

# Onyx LTE USB Cellular Modem

IoT/M2M-optimized LTE Cat 4 USB Modem

# IoT Connectivity and Platform Services

Soracom provides IoT connectivity and platform services to over 20,000 businesses and over 4M connections, with solutions for every challenge in IoT. We're focused on making it easy to connect M2M devices at scale, with a powerful IoT SIM that provides connectivity in 160 countries. Soracom provides direct integrations with the world's leading cloud platforms, making it easy to transmit data from your device to AWS, Google Cloud Platform, or Microsoft Azure.

Our team of IoT experts is on hand to learn more about your challenges, and to discuss how Soracom can help at every stage of your product development lifecycle.



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The **Soracom Onyx LTE USB Cellular Modem** is a high performance communications device that enables cellular data connectivity for fixed and mobile

applications, such as smart agriculture, healthcare, asset tracking, and remote management applications.

Onyx features a Quectel® EG25-G LTE Cat. 4 module which provides global 4G/LTE, 3G, and 2G cellular connectivity in a single device and is optimized specifically for IoT and M2M applications. With a USB port and driver support for Windows and Linux, Onyx can be installed on a wide variety of devices to easily add global cellular data connectivity.

Onyx includes built-in antennas for easy installation without extra wires or accessories, and also provides two external CRC9 antenna connectors to support custom antenna configurations.

Onyx also features built-in application protocols such as TCP, UDP, PPP, FTP, HTTP, and MQTT, allowing devices to integrate into various system architectures and cloud services quickly without the need for custom code.

You create. We connect.

# Onyx LTE USB Cellular Modem

### **Features**

- Global 4G/LTE, 3G, and 2G network compatibility
- Compact, rugged design
- Easy installation
- Integrated antennas
- Built-in application protocols



# **Onyx LTE USB Cellular Modem Technical Specifications**

| CONNECTIVITY | Modem             | EG25-G   |  |  |  |
|--------------|-------------------|--|--|--|--|
|              | Region            | Global   |  |  |  |
|              | Performance       | LTE Cat. 4 (3GPP Release 11)   |  |  |  |
|              | Network Bands     | LTE-FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28             |  |  |  |
|              |                   | 4G<br>LTE-TDD B38/B39/B40/B41  |  |  |  |
|              |                   | 3G UMTS B1/B2/B4/B5/B6/B8/B19  |  |  |  |
|              |                   | 2G GSM <b>850/900/1800/1900</b>  |  |  |  |
|              | Packet Data       | Max. 150Mbps downlink / Max. 50Mbps uplink                               |  |  |  |
| APPLICATION  | Compatibility     | 3GPP TS 27.007, TS 27.005, Enhanced AT Commands                          |  |  |  |
|              | Protocols         | TCP, UDP, PPP, FTP, HTTP, MQTT, NTP, NITZ, PING, QMI                     |  |  |  |
|              | Messaging         | SMS, USSD  |  |  |  |
|              | Operating Systems | Windows 7/8/8.1/10, Linux 2.6 ~ 5.4, Android 4.x/5.x/6.x/7.x/9.x         |  |  |  |
| INTERFACES   | USB               | USB 2.0 Type A   |  |  |  |
|              | SIM               | Nano SIM (4FF)   |  |  |  |
|              | Antenna           | Built-in, 2 × CRC9   |  |  |  |
| POWER        | Operating Voltage | USB powered, 4.2V ~ 6.0V   |  |  |  |
|              | Power Consumption | 35mA (idle, typical), 600mA (during communication, typical)              |  |  |  |
| PHYSICAL     | Dimensions        | 95mm × 36mm × 13mm   |  |  |  |
|              | Weight            | 36g  |  |  |  |
|              | Casing            | PC-ABS   |  |  |  |
|              | Temperature Range | -20°C ~ 60°C (operation), -35°C ~ 85°C (storage)                         |  |  |  |
|              | Humidity          | 5% ~ 75% (operation, non-condensing), Max. 80% (storage, non-condensing) |  |  |  |
| CERTS        | Regulatory        | FCC, PTCRB, JATE, TELEC, CE*   |  |  |  |
|              | Safety            | RoHS   |  |  |  |
|              |                   |  |  |  |  |



\* Certification in progress

# **Onyx LTE USB Cellular Modem Orderable Quantity**

| Soracom Part Number | Short Description  | Minimum<br>Order Quantity | Order<br>Multiple | Number of<br>devices per pack | Packaging<br>Type |
|---------------------|--|---------------------------|-------------------|-------------------------------|-------------------|
| 4573326591591       | Onyx USB Cellular Modem with eSIM<br>included (AIR plan 01s) | 1                         | 1                 | 1                             | Box               |
| 4573326592031       | Onyx USB Cellular Modem with SIM slot                        | 1                         | 1                 | 1                             | Box               |

