

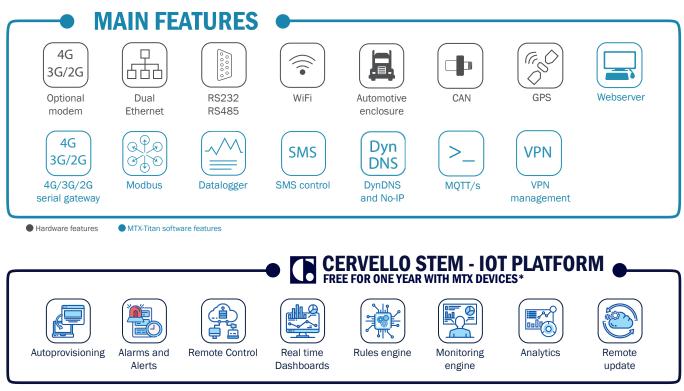


MTX-ROUTER-TITAN II-RA

Industrial Router with dual Ethernet & LTE/4G/3G/2G for automotive

The MTX-Router-Titan II-RA is an industrial router for automotive solutions with a set of interfaces including two Ethernet ports, as well as featuring rugged connectors more resistant to vibrations and IEC 6 1076-2-101/104 compliant. Thanks to its automotive enclosure, it can be used for infinite IoT automotive applications. It includes advanced functionalities such as: DHCP server, NAT, CSD call manager, 4G to RS232/USB gateways, external sensor dataloggers, DynDNS/NoIP client, GSM cell positioning, remote firmware upgrade, etc.





*Available with compatible devices that have MTX-Tunnel or MTX-Titan

- DC input: +9 to +36 Vdc
- ♂ Temperature range: -40° to +85°C

Dimensions: 154x57x135mm

Datasheet subject to changes | 2020/05 MTX © by MATRIX ELECTRONICA S.L.U. SUPPORT: iotsupport@mtxm2m.com SALES: info@mtxm2m.com mtxm2m.com

HARDWARE FEATURES

MTX-ROUTER-TITAN II-RA	4G (optional miniPCle)			
Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 800, 900, 1800, 2100 MHz), Dual-Band GSM 900 & 1800 MHz					
LTE Cat.1 (3GPP Release 9): DL 10.2Mbps, UL 5.2Mbps					
HSPA: DL 7.2Mbps, UL 5.7Mbps UMTS PS: DL 384Mbps, UL 384 Mbps, CS: DL 64Mbps, UL 64Mbps					
GPRS Class 12: DL max. 85.6 kbps, UL max 85.6 kbps					
SMS text and PDU mode					
faces	Conn	lectors			
4G/3G/2G connectivity (optional)	\frown	2x RJ45: Ethernet 10/100 BaseT			
2x Ethernet 10/100 BaseT		USB A-type: USB 2.0			
USB 2.0 OTG		3x M8 6 pins rugged connectors: 2x RS232, 1x RS485, 2x CAN			
2x RS232		Micro SIM			
2x CAN		3x SMA F antenna connectors: 2x 4G/3G, 1x WiFi (optional)			
1x RS485					
2x operating LEDs	Orde	ring Information			
WiFi 802.11 b/g/n (optional)	MT	K-Router-Titan II-RA			
Rugged connectors	MT	K-Router-Titan II-RA-3G			
SIM card interface 1.8/3V	MT	K-Router-Titan II-RA-4G-C1			
2x configuration switches	MT	<-Router-Titan II-RA-4G-C1-W			
Mini PCle	MT	<-Router-Titan II-RA-4G-C3-GPS			
Automotive enclosure	MT	K-Router-Titan II-RA-4G-C4			
	MT	<-Router-Titan II-RA-4G-C6-GPS			
	Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 80 1800 MHz LTE Cat.1 (3GPP Release 9): DL 10.2Mbps, UL 5.2 HSPA: DL 7.2Mbps, UL 5.7Mbps UMTS PS: DL 384Mbps, UL 384 Mbps, CS: DL 644 GPRS Class 12: DL max. 85.6 kbps, UL max 85.6 f SMS text and PDU mode faces 4G/3G/2G connectivity (optional) 2x Ethernet 10/100 BaseT USB 2.0 OTG 2x RS232 2x CAN 1x RS485 2x operating LEDs WiFi 802.11 b/g/n (optional) Rugged connectors SIM card interface 1.8/3V 2x configuration switches Mini PCle	Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 800, 900 1800 MHz LTE Cat.1 (3GPP Release 9): DL 10.2Mbps, UL 5.2Mbps UMTS PS: DL 384Mbps, UL 5.7Mbps UMTS PS: DL 384Mbps, UL 384 Mbps, CS: DL 64Mbps, U GPRS Class 12: DL max. 85.6 kbps, UL max 85.6 kbps SMS text and PDU mode faces Com 4G/3G/2G connectivity (optional) 2x Ethernet 10/100 BaseT USB 2.0 OTG 2x RS232 2x CAN 1x RS485 2x operating LEDs WiFi 802.11 b/g/n (optional) Rugged connectors WiFi 802.11 b/g/n (optional) Rugged connectors SIM card interface 1.8/3V 2x configuration switches Mini PCle Automotive enclosure MTD	1800 MHz LTE Cat.1 (3GPP Release 9): DL 10.2Mbps, UL 5.2Mbps HSPA: DL 7.2Mbps, UL 5.7Mbps UMTS PS: DL 384Mbps, UL 384 Mbps, CS: DL 64Mbps, UL 64Mbps GPRS Class 12: DL max. 85.6 kbps, UL max 85.6 kbps SMS text and PDU mode faces Connectors 4G/3G/2G connectivity (optional)		



TITAN SOFTWARE FEATURES

Serial Gateways



3 simultaneous 2G/3G/4G/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)

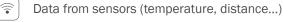
Modbus slave RTU/TCP (send/recevice SMS, Email, SNMP traps...)



