

● ● **LE 910 Series**

LTE 100/50 | DC-HSPA+ 42.0/5.76 Embedded



Product Description

The LE910 introduces the next generation of Telit LTE modules. It is essentially two high-speed cellular modules in one. An LTE 3GPP Release 9 module delivering data rates of 100 Mbps downlink and 50 Mbps uplink and an HSPA+ module delivering up to 42 Mbps downlink and 5.76 Mbps uplink rates. The LE910 automatically falls back to HSPA+ if it is unable to register onto an LTE network. Two LTE-only (single-mode) variants are available as well. It also includes Multiple-input multiple-output (MIMO) technology, an essential feature to meet demands for data rate and link reliability in modern wireless communication systems including LTE.

Key Benefits

- Easy to integrate with peripherals and actuators using USB 2.0 HS, UART and user definable GPIOs
- Increased connectivity performance with MIMO and RX diversity
- Ideal platform for m2m applications and mobile data and computing devices with ultra-compact design and extended operating temperature range
- Combines high-speed wireless connectivity combined with embedded multi-constellation high-sensitivity positioning GPS + GLONASS receiver
- Internet friendly with integrated TCP/IP and UDP/IP stacks
- Simple drop-in migration and technology design reuse path to 2G and 3G with any xE910 module
- Over-the-Air firmware update
- Battery-friendly 1.8 V GPIO

Family Concept

The LE910 is a member of Telit’s flagship xE910 module family and its first model delivering 4G radio access technology in the 28.2 x 28.2 x 2.2 mm family form factor. The Telit xE910 Unified Form Factor Family is comprised of 2G, 3G, and 4G, 3GPP and 3GPP2 products sharing a common form factor as well as electrical and programing interfaces which allows developers to implement a “design once, use anywhere” strategy.

Variants

Five different series of variants are available to fulfill the requirements of North American, European, Korean and Australian market. Multiband configurations, covering different sets of 4G and 3G bands as well as MNO certifications.

AVAILABLE FOR

- EMEA
- North America
- Latin America
- APAC
- Korea
- Australia

Combine your Cellular module with

- Short Range modules



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Complete, Ready to Use Access to the Internet of Things



Telit Modules + m2mAIR Mobile Value-Added Services including Connectivity



ONE STOP. ONE SHOP. NOW, INNOVATE!



		LE910-NAG	LE910-NVG	LE910-SVG	LE910-EUG	LE910-SKG
Market		North America AT&T	North America Verizon	North America Verizon (single-mode)	Europe and Australia	Korea (single-mode)
LTE	Upload (Mbps)	50	50	50	50	50
LTE	Download (Mbps)	100	100	100	100	100
HSPA+	Upload (Mbps)	5.76	5.76	N.A.	5.76	N.A.
HSPA+	Download (Mbps)	21.0	42.0	N.A.	42.0	N.A.
Frequencies						
LTE bands (MHz)		700 (B17) / 850 (B5) / AWS1700 (B4) / 1900 (B2)	700 (B13) / AWS1700 (B4)	700 (B13) / AWS1700 (B4)	800 (B20) / 1800 (B3) / 2600 (B7)	1800 (B3) / 850 (B5)
UMTS HSPA+ bands (MHz)		850 (B5) / 1900 (B2)	850 (B5) / 1900 (B2)	N.A.	850 (B5) / 900 (B8) / 2100 (B1)	N.A.
GSM GPRS EDGE bands (MHz)		850 / 1900	N.A.	N.A.	900 / 1800	N.A.

LE910 Series

Product Features

- Rx Diversity and MIMO DL 2x2
- Embedded GPS | GLONASS receiver
- SIM Access Profile
- LTE 3GPP release 9 compliant
- SIM application Tool Kits 3GPP TS 51.014
- Digital voice
- IP stack with TCP and UDP protocol
- Standard and extended AT command set
- e-Call compliant

Data

- LTE**
- Uplink up to 50 Mbps
 - Downlink up to 100 Mbps
- HSPA+**
- Uplink up to 5.76 Mbps
 - Downlink up to 42.0 Mbps
- UMTS**
- Uplink/Downlink up to 384 kbps

Environmental

- Dimensions 28.2 x 28.2 x 2.2 mm
- Temperature Range
-40°C to +85°C
- REACH and RoHS compliant

Interfaces

- 144-pin LGA Interface
- 10 I/O ports including multifunctional I/Os
- USB 2.0 HS
- UART
- 1.8 V / 3 V SIM interface
- RF pad, RX Div. & MIMO pad, GNSS Antenna pad

Approvals

- CE, GCF (Europe)
- FCC, PTCRB, IC (North America)
- KCC (Korea)

Electrical & Sensitivity

- Output power
 - Class 4 (2 W, 33 dBm) @ GSM 850/900
 - Class 1 (1 W, 30 dBm) @ GSM 1800/1900
 - Class E2 (0.5 W, 27 dBm) @ EDGE 850/900
 - Class E2 (0.4 W, 26 dBm) @ EDGE 1800/1900
 - Class 3 (0.25 W, 24 dBm) @ UMTS
 - Class 3 (0.2 W, 23 dBm) @ LTE
- Supply voltage
 - Nominal: 3.8 VDC
 - Range: 3.3 - 4.2 VDC



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