Product Description

The HE910 is our most compact multi-band HSPA+ LGA module series, with built-in GPS and GSM | EGPRS fallback at 28 x 28 mm. As a member of the xE910 LGA unified form factor family the HE910 series is pin-to-pin compatible with LTE, HSPA, GSM | GPRS and CDMA | EVDO xE910 family counterparts.

Featuring seven-band HSPA+ data rates of up to 7.2 Mbps (Cat 8) downlink and 5.7 Mbps (Cat 6) uplink, ideal for high performance global roaming.

The HE910 series is well-suited for a wide range of industrial and consumer applications with high data throughput requirements, including, asset & fleet tracking, in-car telematics, PDAs, security surveillance, personal navigation devices, e-readers and consumer electronics in general.

Key Benefits

- Seven-band HSPA+ for worldwide coverage
- Design once and deploy globally, thanks to xE910 unified form factor
- LGA package ideally suited for low profile integrated solutions, reducing cost in high-volume applications, as well as saving space and weight in portable devices
- Perfect platform for a wide range of applications requiring HSPA connectivity

Family Concept

The xE910 Unified Form Factor family is comprised of pin-to-pin compatible modules in Telit’s broadest range of cellular air interfaces and band combinations making it a pillar of the concept “design once and deploy globally”.

A one-time design and integration effort enables world-wide or regional device re-use across different data rates and wireless technologies with air interfaces in GSM | GPRS, UMTS | HSPA+, 1xRTT, EV-DO, and LTE (pre-release).

The xE910 family was conceived to enable applications to be easily upgraded in a number of ways. For example: migrating from 2G to 3G or 4G; or upgrading from 2 bands to 3, 4, or more. The family fully preserves the core design of the application or device from launch to phase-out with modules packaged in a common 28.2 x 28.2 mm LGA foot-print. It is recommended for mid to high-volume, compact-sized applications.

Telit IoT Locate

IoT LOCATE is a Telit portal-based service that provides a served cellular Cell-IDs. Accessing a database of over 40 million cell-IDs globally, IoT LOCATE can provide a position for every use-case including indoors/underground, out-doors, and boundary situations.

IoT Connectivity & Portal Ready

This product is capable of supporting the extensive suite of Value Added Services from IoT Connectivity including Module Management and others which make the manage-ment of IoT deployments under mobile networks effective, enhancing profitability and reliability. It is also Portal-ready which means that the AT command library in this module includes a set of high-level commands designed exclusively for quick and hassle-free on-boarding of the device to the portal and to back-end systems and servers. Telit Portal-ready modules powered by deviceWISE make application-level data flows and controls simple to program, maintain and improve.
**Product Features**

- **Supported frequencies**
  - GSM | GPRS | EDGE: 850, 900, 1800, 1900
  - UMTS | HSPA: 800/850*, 900, AWS1700, 1900, 2100 MHz
  - * Bands B6 and B19 (800 MHz) are a subset of B5 (850 MHz) and supported as well.
- **HSPA+ data up to** max 7.2 Mbps downlink / 5.76 Mbps uplink
- **Quad Band GPRS and EDGE**
- **Extended temperature range:** specify temp range -40 +85°C
- **3GPP release 7 compliant**
- **Control via AT commands according to 3GPP TS 27.005, 27.007 and Telit custom AT commands**
- **Built in UDP/TCP/FTP/SMTP stack**
- **Digital voice and SMS**
- **IP stack with TCP and UDP protocol**
- **eCall compliant**
- **Standard and extended AT command set**

**Frequencies**

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<th>UMTS</th>
<th>HSPA+ bands (MHz)</th>
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**HE910 Series**

**Environmental**

- Dimensions 28.2 x 28.2 x 2.2 mm

**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

**Approvals**

- FCC and IC
- CCF57 Level 2
- CDMA Carrier Approvals
- RoHS
- CCC (China)

**Electrical & Sensitivity**

- **Output power**
  - Class 4 (2 W, 33 dBm) @ GSM 850 /900
  - Class 1 (1 W, 30 dBm) @ GSM 1800 /1900
  - Class 3 (0.5 W, 24 dBm) @ UMTS
  - Class E2 (0.4 W, 26 dBm) @ EDGE 850 /900
  - Class E2 (0.5 W, 27 dBm) @ EDGE 1800 /1900
- **Supply voltage**
  - Nominal: 3.8 VDC
  - Range: 3.4 - 4.2 VDC
- **Sensitivity**
  - 111 dBm @ UMTS
  - 109 dBm @ GSM 850 /900 MHz
  - 110 dBm @ DCS1800 /PCS1900 MHz

**AppZone Application Resources**

- Programming language: C
- IDE: Eclipse
- Dedicated File System: 5 MB
- Separate App. RAM Space: 2 MB

**Questions? Visit www.telit.com/contact-us**