MTX-DIN

Industrial applications DIN rail M2M modem

The MTX-DIN family are a new UMTS/HSPA modems designed for industrial environments due to its extended operating temperature range. It has an intrinsic and powerful TCP/IP communication stack with Internet Services.

The MTX-DIN is sized in DIN 9 modules for DIN rail housing, with the necessary interfaces for industrial applications, a SIM card reader, auto power-on, USB, SPI/I2C, serial ports.

The MTX-DIN includes Java embedded programmability and a full range of I/Os. It can host and control your Java J2ME application allowing you to develop and embed your code onto the terminal to reduce costs by avoiding external components. It uses SMD technology.

It is compatible with MTX-Tunnel, optional firmware that can be executed in our modems to use them as powerful GPRS or 3G gateways.
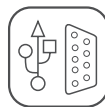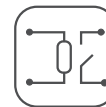
MAIN FEATURES

Java	Five band UMTS (WCDMA) HSPA+	Optoisolated I/Os	USB/RS232/ 485/422	Analog inputs	Relay outputs	Industrial temperature

DIN Rail	Automatic restart	MTX-Tunnel

- DC: 12V (9-30) AC: 24V (12-24)
- Temperature range: -30° to +80ºC
- Dimensions: 157x86x58mm
- Weight: <300gr

CE FC PTCRB RoHS compliant ISO 9001

	MTX-DIN 3G	MTX-DIN 2G
	Five bands UMTS (WCDMA/FDD); bands: 800, 850, 900, 1900 & 2100MHz. Quad band GSM; bands: 850, 900, 1800 & 1900MHz	Quad band GSM: 850, 900, 1800, 1900MHz
3G	HSDPA cat.8/HSUPA cat.6 data rates: DL max. 7.2 Mbps, UL max. 5.76 Mbps	
2G	EDGE class 12 data rates: DL max. 237 kbps, UL max. 237 kbps GPRS class 12 data rates: DL max. 85.6 kbps, UL max. 85.6 kbps	GPRS class 12 data rates: DL max. 86 kbps, UL max. 86 kbps
CSD	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	SMS text messages	SMS text messages

General Features

- SIM application toolkit, 3GPP release 99
- Control via AT commands
- TCP/IP stacks access via AT commands
- Internet services: TCP, UDP, HTTP, FTP, SMTP, POP3

Special Features

- USB interfaces support composite modes and Linux/Mac compliant mode
- Firmware update via USB/RS232
- Real Time Clock with alarm functionality
- Multiplexer according 3GPP TS 27.010
- RLS monitoring (jamming detection)
- Informal network scan

Ordering Information

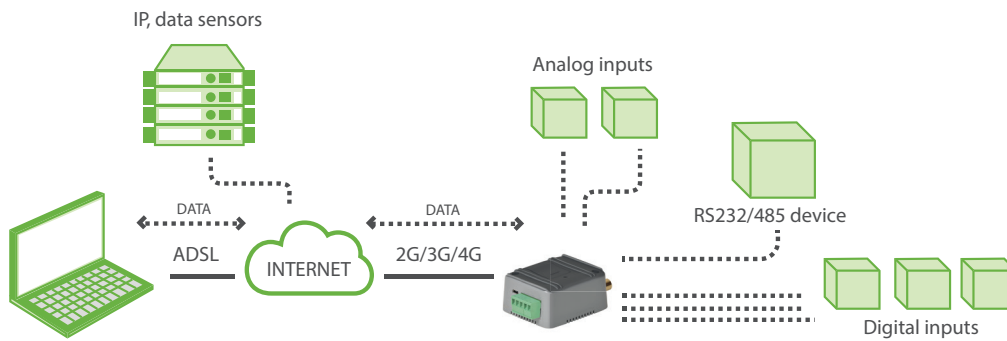|	
MTX-DIN-3G	199801139
MTX-DIN-2G	199801103

Interfaces

- GSM FME M antenna connector
- USB 2.0
- SIM card interface 1.8V and 3V
- Plug-in 52-way (45 usable) 5mm pitch terminal block: 2x optoisolated I/O, 4x opto I, 2x analog I, 1x SPI bus, 2x RS232/422/485 configurable ports, 4x form C switching contact relays, speaker and microphone signals available (not amplified)
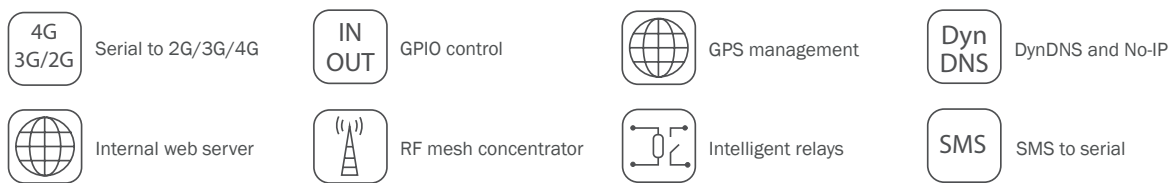- Operating status LEDs

Java Features

- Oracle Java ME embedded 3.2
- Compliant to CLDC 1.1 HI and IMP-NG standards
- Capable of running multiple MIDlets in parallel with inter-MIDlet communication
- Java standard APIs: JSR75 (FileConnection), JSR177 (CRYPTO), JSR280 (XML)
- Accessible periphery for Java applications: IO pins, I2C, SPI interfaces, ADC/DAC, serial interfaces (API): ASC0, ASC1, USB
- Memory space for Java applications: Flash File System: 8MB, RAM: 6MB, Just-in-Time (JIT) Compiler execution optimization

TUNNEL SOFTWARE FEATURES

IP, data sensors

Analog inputs

RS232/485 device

DATA — ADSL — INTERNET — DATA — 2G/3G/4G

Digital inputs

MAIN FEATURES

4G 3G/2G — Serial to 2G/3G/4G	IN OUT — GPIO control	GPS management	Dyn DNS — DynDNS and No-IP
Internal web server	RF mesh concentrator	Intelligent relays	SMS — SMS to serial

Connectivity

4G 3G/2G — 2G/3G/4G serial gateways: TCP client, TCP server, UDP client/server, accept incoming CSD calls, up to 2 simultaneous tunnel

GPRS connectivity mode: permanent 100% time, under request (SMS, missed call), change on a digital input, analog input out of level, serial data on RS232/RS485 port, scheduled date/hour/time

TCP Services

Web server and Telnet

Remote access by web browser

Shows the status of digital and analog inputs

Change digital output level and relays

Execute AT commands remotely

Security

Authorized phone numbers

Firewall IP

SSL connections

SMS Alarm and Control

Send SMS alarm when the level of digital input change

SMS — SMS can be sent to up 10 remote users

>_ — Execute remote AT commands

Change the status of digital outputs & relays

SMS — Alias method is allowed

Solutions for Dynamic IP

GPRS session using a SMS or missed call

Dyn DNS — DynDNS and NoIP

Private DNS

Metering, Modbus, Sensors...

868 MHz remote monitoring sensors (Wavenis)

Modbus RTU devices

Relays control

Access to serial devices using GPRS and GSM