

Your device and data are over there, but you are here.

Connect with your device to gain real-time access to your sensor data and control your remote systems. Get ready for rapid development. LooUQ's LTEm2 modem enables rapid IoT device design, development, and deployment. LooUQ has done the work to enable your project to reach market opportunities as they appear. The LTEm2 offers everything you need for remote sensing and control applications: small size, low power, easy host connectivity and cloud platform compatibility.

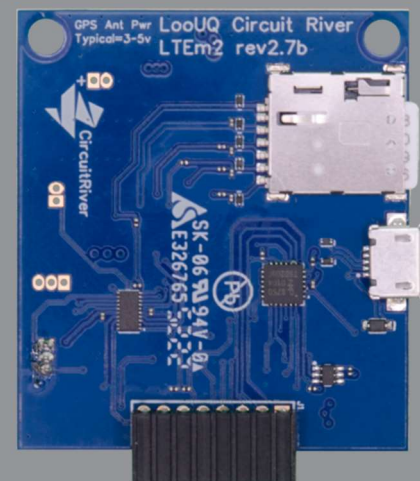
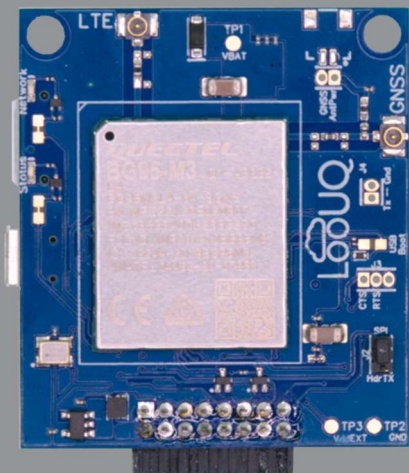
## Benefits

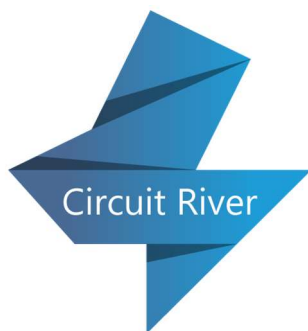
- Global network compatibility
- Works seamlessly with popular IoT development boards
- Rapid development with LooUQ open-source device software
- Secure communications with industry standard encryption
- Field serviceable OTA updates
- Fully integrated with LooUQ LQCloud
- Easily integrates with major cloud platforms

## Features

- Broad carrier compatibility with MNO/MVNO networks
- Verizon OD Certification (*in process*)
- Small size: 48mm x 40mm x 8mm
- Low-power, battery centric design
- Data rates up to 588 kbps/1119 kbps (*d/u LTE Cat M1*)
- TCP/IP functionality support TCP/UDP/SSL/HTTP/MQTT
- SSL/TLS support for TCP/HTTP/MQTT
- Integrated GNSS receiver (standalone and assisted)
- SPI and UART serial host interfaces, jumper selectable
- USB for data/commands, firmware updates and diagnostics
- Persistent file system for application storage
- Industry recognized Quectel BG95-M3 module
- Firmware-Over-the-Air upgrade support
- Cross-industry applicability
- Anywhere, anytime communications
- RoHS/Pb Free Assembly

Part Number: **CR-LTEM2**





Contact LooUQ's Product Team  
231/237-8860

Find Us Online  
[www.LooUQ.com](http://www.LooUQ.com)

More Information  
[answers.LooUQ.com](http://answers.LooUQ.com)

# Specifications

## Physical

- 45mm x 40mm x 9.15mm board
- 48mm x 40mm overall with host connector.
- 3D model and detailed dimension information is available at [answers.LooUQ.com](http://answers.LooUQ.com)

## Power

- Supply voltage 3.7-volts nominal (3.6v min, 4.2v max)
- Consumption @ LTE Cat M1 (typical)
  - Power Saving Mode: 10uA
  - LTE Connected Mode (average)
    - 124mA @ 0dBm
    - 130mA @ 10dBm
    - 190mA @ 23dBm

## Communications

- LTE CAT-M1, LTE NB-IOT, and EGPRS network support  
1119 kbps (uplink), 588 kbps (downlink) on LTE Cat-M1
- SPI host interface for efficient communications
- Optional direct UART interface for data/command
- USB interface for data/command, updates/diagnostics, and NMEA format sentence output of GNSS.
- NMEA UART interface (receive only).
- Antenna connections (U.FL/IPEX)
  - Main cellular
  - GNSS passive or active
  - GNSS power injection header for active GNSS antenna

## Approvals

- Quectel BG95-M3 module FCC approved (*XMR201910BG95M3*)
- Verizon OD certification (*in process*)

## Support

LTE-M2 support is available 7x24 via our online LooUQ Answers Center. Priority support is optionally available. LooUQ also offers data plans and LQCloud platform integrated service plans. Please contact us for more information.

LooUQ – Traverse City, MI USA  
<https://github.com/LooUQ>