


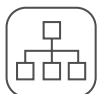
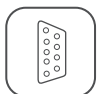












MTX-GTW

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





MTX-GTW has 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/3G/2G | 
Ethernet | 
RS232 | 
RS485/422 | 
WiFi | 
USB 2.0 | 
Relay | 
GPS (optional) |
| 
Accelerom. | 
Linux | 
AT commands | 
DHCP | 
Firewall | 
CSD | 
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: -40° to +85°C
-  Dimensions: 78.1x66.8x37.2mm
-  Weight: <190gr

Preliminary Datasheet. Subject to changes | 20207/05
 MTX © by MATRIX ELECTRONICA S.L.U.
 SUPPORT: iotsupport@mtx2m.com
 SALES: info@mtx2m.com
mtx2m.com







HARDWARE FEATURES

	MTX-GTW 4G	MTX-GTW 3G
	<p>EUROPE: Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 800, 900, 1800, 2100 MHz), Dual-Band GSM 900 & 1800 MHz</p> <p>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)</p>	<p>WORLDWIDE: Five Bands UMTS (WCDMA/FDD); Bands: 800, 850, 900, 1900 & 2100 MHz. Quad-Band GSM; Bands: 850, 900, 1800 & 1900 MHzzz</p>
	LTE Cat.1 (3GPP Release 9): DL 10.2Mbps, UL 5.2Mbps	
	HSPA+ Cat.8 (3GPP Release 6,7): DL 7.2Mbps, UL 5.7Mbps	<p>HSDPA Cat.8/HSUPA Cat.6 data rates: DL max. 7.2 Mbps, UL max. 5.76 Mbps</p> <p>EDGE Class 12 data rates: DL max. 237 kbps, UL max. 237 kbps</p>
	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 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	 GPS (optional)
 Ethernet 10/100 BaseT	 1x relay
 USB 2.0	 Accelerometer
 Up to 3x RS232	 1x CAN
 1x RS485	 Temperature sensor
 SIM card interface 1.8V/3V	 DIP switch for configuration
 WiFi b/g/n	 1x 1Wire
 RF expansion (optional)	 1x GPIO

Connectors

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

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



PTXDist



NAT/IP firewall



Modem control via AT commands



CSD call support (only 3G)

ORDERING INFORMATION

MTX-GTW-LC	199802152	MTX-GTW-3G	199802120
MTX-GTW	199802110	MTX-GTW-3G (con pila RTC) V2	199802163
MTX-GTW (con pila RTC) V2	199802162	MTX-GTW-3G-BT	199802170
MTX-GTW-IO	199802153	MTX-GTW-4G-GPS	199802123
MTX-GTW-IO (con pila RTC) V2	199802155	MTX-GTW-4G (con pila RTC) V2	TBD

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