

# 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 its most remarkable features 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



4G/3G



USB 2.0



RS232 422/485



230V



Legacy communic.



DIN rail



Rugged connectors



Status LEDs



Webserver

HARDWARE



Serial gateway

SOFWARE



SNMPv3



TACACS+



Firewall



Watchdog



SMS control



VPN management

# Strenghts & Benefits

- Self-provison of the SIM card: the device detects the service provider and autoconfigures itself.
- It also selects the service provider depending on the quality of service.
- Powered directly to 230V without the need of a power source.
- Industrial rugged connectors.

## **Applications**

- Specially designed for the electric metering market.
- Adaptable to harsh environments: dust, wind, blows, etc.

# **Specifications**

## MTX-StarEnergy-M 4G

LTE FDD: B1/B3/B5/B7/B8/B20

**WCDMA**: B1/B5/B8 **GSM**: B3/B8

LTE FDD: Max 10Mbps (DL)/Max 5Mbps (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)

CSD data transmission up to 9.6 kbps, V.110, non-transparent

**SMS**: text and PDU mode support

## Interfaces

- 4G/3G/2G connectivity
- 1x RS232/422/485
- CSD call
- **230Vac**



## Connectors

- SMA F antenna conectors:
  - 4G/3G/2G
- USB A type connector: USB 2.0
- DB9 F: RS232/422/485
- Terminal block: power supply (3way plug-in 5mm)
- SIM card holder (internal)

## Characteristics

- 4x status LEDs
- DIN rail/wall mounting
- Power input: 85Vac 260Vac
- Temperature range: -40 85°C
- Dimensions: 122x51x75mm
- Weight: <500gr.

## MTX-Titan Software Features

### **SERIAL GATEWAYS**

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

### **SMS**

 Full control by SMS with phone number authorizations

### **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, ...
- 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

## References

### **PRODUCTS**

MTX-StarEnergy-M

#### 0001998100040

#### **ACCESSORIES**

MTX-StarEnergy-M-cable RS232 [DB9 M] compatible Actaris/Itron meters [RJ45]

000230001099

■ MTX-StarEnergy-M-cable RS485 [DB9 M] compatible Actaris/Itron meters [RJ45]

000230001100

### **OPTIONAL ACCESSORIES**

■ MTX-T ACC Data Cable USB A M - USB A M - 2m

000118001114

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# MTX-StarEnergy-M2

Industrial IoT modem with LTE for metering applications

The MTX-StarEnergy-M2 is an innovative industrial modem that comprises a set of features specially oriented for the electric market. One of its most remarkable features 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



4G/3G



USB 2.0



2x RS232



230V



Legacy communic.



DIN rail



Rugged connectors



Status LEDs



Webserver

HARDWARE



Serial gateway

SOFWARE



SNMPv3



TACACS+



Firewall



Watchdog



SMS control



VPN management

# Strenghts & Benefits

- Self-provison of the SIM card: the device detects the service provider and autoconfigures itself.
- It also selects the service provider depending on the quality of service.
- Powered directly to 230V without the need of a power source.
- Industrial rugged connectors.

## **Applications**

- Specially designed for the electric metering market.
- Adaptable to harsh environments: dust, wind, blows, etc.

# **Specifications**

## MTX-StarEnergy-M2 4G

LTE FDD: B1/B3/B5/B7/B8/B20

**WCDMA**: B1/B5/B8

**GSM**: B3/B8

LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL)

**DC-HSDPA**: Max 42Mbps (DL) **HSUPA**: Max 5.76Mbps (UL)

WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)

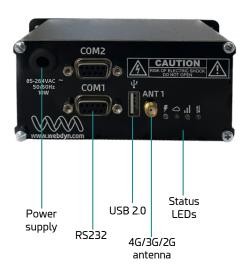
**EDGE**: Max 296Kbps (DL)/Max 236.8Kbps (UL) **GPRS**: Max 107Kbps (DL)/Max 85.6Kbps (UL)

CSD data transmission up to 9.6 kbps, V.110, non-transparent

**SMS:** text and PDU mode support

## Interfaces

- 4G/3G/2G connectivity
- 2x RS232
- CSD call
- **230Vac**



## Connectors

- SMA F antenna conectors:
  - 4G/3G/2G
- USB A type connector: USB 2.0
- 2x DB9 F: RS232
- Terminal block: power supply (3way plug-in 5mm)
- SIM card holder (internal)

## Characteristics

- 4x status LEDs
- DIN rail/wall mounting
- Power input: 90Vac 264Vac
- Temperature range: -40 85°C
- Dimensions: 122x51x75mm
- Weight: <500gr.

## MTX-Titan Software Features

### **SERIAL GATEWAYS**

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

### **SMS**

 Full control by SMS with phone number authorizations

#### **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, ...
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- 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

## References

### **PRODUCTS**

MTX-StarEnergy-M2

### 0001998100045

#### **ACCESSORIES**







Stub antenna





2 rail DIN clips Borna 3 vías

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