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

Description

Janus CellBridge™ SMT is the first end device certified surface mount cellular modem available for use in all IoT applications globally. The 89 Pad LGA Package allows users to assemble modems onto application PCBs during primary pick & place processing via automated assembly equipment.



Standard assembly procedures coupled with CellBridge LGA architecture ensures the best modem to PCB connectivity possible, virtually eliminating problematic mechanical connectivity issues in the field.

The CellBridge™ SMT offers global frequency bands, supporting dual mode Cat M1/NB2 (NB-IoT) with 2G fallback. It is highly recommended for new designs and is also ideal as a migration path for existing 2G and 3G devices. Both current and updated designs benefit from a significant extension in product life with 4G LTE Cat M1/NB2 technology.

The CellBridge™ SMT Modem also includes a state-of-art GNSS receiver that can simultaneously search and track satellite signals from multiple satellite constellations.

LTE310SMT CAT-M1/NB2 Specifications

- Approvals
 - Regulatory: FCC, ISED, PTCRB, RED
 - North American Carriers: AT&T and Verizon
- 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" x 0.15" (26mm x 35mm x 3.81mm)
- 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
- Six GPIO, one ADC and one DAC
- SIM Card
 - Nano (4FF size) Locking SIM card socket
- Antenna:
 - Cellular and GNSS antennas
 - Two U.FL miniature RF connectors
- GNSS
 - GPS, GLONASS, BeiDou, Galileo, and QZSS
 - NMEA data

Features

- 4FF (nano) SIM Holder
- SIM IC (optional)
- 89 Pad LGA Package
- Ships in Tape and Reel (see page 2)
- 1.02" x 1.38" (26mm x 35mm)
- Lowest Modem Total Cost of Ownership (TCO)
- End Product Certification
- Excellent Shock and Vibration (vs. connector units)
- Mobile IoT 3GPP Rel14-LTE CAT-M1, NB1, NB2
- Telit OneEdge Ready (see page 2)
- Qualcomm 9205 Chipset

Applications

- Fleet Management
- Asset Tracking
- Security Systems
- Telehealth
- Telematics & Telecontrol
- Remote Sensors
- Remote Meter Reading
- Vending Machines





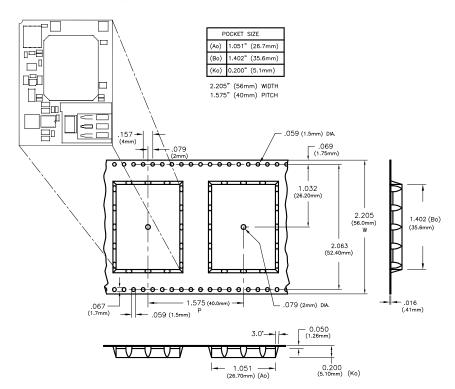
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 Revision
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 14 March 2023

Tape & Reel Information Dimensions



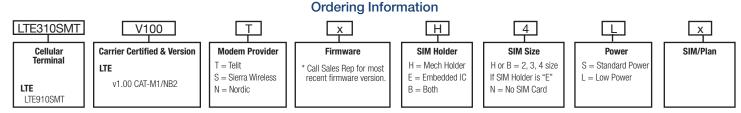
Telit OneEdge® Availability

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 manament, FOTA updates and application enablement of low power devices with the goal of more robust and secure connections.
- Telit simWISE™, a module-embedded SIM technoogy, enables reduced footprint, streamlined manfacturing 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.







Example: Part Number – LTE310SMTV100TxH4Lx = LTE Cellular Socket Modem; Telit Modem; Current Firmware; Mech SIM Holder; SIM Nano (4FF) Size Card; Low Power, SIM Plan.

Contact Sales for Additional Special Order Options: Bill Borton: bborton@janus-rc.com | 630-499-2121

Revision History

Revision	Revision Date	Note
00	07/15/20	Initial Product Brief
01	06/02/21	Added Tape & Reel Dimensions
02	07/13/21	Updated Dimensions
03	12/23/21	Updated Regulatory Approvals
04	03/14/23	Undated Contact Information



