

MTX-StarEnergy-M

Industrial IoT modem with LTE for metering applications

The MTX-StarEnergy-M is an innovative industrial modem that comprises a set of features specially oriented for the electric market.

One of the most remarkable features of the MTX-StarEnergy-M is the self-provisioning according to the SIM card inserted: the router is able to detect the service provider according to the SIM inserted and autoconfigures itself (APN, sockets, etc.) depending on the provider.

Also important is the selection of the service provider according to the quality of the service. In roaming SIM cards, the router analyzes the quality of the signal from several service providers and automatically connects to the one with the best quality.



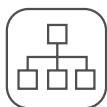
MAIN FEATURES



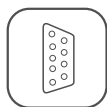
LTE connectivity



USB 2.0



Ethernet



RS232/422
/RS485



230Vac



DIN rail



Legacy
communications



TACACS+



Web server



Serial gateway



SNMPv3







NTP



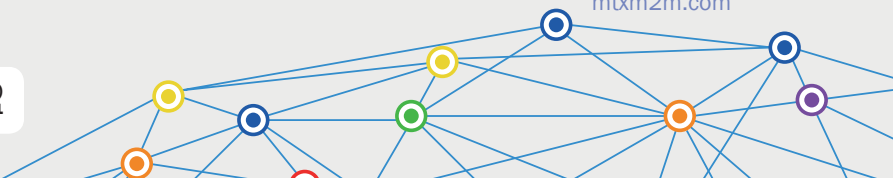
Firewall









Watchdog

-  AC input: 230Vac (0.8Vn-1.15Vn)
Class II electrical protection, double insulation
-  Temperature range: -40° to +85°C
-  Dimensions: 112x51x75mm
-  Weight: <500gr









Preliminary Datasheet. Subject to changes | 2019/04
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mtx2m.com










HARDWARE FEATURES

	MTX-StarEnergy-M Cat.1	MTX-StarEnergy-M Cat.4
	LTE FDD: B1/B3/B5/B7/B8/B20 WCDMA: B1/B5/B8 GSM: B3/B8	LTE FDD: B1/B3/B5/B7/B8/B20 WCDMA: B1/B5/B8 GSM: B3/B8
	LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL)	LTE FDD: Max 150Mbps (DL)/Max 50Mbps (UL)
	DC-HSDPA: Max 42Mbps (DL) HSUPA: Max 5.76Mbps (UL) WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)	DC-HSDPA: Max 42Mbps (DL) HSUPA: Max 5.76Mbps (UL) WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)
	EDGE: Max 296Kbps (DL)/Max 236.8Kbps (UL) GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL)	EDGE: Max 296Kbps (DL)/Max 236.8Kbps (UL) GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL)
	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	SMS text and PDU mode

Interfaces





-  4G/3G/2G connectivity
-  USB 2.0
-  Ethernet 10/100 BaseT
-  1x RS232/422/485 (4 wire)
-  CSD call
-  SIM card interface 1.8V/3V
-  230Vac
-  DIN rail/wall mounting
-  4x status LEDs

Connectors




-  USB A type connector: USB 2.0, Ethernet
-  DB9 F: RS232/422/485 (4 wire)
-  SIM
-  Terminal block: power supply (2-way plug-in 5mm)
-  2x SMA F antenna connectors: 4G/3G/2G
-  SIM holder (internal)
-  uSIM (external)

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 TATACS+
-  Incoming CSD call for metering applications

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

-  Self-provisioning according to the SIM card inserted: the router is able to detect the service provider according to the SIM inserted and autoconfigures itself (APN, sockets, etc.) depending on the provider
-  Watchdog
-  GSM cell location
-  Programmable autoreset (schedule, timer...)
-  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 (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 available depending on the requirements of the final application

*The Titan network architecture is protected by nearly 60 hardware and software patents.