

MTX-Router-Titan mini

LTE/4G/3G/GSM/GPRS compact industrial IoT router

The MTX-Router-Titan mini is an innovative industrial router. By providing an easy integration and powerful interfaces, it avoids further hardware components. Some of its interfaces are: Ethernet, WiFi, USB, RS232, 1-Wire, GPIOs and a relay. A 4G (LTE Cat.3) modem is attached internally. The MTX-Router-Titan mini includes: DHCP server, NAT, WiFi Access Point, CSD call manager, 3G to RS232/USB gateways, external sensor dataloggers (temperature, distance, Modbus RTUs), DynDNS/NoIP client, relay control, GSM cell positioning, remote firmware upgrade, among others.



Main Features



4G/3G/2G



Ethernet



RS232 RS485



WiFi



Relay



GPS Acce (optional)



Accelerometer



Cervello Stem



Webserver

HARDWARE



Serial gateway

SOFWARE



Datalogger



Modbus



DynDNS No-IP



MQTT



SMS control



VPN management

Strenghts & Benefits

- A complete set of wired and wireless interfaces.
- It doesn't need further hardware components.
- Like all MTX-Titan routers, it has all the functionalities of MTX-Titan software, and the Cervello Stem IoT platform.

Applications

 It can be used in an infinite IoT applications.

Specifications

Titan mini 4G	Titan mini 3G
Penta-Band LTE: Bands 1, 3, 8, 20, 28 (700, 800,900, 1800, 2100 MHz) Dual-Band UMTS/HSPA+: Bands 8, 1 (900, 2100 MHz) Dual-Band GSM: 900 and 1800 MHz	Five Bands UMTS (WCDMA/FDD) Bands: 800, 850, 900, 1900 and 2100 MHz Quad-Band GSM Bands: 850, 900, 1800 and 1900 MHz
LTE Cat. 1 DL: max. 10.2 Mbps, UL: max. 5.2 Mbps	
HSPA+ Cat.8 data rates DL: max. 7.2 Mbps, UL: max. 5.76 Mbps	HSDPA Cat.8/HSUPA Cat.6 data rates DL: max. 7.2 Mbps, UL: max. 5.76 Mbps
GPRS Class 12 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
SMS text and PDU mode support	SMS text and PDU mode support

Interfaces

- 4G/3G/2G connectivity
- Ethernet 10/100 BaseT
- Up to 3x RS232
- WiFi b/g/n
- 1x RS485
- 1x relay
- 1x 1Wire
- 1x GPI0
- Accelerometer
- DIP switch for configuration
- Temperature sensor
- RF expansion (optional)
- GPS (optional)

Connectors

- 1x SMA F: GPS/1x SMA F RP: WiFi
- 1x SMA F: 4G/1x FME M: 3G
- Micro USB connector AB Type
- Terminal block: power supply
- 1x RJ45: Ethernet 10/100 BaseT
- 1x DB15: RS485, 2x RS232, 1x relay, 1x CAN, 1x GPIO
- Micro SIM





Characteristics

DC: 24V (7-50 Vdc)

■ Temperature range: -40 - 85°C

■ Dimensions: 78.1x66.8x37.2mm

■ Weight: <500gr.

Certifications: CE, FCC, PTCRB, RoHS, ISO9001

References

PRODUCTS

■ MTX-Router-Titan mini (only ETH+WiFi)	000199802134
■ MTX-Router-Titan mini-3G	000199802118
MTX-Router-Titan mini-3G-GPS	000199802140
MTX-Router-Titan mini-4G-GPS	000199802142
MTX-Router-Titan mini-4G-GPS US	000199802172

MTX-Titan Software Features

SERIAL GATEWAYS

- 3 simultaneous 2G/3G/4G/Eth/WiFi <-> RS232/485/USB gateways
- Modes: TCP server/TCP client
- SSH encryption enabled, supports TACACS+
- Incoming CSD call for metering applications

MODBUS

- Modbus TCP/Modbus RTU gateway
- Modbus TCP/RTU to SNMP gateway (SNMP connectivity for any modbus device)
- Modbus slave RTU/TCP (send/recevice SMS, Email, SNMP traps...)
- User scripts

DATALOGGER

- Data from sensors (temperature, distance...)
- Serial data collected by RS232, RS485 or USB
- GPS data for tracking applications or fleet management
- Automatic data sending (HTTP/HTTPS/FTP/ MQTT) with JSON format

SENSOR COMPATIBLE

- Temperature sensor MTX-Temp-RS232
- Distance sensors (ultrasound) Maxbotics
- Modbus RTU/TCP sensors
- Internal jamming detection sensor with alarm indicator

SMS

- Full control by SMS with phone number authorizations
- Alarms (digital input, temp., MBus data read)
- Send/receive SMS by Modbus TCP (for PLC)

OTHER

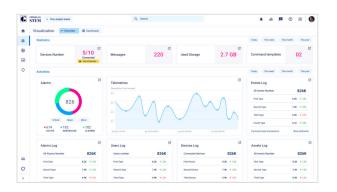
- Compatible with DynDNS/No-IP & private DNS
- GSM cell location
- Programmable autoreset (schedule, timer...)
- Multioperator SIM utilities (integrated rssi scanning tool)
- Time synchronization (NTP) with timezones
- Over The Air firmware upgrade
- Full management with AT Command by serial, socket, SMS, modbus, SNMP, ...
- NAT, firewall, DHCP, etc. and other standard router characteristics
- 4G connectivity supervisor to maintain connection always active
- Internal configuration webserver (all logos and pictures can be customized by user)
- Clear and understandable application notes with examples (OpenVPN, serial gateways, modbus, datalogger, SMS, metering, SNMPv2 and SNMPv3...)
- Traffic control (prevents excessive data traffic consumption), TACACS+ (for HTTP, Telnet and SSH), multiuser profiles

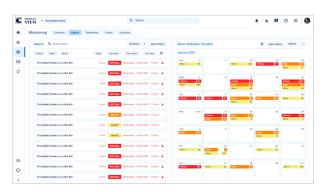
VPN

- OpenVPN with client/server mode
- Permanent or activated by SMS, AT command, modbus, SNMP, serial...

^{*}The Titan network architecture is protected by nearly 60 hardware and software patents

Cervello Stem - IoT Platform





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 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