

### **UMTS | HSPA+** 5.76/14.4

# HE 910 V2 Family





Telit Unified AT Command Set

LGA Package

Dual Band HSPA+

Quad Band EDGE

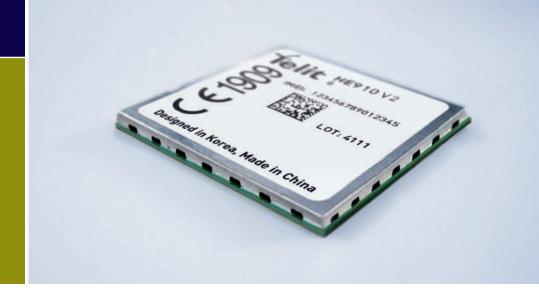
Quad Band GPRS

RoHS Compliant SIM Access Profile

USB 2.0 High Speed Compatible

RF Sensitivity





The HE910 V2 modules are small, lightweight, low power consumption devices which combine the access to digital communication services in 2G and 3G networks with Land-Grid Array (LGA) form factor.

The LGA package provides ultra low profile in the integrated solution while at the same time enhancing the performance of mechanical resistance to shock and reducing cost in highvolume applications, saving space and weight in portable devices.

The HE910 V2 variants are to be banded for European and North American markets and feature dual-band 3G and quad-band 2G support, including features like HSDPA 14.4 Mbps (Cat 10), HSUPA 5.7 Mbps (Cat 6), EGPRS Class 12.

The modules are compatible with Telit's xE910 family and as such can be dropped into existing or planned designs for xE910 modules without the need for additional reworking. This allows the xE910 family to enhance cross-technology capability with other popular global air-interface technologies.

The HE910 V2 is fully digital audio capable and supports both GPS and GLONASS location technologies, while also providing full-duplex PCM input and output. This makes it wellsuited for more advanced applications, such as healthcare, smart home and smart grid.

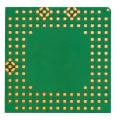
As a part of Telit's corporate policy of environmental protection, all Telit products comply with the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

HE910 Variants							
Variant name	Upload	Download	Frequencies	Features			
	HSUPA (Mbps)	HSDPA (Mbps)	UMTS HSPA+ bands (MHz)	GSM GPRS EDGE Quad-band	Data	Voice	GPS
EMEA / APAC / Latin American markets							
HE910-EUR V2	5.76	14.4	900, 2100		-	-	
HE910-EUD V2	5.76	14.4	900, 2100		-		
HE910-EUG V2	5.76	14.4	900, 2100		-	-	-
North American market							
HE910-NAR V2	5.76	14.4	850, 1900		-		
HE910-NAD V2	5.76	14.4	850, 1900	-	-		
HE910-NAG V2	5.76	14.4	850, 1900	-	-	-	-

## HE 910 V2 Family









actual size

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#### **Product features**

Supported frequencies GSM/GPRS/EDGE: 850, 900, 1800, 1900 UMTS/HSPA:

900, 2100 MHz for European market, 850, 1900 MHz for North American market

- HSPA+ data up to 14.4 Mbps downlink / 5.76 Mbps uplink
- Quad Band GPRS and EDGE class 12
- Small dimensions 28.2 x 28.2 x 2.2 mm
- Optional embedded GNSS receiver (GPS+Glonass)
- Extended temperature range
- SIM Access Profile
- 3GPP release 7 compliant
- Control via AT commands according to 3GPP TS27.005, 27.007 and customized Telit AT commands
- Serial port multiplexer 3GPP TS27.010
- SIM application Tool Kits 3GPP TS 51.014
- Built in UDP/TCP/FTP/SMTP stack

#### Interfaces

- 10 I/O ports maximum including multifunctional I/Os
- I2S for digital audio interface
- USB 2.0 HS
- 2 UART
- SPI
- I2C
- 1.8 V / 3 V SIM interface

#### Data

- HSPA category 6 in uplink and up to category 10 in downlink
  - Uplink up to 5.76 Mbps
  - Downlink up to 14.4 Mbps
- UMTS
  - Uplink/Downlink up to 384 kbps
- EDGE
  - Uplink up to 237 kbps
  - Downlink up to 237 kbps
- GPRS
- CSD

#### **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
  - -111 dBm @ UMTS
  - -109 dBm @ GSM 850 / 900 MHz
- -110 dBm @ DCS1800 / PCS1900 MHz
- Supply voltage
- Nominal: 3.8 VDC
- Range: 3.4 4.2 VDC

#### **Additional features**

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

#### **Approvals**

- RoHS Compliant
- CE, GCF (Europe)
- FCC, PTCRB, IC (North America)

#### Order No.

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



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