



Autoprovisioning



Alarms and



Remote Control



Real time Dashboards



Rules engine



Monitoring engine



Analytics



Remote update



<sup>\*</sup>Available with compatible devices that have MTX-Tunnel or MTX-Titar

# HARDWARE FEATURES

#### MTX-StarSensor 4G

LTE 5 Bands (700, 800, 900, 1800, 2100MHz), GSM/GPRS/EDGE: 2 Bands (900, 1800MHz)

4G LTE Cat.1: DL 10.2Mbps, UL 5.2Mbps

HSPA (3GPP release 6,7): DL 7.2Mbps, UL 5.7Mbps; HSDPA Cat.8/HSUPA Cat.6 UMTS (3GPP release 4): PS data rate 384 kbps DL, UL 384kbps

GPRS (EU only): DL 85.6kbps, UL 85.6kbps

SMS: text and PDU mode support

#### **Interfaces**

4G/3G/2G connectivity

USB (internal)

₩ RS232

RS485

4x GPIOs (internal)

Tamper input

(w-)) Up to 2x 4-20mA/0-10Vdc

Dual SIM card interface 1.8V and 3V

Operating status LEDs

Real Time Clock with alarm functionality

Primary batteries

Ultra Low Power

#### Processor

	4G	
Flash	31MB	
RAM	18MB	
CPU	ARM11	





#### **Connectors**

1x SMA F: 4G

Mini USB (internal)

1x RJ45: RS232, RS485 (multiplexed)

4x2 terminal block: power supply, RS485, tamper (internal)

Up to 2x 4-20mA/0-10Vdc

Up to 2x power outputs: 12, 18, 25, 32 Vdc software configurable



# MTX-TUNNEL SOFTWARE FEATURES

## **Connectivity**



4G/3G/2G serial gateways: TCP client, TCP server, UDP client/server, 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



Execute AT commands remotely: Telnet, MOTT/MOTTS, 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, local configuration option



SMS can be sent to up 10 remote users



Execute remote AT commands



Change the status of digital outputs



Customizable SMS commands

### **Solutions for Dynamic IP**



IP session using a SMS or missed call



DynDNS and NoIP



Private DNS

### Metering, Modbus, Sensors...



Local access to data option, through serial interface.



Master for modbus RTU devices, Modbus TCP slave, Modbus TCP to RTU gateway



Access to serial devices using 2G/3G/4G and GSM



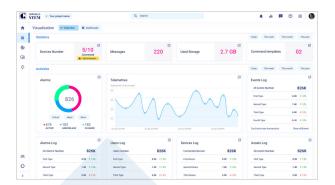
Astronomical clock

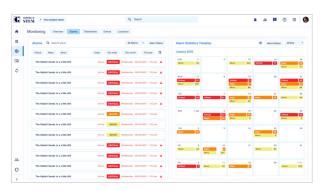




# **CERVELLO STEM - IOT PLATFORM**

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\*



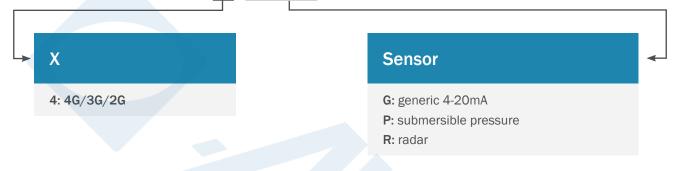
<sup>\*</sup>Upgrade required

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

# ORDERING INFORMATION

MTX-StarSensor [4-G]	TBD	MTX-StarSensor [4-R]	TBD
MTX-StarSensor [4-P]	TBD		

# MTX - StarSensor [X - Sensor]



# **DIMENSIONS**

