The use of a single antenna brings significant cost savings compared to LTE Cat 1 with two antennas. It allows for the reduction of the overall device dimensions, making it possible to serve IoT applications with stringent size requirements.

The optional embedded GNSS receiver makes the LE910S1-E ideal for all-in-one tracking use cases in which more precise, faster-refreshing, satellite-based positioning and navigation must complement cellular-based positioning.

The LE910S1-E is a new member of Telit’s flagship xE910 module family delivering 4G radio access technology in the 28.2 × 28.2 × 2.2 mm family form factor. The Telit xE910 unified form factor family comprises 2G, 3G and 4G products that share a form factor and electrical and programming interfaces, allowing developers to implement a “design once, use anywhere” strategy.
LE910S1

Product Features
- LTE FDD Cat.1. 3GPP release 9 compliant
- Single LTE antenna
- VoLTE support
- SMS over IMS
- Built in UDP/TCP/PPP/HTTP/HTTPS/NTP/FTP stack
- IPv4/IPv6 stack
- Control via AT commands according to 3GPP
- TS 27.005, 27.007 and Telit Custom AT commands
- SIM application Tool Kit 3GPP TS 51.014
- GNSS support

Data
LTE Cat. 1
- Uplink up to 5 Mbps
- Downlink up to 10 Mbps

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

Interfaces
- 181-pin LGA interface
- 10 I/O ports (±1.8V) including multifunctional I/Os
- USB 2.0 HS
- UART
- SPI
- I2C
- 1.8 V / 3V SIM interface

Approvals
- RED/GCF (Europe)

Electrical & Sensitivity
- Output power
  - Class 3 (0.2 W, 23 dBm) @ LTE
- Supply voltage range:
  - Nominal: 3.8 VDC
  - Range: 3.4 - 4.2 VDC

GNSS
- GPS, GLONASS, Galileo and BeiDou navigation system
- Satellite Augmentation system (SBAS)
- GPS L1, GLONASS L1, Galileo E1, BeiDou B1
- Sensitivity (GPS):
  - Acquisition: -147 dBm
  - Tracking: -160 dBm
- Time To First Fix (GPS @ -130 dBm):
  - Hot Start: < 1 s
  - Cold Start: < 28 s