

UMTS | HSPA+ 5.76/21.0

# HE 910 Mini PCIe

Data Cards



- 28 Channel GPS Receiver
- Telit Unified AT Command Set
- Multi Band
- RX Diversity
- Multi Band HSPA+
- Quad Band EDGE
- Quad Band GPRS
- RoHS Compliant
- SIM Access Profile
- USB 2.0 High Speed Compatible
- Extended RF Sensitivity
- Embedded TCP/IP Stack



TELIT INFINITA SERVICES



Telit's cutting edge technology, offered with the HE910 family of m2m modules is now available also in the standard Mini PCIe form factor, with a 52-pin card edge connector. The Telit embedded module allows application developers to easily integrate m2m capabilities in products with the "plug-and-play" Mini PCI Express card slot.

The Telit HE910 with Mini PCIe Adaptor enables secure 3G cellular data, voice and video communications for a wide variety of commercial and industrial installations, including mobile computing devices and tablet PCs, ATMs, kiosks, digital signage, surveillance, fleet vehicles and other applications benefitting from frequent wireless data connection, monitoring and control.

Designed for m2m applications requiring high bandwidth and worldwide coverage, the HE910 with Mini PCIe Adaptor combines premium radio access technology UMTS/HSPA+ with backward compatibility to GSM, GPRS and EDGE networks. It includes HSDPA 21.0 Mbps (Cat. 14), HSUPA 5.7 Mbps (Cat. 6), embedded TCP/IP protocol stack and custom Telit AT commands. Support for USB and RIL drivers for Windows and Linux environments is available. Integrated high sensitivity A-GPS functionality is also provided.

As a part of Telit's corporate policy of environmental protection, all Telit products comply with the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

### Product features

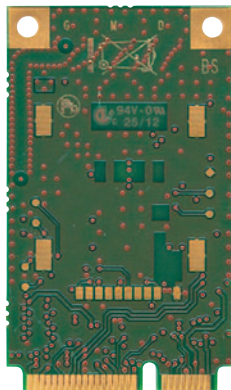
- Supported frequencies
  - GSM / GPRS / EDGE: 850, 900, 1800, 1900
  - UMTS / HSPA: 800/850 \*, 900, AWS 1700, 1900, 2100 MHz
  - \* Bands B6 and B19 (800 MHz) are a subset of B5 (850 MHz) and supported as well.
- HSPA+ data up to 21.0 Mbps downlink / 5.76 Mbps uplink
- Quad Band GPRS and EDGE
- Dimensions:
  - 51 x 30 x 3.2 mm
  - 51 x 30 x 4.8 mm (with optional sim-holder)
- Weight: 10 grams
- Optional high sensitivity GPS/A-GPS receiver (SUPL 1.0)
- Rx Diversity
- Extended temperature range
- 3GPP release 7 compliant
- Control via AT commands according to 3GPP TS27.005, 27.007 and customized Telit AT commands
- SIM application Tool Kits 3GPP TS 51.014
- Built in UDP/TCP/FTP/SMTp stack

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actual size



[with optional sim-holder]

**Interfaces**

- USB 2.0 HS
- USIM/SIM connection – class B and class C
- SIM holder (option)
- DVI (Digital Voice Interface through the 52 pin edge connector)
- Wake
- W\_Disable
- Led\_wwan

**Data**

- HSPA category 6 in uplink and up to category 14 in downlink
  - Uplink up to 5.76 Mbps
  - Downlink up to 21.0 Mbps
- UMTS
  - Uplink/Downlink up to 384 kbps
- EDGE
  - Uplink up to 236.8 kbps
  - Downlink up to 296 kbps
- GPRS

**GPS receiver**

- SUPL 1.0
- High sensitivity for indoor reception, better than -165 dBm with A-GPS
- GPS Cold Start Autonomous (acquisition sensitivity) -147 dBm
- GPS Hot Start Autonomous -161 dBm
- GPS tracking mode -166 dBm
- Accuracy 3 m
- TTFF from Cold Start 42 s
- TTFF from Warm Start 30 s
- TTFF from Hot Start 1.8 s
- Supports multi-channel GPS
- L1 1575.42 MHz
- GPS NMEA 0183 output format
- Datum WGS-84
- Dedicated GPS AT commands

**Electrical**

- Output power
  - Class 4 (2 W, 33 dBm) @ GSM 850 / 900
  - Class 1 (1 W, 30 dBm) @ GSM 1800 / 1900
  - Class 3 (0.25 W, 24 dBm) @ UMTS
  - Class E2 (0.5 W, 27 dBm) @ EDGE 850 / 900
  - Class E2 (0.4 W, 26 dBm) @ EDGE 1800 / 1900
- Sensitivity
  - -108 dBm @ UMTS
  - -107 dBm @ GSM 850 / 900 MHz
  - -106 dBm @ DCS1800 / PCS1900 MHz
- Supply voltage: 3.3 VDC +/- 9%

**Additional features**

- IP stack with TCP and UDP protocol
- Standard and extended AT command set

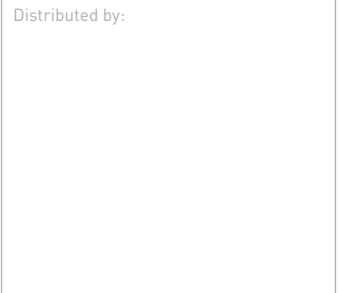
**Available variants**

- Voice, Data and GPS
- Data-Only

**Order No.**

Please contact your Telit representative for order codes and all further information

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