

MTX-ROUTER-TITAN mini

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

The MTX-Router-Titan mini is an innovative industrial router that comprises a complete set of wireless and wired interfaces. By providing an easy integration and powerful interfaces, it avoids further hardware components.

Plenty of interfaces: Ethernet, WiFi, USB, RS232, 1-Wire, I2C, GPIOs and relays. It can be used in infinite M2M and IoT applications. A 4G (LTE CAT3) 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.



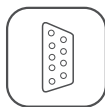
MAIN FEATURES



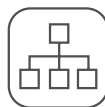
4G connectivity



USB 2.0



RS232
RS485



Ethernet



WiFi



Relay



Accelerometer



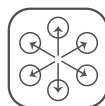
DynDNS



Web server



Serial gateway



Modbus



Datalogger







Firewall



VPN







VPN

-  DC input: 24V (7-50 Vdc)
-  Temperature range: -40° to +85°C
-  Dimensions: 78.1x66.8x37.2mm
-  Weight: <500gr
















Preliminary Datasheet. Subject to changes | 2017/09
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mtx2m.com



HARDWARE FEATURES

	MTX-ROUTER-TITAN mini 4G	MTX-ROUTER-TITAN mini 3G
	<p>EUROPE: Penta Band LTE: 800/900/1800 /2100/2600 MHz; FDD-Band (20,8,3,7,1); Tri Band UMTS (WCDMA): 900/1800/2100 MHz; FDD-Band (8,3,1); Dual Band GSM/GPRS/EDGE: 900/1800 MHz</p> <p>US: Quad Band LTE: 700/850/AWS (1700/2100)/1900 MHz; FDD-Band (17,5,4,2); Tri Band UMTS (WCDMA): 850/AWS (1700/2100)/1900 MHz; FDD-Band (5,4,2); Quad Band GSM/GPRS/EDGE: 850/900/1800/1900 MHz)</p>	<p>WORLDWIDE: Five Bands UMTS (WCDMA/FDD); Bands: 800, 850, 900, 1900 & 2100 MHz. Quad-Band GSM; Bands: 850, 900, 1800 & 1900 MHz</p>
	LTE Cat. 3: DL max. 100 Mbps, UL max. 50 Mbps, 2x2 DL MIMO	
	HSPA+ DL Cat.24 / UL Cat. 6, Dual Carrier: DL max. 42 Mbps, UL max. 5.76 Mbps	HSDPA Cat.8 / HSUPA Cat.6 data rates: DL max. 7.2 Mbps, UL max. 5.76 Mbps
	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
	SMS text messages	SMS text messages

Interfaces

 4G/3G/2G connectivity	 GPS (optional)
 Ethernet 10/100 BaseT	 1x relay
 USB 2.0	 Accelerometer
 Up to 3x RS232	 Temperature sensor
 1x RS485	 DIP switch for configuration
 SIM card interface 1.8V/3V	 1x 1Wire
 WiFi b/g/n	 1x GPIO
 RF expansion (optional)	

Connectors



Micro USB connector AB Type



1x RJ45: Ethernet 10/100 BaseT



1x DB15: RS485, 2x RS232, 1x relay, 1x CAN, 1x GPIO



Micro SIM



1x SMA F: GPS / 1x SMA F RP: WiFi







1x SMA F: 4G / 1x FME M: 3G

ORDERING INFORMATION





MTX-Router-Titan-mini	199802134
MTX-Router-Titan-3G-mini	199802118
MTX-Router-Titan-3G-GPS-mini	199802140
MTX-Router-Titan-4G-GPS-mini	199802142

TITAN SOFTWARE FEATURES





Serial Gateways

-  3 simultaneous 2G/3G/Eth/WiFi <-> RS232/485/USB gateways
-  Modes: TCP server/TCP client
-  SSH encryption enabled
-  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/receive 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
-  RF868 Wavenis/wireless M-Bus sensors
-  Internal jamming detection sensor with alarm indicator













Internal Relays

-  Control & activation by: web, schedule, SMS, astronomical clock, temperature, distance...
-  Automatic activation by GPS
-  Watchdog for external devices (relay is activated if ping doesn't respond)



SMS

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

Other

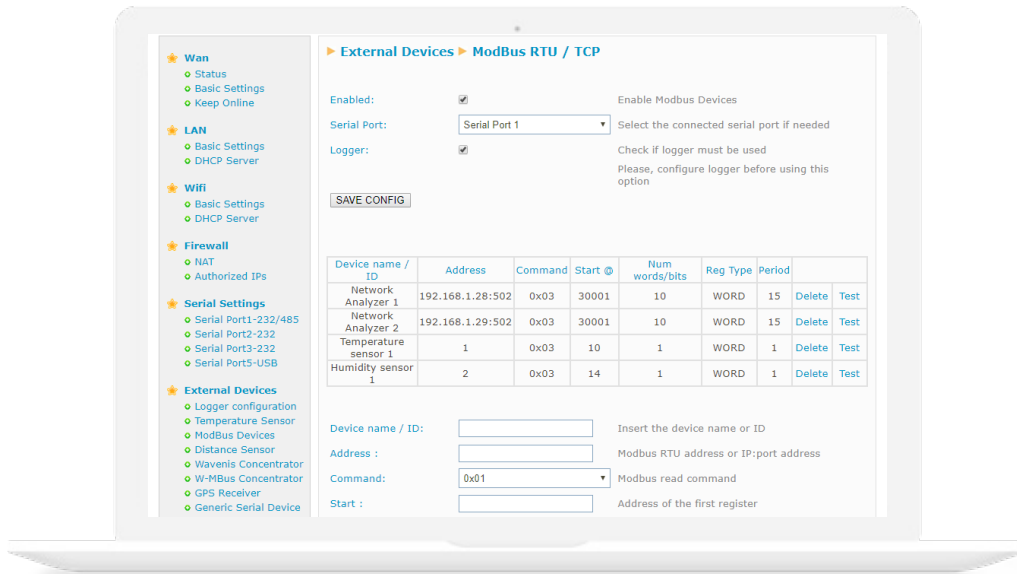
-  Compatible with DynDNS/No-IP & private DNS
-  GSM cell location
-  Programmable autoreset (schedule, timer...)
-  Multioperator SIM utilities (integrated rssi scanning tool)
-  Time synchronization (NTP) with timezones
-  Over The Air firmware upgrade
-  Full management with AT command by serial, socket, SMS, modbus, SNMP...
-  NAT, firewall, DHCP, etc. and other standard router characteristics
-  4G connectivity supervisor to maintain connection always active
-  Internal configuration webserver (custom logos, pictures, text, menus and features)
-  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...

TITAN SOFTWARE INTERFACE

The configuration of the routers MTX-Titan can be intuitively done from any computer with a web browser. We can connect locally via Ethernet or WiFi, or remotely via 3G. We can also connect via SMS, Modbus RTU, Modbus TCP and SNMP.



TITAN SOFTWARE DIAGRAM

Titan Software adds advanced features to routers MTX-Titan, which allows them to not only perform the usual router configurations, but also 3G-RS232/485 gateways, remote control of USB devices, execute commands via SMS (to verify coverage, communte relays...), accepting GSM data calls (CSD) to access different kinds of devices like electricity meter boxes, autonomously reading Modbus TCP or Modbus RTU devices, sending data (temperature, distance...) to the cloud, and more.

