# MTX-LTE-PLS8-R2 modem

## *LTE/UMTS (WCDMA)/HSPA+ Industrial M2M Modem*


The MTX-LTE-PLS8-R2 modem is a new industrial M2M family modem ready to work in 4G (LTE) and 3G (CDMA or HSPA+) networks, especially designed for applications that need high speed data transmission rates and low latency. It is a complete 4G/3G/2G radio modem that integrates everything you need for wireless M2M capability in one compact plug-and-play unit. When LTE network is not present, it switches automatically to lower speed mode such as HSPA+, EDGE or GPRS.

The MTX-LTE-PLS8-R2 is a self-contained modem with its own SIM card reader and a USB 2.0 High Speed and RS232 interface, minimizing the need for further hardware development. This modem can be used as a powerful and flexible device that can be integrated in a wide range of telemetry applications that rely on the remote exchange of data or SMS via the GSM cellular network.

The MTX-LTE-PLS8-R2 also includes a high sensitivity GPS/GLONASS receiver for positioning or fleet management applications.

**Industrial features**: the MTX-LTE-PLS8-R2 modem can be used in industrial applications due to its extended operating temperature range. It also features an automatic restart after shutdown in case of faulty power conditions.

# MTX-LTE-PLS8-R2 modem

## General features

- Quad-Band LTE
  - Model MTX-LTE-PLS8-E: 800/900/1800/2600MHz, FDD-Band (20,8,3,7)
  - Model MTX-LTE-PLS8-US: 700/850/AWS[1700/2100]/1900MHz, FDD-Band (8,3,1)
- Tri-Band UMTS (WCDMA)
  - Model MTX-LTE-PLS8-E: 900/1800/2100MHz, FDD-Band (8,3,1)
  - Model MTX-LTE-PLS8-US: 850/AWS[1700/2100]/1900MHz, FDD-Band (5,4,2)
- Dual-Band GSM/GPRS/EDGE 900/1800MHz (model MTX-LTE-PLS8-E)
- Quad-Band GSM 850/900/1800/1900MHz (model MTX-LTE-PLS8-US)
- UMTS/HSPA (FDD) 3GPP Release 8 Rx diversity
- GSM/GPRS/EDGE 3GPP Release 6 DARP/SAIC
- SIM Application Toolkit, 3GPP release 99
- Control via AT commands (Hayes, TS 27.007, TS 27.005)
- TCP/IP stack access via AT commands
- Internet services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range:
  - Maximum: 6.5 to 40VDC
  - Recommended: 7 to 35VDC
- Average power consumption (at 12V)
  - Power down: 0.45mA
  - LTE (LTE Data transfer Band 3 @ +23dBm): 650mA
  - WCDMA (UMTS/HSDPA Data transfer Band III @ +24dBm): 620mA
  - GPRS class 12 (average) (4Tx/1Rx): 930mA
- Operating temperature range: -30ºC to +85ºC
- Dimensions, excluding connectors: 78.1 x 66.8 x 37.2mm
- Weight: <190 g
- IP30 enclosure
- Powered by Cinterion PLS8 Rel.2 module

## Interfaces

- 2x LTE SMA F antennae connectors
- GPS SMA F antenna connector
- USB 2.0 High Speed port up to 480Mbps
- 8-wire RS232 port (Dsub9 female connector)
- SIM card interface 3V, 1.8V
- Plug-in power supply

## Drivers

- NDIS/USB driver for Microsoft® Windows Vista™, Windows 7™ and Windows 8™
- RIL driver for devices based on Android OS™
- SB driver for Microsoft® Windows Embedded Compact™
- CDC-ACM compliant mode for Linux

## Specifications

- LTE Cat.3 DL: max. 100Mbps, UL: max: 50Mbps, 2x2 DL MIMO
- HSPA+ DL Cat.24/UL Cat.6, Dual Carrier DL: max. 42Mbps, UL: max. 5.76Mbps
- UMTS DL: max. 384kbps, UL: max. 384kbps
- EDGE Class 12 data rates DL: max. 237kbps, UL: max. 237kbpsGPRS Class 12 data rates DL: max. 85.6kbps, UL: max. 85.6kbps
- Supplementary services & USSD support
- SMS text and PDU mode

## GPS/GLONASS features

- GNSS dedicated AT commands
- A/GPS support: standalone, XTRA®, CP E911
- Protocol NMEA-0183 V2.3
- Option for temporary NMEA stream buffering
- Tracking sensitivity better than -158dBm

## Ordering information

- **MTX-LTE-PLS8-R2-E**: TBD
- **MTX-LTE-PLS8-R2-US**: TBD