JANUS REMOTE COMMUNICATIONS
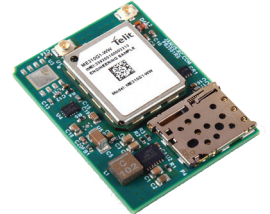
LTE310SMT v1.00 CAT-M1/NB2
Global CellBridge™ 4G Cellular Modem

Description

The CellBridge™ SMT offers global frequency bands for global deployment, supporting dual mode Cat M1/NB2 (NB-IoT) and 2G fallback. It is highly recommended for new designs and is also ideal as a migration path for existing GPRS or CDMA devices. Both current and updated designs benefit from a significant extension in life cycle with LTE Cat M1/NB2.

The CellBridge SMT Modem also includes a state-of-art GNSS receiver that can simultaneously search and track satellite signals from multiple satellite constellations. This multi-GNSS receiver uses the entire spectrum of GNSS systems available: GPS, GLONASS, BeiDou, Galileo, and QZSS. The two UFL connectors located on the front of the modem allows users to cable the antennas appropriately for specific designs. A 4FF (nano) size SIM card holder is available for manual SIM insertion and SIM IC pads are available if the user prefers a surface mount SIM solution.

LTE310SMT CAT-M1/NB2 Specifications

- Approvals (pending)
  - Regulatory: FCC, GCF, PTCRB
  - Carrier: PTCRB, AT&T, Verizon and RED certifications;
- Data Rate:
  LTE Cat M1 (Rel. 14)
  - Uplink up to 1 Mbps
  - Downlink up to 588 Kbps
  LTE Cat NB2 (Rel. 14)
  - Uplink up to 160 Kbps
  - Downlink up to 120 Kbps
  EGPRS (2G Fallback variants)
  - Uplink up to 210 Kbps
  - Downlink up to 264 Kbps
- V1.00 Frequency bands
  - LTE 4G Bands: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B27, B28, B66, B71, B85
  - GSM 2G Bands: B2, B3, B5, B8
- TCP/IP stack access via AT commands
- SMS (MO / MT)
- Output power: Class 3 (0.2W, 23 dBm) @ LTE
- Dimensions: 1.02" x 1.38" (26mm x 35mm)
- Operational temperature range: -40°C to 85°C
- Internal Switching Regulator:
  - Input Voltage Range: 2.5 to 5.25Vdc
  - Supply disable via terminal input pin
- UART, USB and SPI ports
- 6 GPIO, 1 ADC and 1 DAC
- SIM Card
  - Locking SIM card socket, Nano (4FF size) SIM
- Antenna:
  - Cellular and GNSS antennas
  - U.FL miniature RF connectors
- GNSS
  - Stand alone GNSS available at AT command interface
  - NMEA data
  - GNSS antenna connection w/active antenna support

Features

- **89 Pad LGA PACKAGE**
- Ships in Tape and Reel
- 1.02" x 1.38" (26mm x 35mm)
- Lowest Modem Total Cost of Ownership (TCO)
- End Product Certification (in progress)
- Excellent Shock and Vibration (vs. connector units)
- Mobile IoT 3GPP Rel14-LTE CAT-M1, NB1, NB2
- Telit OneEdge Ready (see OneEdge info on back)
- Qualcomm 9205 Chipset

The LTE310SMT v1.00 Modem allows end users to assemble "end device" certified embedded cellular modems right onto application PCBs. No more hand assembly. No more modem pin connection issues in the field. Our CellBridge SMT units are designed to be placed during the primary pick & place assembly process, like all other primary BOM components.

The LTE310SMT modems are part of the CellBridge™ Janus Products.

CellBridge™
Global Cellular Modem Solutions
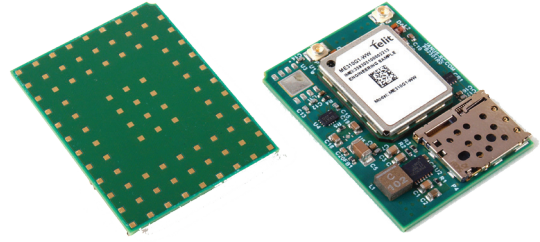
Telit OneEdge® Availability

- Telit offers ME910G1 with OneEdge, a software suite integrated with deployment and management tools to address the complexity expected with the exponential growth in the number of IoT devices. The following components include:
- **Lightweight M2M protocol** enables comprehensive device management, FOTA updates and application enablement of low-power devices with the goal of more robust and secure connections.
- **Telit simWISE™**, a module-embedded SIM technology, enables reduced footprint, streamlined manufacturing and logistics, secure communications for connected devices.
- **Telit IoT AppZone** can run code and applications directly inside the Telit module.
- **Telit's Connection Manager** automates operations for connection to cellular networks.
- **Location** services provide the position of devices even in the absence of a GNSS connection.

Telit ONEEDGE

Telit is in it.
Making machines talk.

LTE310SMT v1.00 CAT-M1/NB2 4G Rendering

Applications

- Fleet Management
- Asset Tracking
- Security Systems
- Telemetry
- Telematics & Telecontrol
- Remote Monitoring Systems
- Remote Meter Reading
- Vending Machines

Ordering Information

LTE310SMT	V100	T	x	H	4	L
Cellular Terminal **LTE** LTE910SMT	**Carrier Certified & Version** **LTE** v1.00 CAT-M1/NB2	**Modem Provider** T = Telit S = Sierra Wireless N = Nordic	**Firmware** * Call Sales Rep for most recent firmware version.	**SIM Holder** H = Mech Holder E = Embedded IC B = Both	**SIM Size** H or B = 2, 3, 4 size If SIM Holder is "E" N = No SIM Card	**Power** S = Standard Power L = Low Power

Example: Part Number – LTE**310SMTV100TxH3L** = LTE Cellular Socket Modem; Telit Modem; Current Firmware; Mech SIM Holder; SIM Size Card 3; Low Power.

Contact Sales for Additional Special Order Options: Dave Jahr: djahr@janus-rc.com | 630-499-2121

Revision History

Revision	Revision Date	Note
00	07/15/20	Initial Product Brief

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CellBridge™
Global Cellular Modem Solutions