#WeAreConnectivity

SMART SOLUTIONS FOR A CHANGING WORLD

MTX-GTW

LTE/4G/3G/2G compact industrial IoT gateway

The MTX-GTW gateway is an innovative and unlimited power gateway with a complete set of wireless and wired interfaces, powered by an ARM9 processor module with embedded Linux and Java VM. By providing an easy integration and powerful interfaces, it avoids further hardware components.

Interfaces: Ethernet, WiFi, USB OTG, RS232/RS485/RS422, CAN, 1-wire, GPIOs; it can be used in infinite M2M and IoT applications. Its internal mini-PCIe slot can accommodate any communication board you need: LTE & GPS, HSPA+ & GPS, GPRS, GPS, WiFi b/g/n, Bluetooth 4.0 or Bluetooth Low Energy.

Internal GPS, Bluetooth 4.0 and/or WiFi 5GHz/2.4GHz (802.11 ac/a/b/g/n/d/e/h/i) modules can be optionally ordered.





MAIN FEATURES

- 4G connectivity
- USB 2.0
- RS232 RS485
- Ethernet
- WiFi
- Relay
- Accelerometer
- DHCP
- Firewall
- CSD
- Linux
- AT commands
- Java compatible*

*This device is Java compatible. It is the customer's responsibility to acquire the pertinent Java SE Subscription and Oracle agreement.

- DC input: 12V (+7 to +50 Vdc)
- Temperature range: -40º to +85ºC
- Dimensions: 78.1x66.8x37.2mm
- Weight: <190gr

Preliminary Datasheet. Subject to changes | 2017/09
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SUPPORT: iotsupport@mtxm2m.com
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HARDWARE FEATURES

	MTX-GTW 4G	MTX-GTW 3G
	EUROPE: Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 800, 900, 1800, 2100 MHz), Dual-Band GSM 900 & 1800 MHz **US**: Quad-Band LTE: Bands 2, 4, 5, 12 (700, 850, 1700/2100 (AWS) & 1900 MHz), Tri-Band UMTS: Bands 5, 4, 2 (WCDMA/FDD 850, 1700/2100 (AWS) & 1900 MHz)	WORLDWIDE: Five Bands UMTS (WCDMA/FDD); Bands: 800, 850, 900, 1900 & 2100 MHz. Quad-Band GSM; Bands: 850, 900, 1800 & 1900 MHzzz
4G	LTE Cat.1 (3GPP Release 9): DL 10.2Mbps, UL 5.2Mbps	
3G	HSPA+ Cat.8 (3GPP Release 6,7): DL 7.2Mbps, UL 5.7Mbps	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
2G	GPRS Class 12 (ELS61-E): DL max. 85.6 kbps, UL max 85.6 kbps	GPRS Class 12 data rates: DL max. 85.6 kbps, UL max. 85.6 kbps
CSD		CSD data transmission up to 9.6 kbps, V.110, non-transparent
SMS	SMS text and PDU mode	SMS text and PDU mode

Interfaces

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

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

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Customization

MiniPCIe socket modules available

- LTE GPS
- HSPA GPS
- HSPA+ GPS
- WiFi b/g/n & bluetooth 4.0
- WiFi ac/a/b/g/n/d/e/h/i & BT 4.0
- HSPA WiFi b/g/n & BT 4.0
- HSPA WiFi ac/a/b/g/n/d/e/h/i & BT 4.0
- HSPA 2xWiFi b/g/n & 2xBT 4.0
- HSPA GPS WiFi b/g/n & BT 4.0
- HSPA GPS WiFi ac/a/b/g/n/d/e/h/i & BT 4.0
- HSPA GPS 2xWiFi b/g/n & 2xBT 4.0

Processor

Powered by TQ-Components TWMa28 module:

- Freescale i.MX28 (ARM9 architecture)
- 454MHz clock CPU freq
- 128MB DDR2
- 4GB eMMC Flash
- 32KB EEPROM
- Linux kernel 3.14
- Java VM loaded

SOFTWARE FEATURES

DHCP server

NAT/IP firewall

CSD call support (only 3G)

Yocto BSP

Modem control via AT commands

ORDERING INFORMATION

MTX-GTW	**199802110**
MTX-GTW-IO	**199802153**
MTX-GTW-BT	**199802159**
MTX-GTW-3G	**199802120**
MTX-GTW-3G-GPS	**199802143**
MTX-GTW-4G-GPS	**199802123**

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FEATURES BY MODEL

MTX-GTW							
	GTW	IO	BT	3G	3G-GPS	4G-GPS	LC
Celular modem				3G	3G	4G	
WiFi	1x	1x	1x	1x	1x	1x	
GPS		(*1)			1x	1x	
Bluetooth 4.0 + BLE			X	(*1)	(*1)		
RS232/485/422 (4-wire)	1x	1x	1x	1x	1x	1x	1x
RS232 (2-wire)	2x	2x	2x	2x	2x	2x	2x
Ethernet	1x	1x	1x	1x	1x	1x	1x
CAN 2.0B	1x	1x	1x	1x	1x	1x	1x
USB OTG	1x	1x	1x	1x	1x	1x	1x
1-wire		1x	1x	1x	1x	1x	
Count input		1x (*3)	1x (*3)	1x (*3)	1x (*3)	1x (*3)	
3-axis accelerometer		1x	1x	1x	1x	1x	
Latch relays		1x	1x	1x	1x	1x	
Dual SIM				(*1)	(*1)	(*1)	
MFF2 SIM				(*1)	(*1)	(*1)	
Gyroscope + magnetometer		(*1)	(*1)	(*1)	(*1)	(*1)	
Opto IO		(*2)	(*2)	(*2)	(*2)	(*2)	
Analog IO		(*2)	(*2)	(*2)	(*2)	(*2)	

(*1): upon request
(*2): upon request; this may affect other options availability such as 1-wire, optoIO, count input, relays, analog IO
(*3): upon request, up to 2 count inputs available, shared with the RS232 RX lines