User scripts

(only 3G)

Datalogger



 ${
m P}$ 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



(A)

Modbus RTU/TCP sensors

RF868 Wavenis/wireless M-Bus sensors

Internal jamming detection sensor with alarm indicator

SMS

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

Other

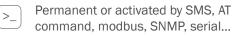
- $\frac{\text{Dyn}}{\text{DNS}}$ Compatible with DynDNS/No-IP & private DNS
- GSM cell location
- Programmable autoreset (schedule, timer...)
- Multioperator SIM utilities (integrated rssi scanning tool)
- → Time synchronization (NTP) with timezones
- Over The Air firmware upgrade
- Full management 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 (all logos and pictures can be customized by user)

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

VPN OpenVPN with client/server mode





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	shboads						*	Monitoring Overview Alarms	Telemetries Events Locations
Statistics					Today This week This	month This year	23	Alarms Q, Search alarm	All Alarms * Alarm H
Devices Number 5/1	cted	220 U	Ised Storage	2.7 GB	Command templates	02	8	Orlical Major Minor	Today This week This month This year
A DAM	denties							The Rabbit Sends in a Little Bill	Artive ChiTiCAL Wednesday - 08/02/2007 - 1.82 pr
Activities					Today This week This	month This year	0	The Rabbit Sends in a Little Bill	Active CALTICAL Wednesday - 58/02/2007 - 1.52 pr
Alarms	Z Telemetries			8	Events Log	0		The Rabbit Sends in a Little Bill	Active CRITICAL Wednesday - 06/02/2007 - 1.52 pr
	Respectivities (Lenin average) 6.4		~		All events Number	826K		The Rabbit Sends in a Little Bill	Active COLTICAL Webserday - 08/02/2007 - 1.52 pr
826		1 .		A-	First Type	828 +125		The Rubbit Sends is a Utile Bill	Active CONTROLAT. Wednesday - 08/02/2007 - 1.82 pr
		$ / \wedge $			Second Type	7.46 +1.25			
Ortical Major Minor				S	Third Type	6.96 +1.25		The Rabbit Sends in a Little Bill	Active MAJOR Wednesday - 08/02/2007 - 1.52 pr
•674 •182 •18	2				Fourth Type	6.1K +1.25		The Rabbit Sends in a Little Bill	Active MINOR Wednesday - 08/10/2007 - 1.52 pr
ACTIVE ARNOWLADE CLE	ARED Jan 35, 3 15 PM	Jun 28, 3-30 PM Jun 28	8.3457H Am	28,430794	Top Events type transactions	Show all Events		The Rabbit Sends in a Little Bill	Active MinOR Wednesday - 08,42/2007 - 1.52 pr
Alarms Log	2 Users Log	Ø	Devices Log	Ø	Assets Log	ø		The Rabbit Sends is a Little Bill	Active GBT CAL Webweday - 04/02/2007 - 1.02 pr
All Alarma Number 8	26K Users number	826K	Connected devices	826K	All events Number	826K		The Rabbit Sends in a Little Bill	Autive ChiTiCAL Wednesday - 08/02/2007 - 1.52 pr
Feat Type 8.2K	1.2% Feat Type	828 1125	First Device	828 1125	First Type	826 1125	25.	The Rabbit Sends in a Little Bill	Artive Control 41. Westweeder - 68.402/2007 - 1.52 pr
Second Type 7.4K	+ 1.2% Second Type	2.4K +1.2%	Second Device	7.4K +1.2N	Second Type	7.46 +1.25	0	The Bubble Service in a Little Bill	Active CONTRAC Wednesday - 08/00/2007 - 1/02 pr

General Features

- æ Up to unlimited devices Autoprovisioning ß
- Real time dashboards
- Remote control
- E C Monitoring engine
- Alarms and alerts
- **, te** Rules engine
- ð Remote update
- Connect engine*
- API Keys* **, W**
- Analytics*
- EQ. Multi-tenant*
- Ľ White labeling*



Monitor



Alarms, Events and Incidents

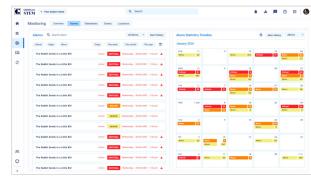
Tracking*

Control



Command template





Devices Inventory

	Add single and single from template							
	Add Bulk from template and from autoprovisioning							
	Manage: Device template, Groups, Assets and Bulk actions							
Conn	Connect							
	Topics*							
	Transformation*							
	Integration keys*							
Visua	Visualize							
	Dashboards							
	Reports							
Autor	nate							
	Rules Engine							
	Actions							
	Triggers							
Secu	Security							
	2-factor authentication							
	SSL for end user application							
	Custom admin roles*							

*Upgrade required

**Available with compatible devices with MTX-Tunnel or MTX-Titan

