**Inseego SK160NE-ACR**

# Inseego SK160NE-ACR Skyus 160 LTE Cat 6 Modem User Manual

Model: SK160NE-ACR

## 1. PRODUCT OVERVIEW

The Inseego Skyus 160 is a robust LTE Cat 6 modem designed for reliable and high-speed connectivity in various environments. It features multi-carrier support, Wi-Fi, Bluetooth, GPS, and a built-in battery backup, making it suitable for both mobile and fixed applications requiring consistent internet access.

## Key Features:

- **GPS:** NMEA or TAIP Protocol support for location services.
- **Antenna Connectivity:** Two SMA connectors for external cellular antennas and one SMA for an external GNSS antenna. Internal Wi-Fi/BT antennas are also included.
- **Wi-Fi Technology:** Wi-Fi 5 (802.11 b/g/n/ac) supporting up to 20 client devices.
- **Built-in Battery:** Provides instant failover and ensures business continuity during power interruptions.
- **Versatility:** Adaptable for various installation scenarios, from vehicle hotspots to SD-WAN for branch offices.

Figure 1: Top view of the Inseego Skyus 160 Modem, displaying its compact design and indicator lights.

## 2. SETUP GUIDE

### 2.1. Package Contents

Before proceeding, ensure all components are present in the package:

- Inseego Skyus 160 LTE Cat 6 Modem
- Whip Antennas (quantity may vary)
- AC Power Adapter
- *(SIM card not included)*

### 2.2. SIM Card Installation

The Skyus 160 uses a 4FF (Nano) SIM card. Ensure the device is powered off before inserting or removing the SIM card.

1. Locate the SIM card slot on the device.
2. Gently insert the 4FF SIM card into the slot with the gold contacts facing down and the notched corner aligned correctly.

3. Push the SIM card until it clicks into place.

## 2.3. Antenna Connection

Connect the provided whip antennas to the SMA connectors on the device. For optimal performance, ensure antennas are securely tightened.

- Connect cellular antennas to the two SMA ports labeled for cellular.
- If using external GPS, connect the GNSS antenna to its dedicated SMA port.



Figure 2: Side view of the Inseego Skyus 160 Modem, highlighting the antenna connection points and other ports.

## 2.4. Power Connection

Connect the AC power adapter to the modem's power input port, then plug the adapter into a standard electrical outlet.

## 2.5. Initial Power On

Once power is connected, the device should automatically power on. Observe the LED indicators for status updates.

## 3. OPERATING INSTRUCTIONS

### 3.1. Understanding LED Indicators

The Skyus 160 features several LED indicators to provide real-time status information:

- **Power LED:** Indicates power status (On/Off).
- **Signal Strength LED:** Shows the strength of the cellular signal (e.g., green for strong, amber for moderate, red for weak/no signal).
- **Network Status LED:** Indicates connection to the cellular network (e.g., solid for connected, blinking for searching).
- **Wi-Fi LED:** Indicates Wi-Fi activity.

### 3.2. Connecting Devices

You can connect devices to the Skyus 160 via Wi-Fi or Ethernet.

#### 3.2.1. Wi-Fi Connection

1. On your device (laptop, smartphone), search for available Wi-Fi networks.
2. Select the Wi-Fi network name (SSID) broadcast by the Skyus 160. The default SSID and password are usually found on a label on the device or in accompanying documentation.

3. Enter the Wi-Fi password when prompted.

### 3.2.2. Ethernet Connection

Connect an Ethernet cable from one of the Skyus 160's Ethernet ports to your computer or network switch.

## 3.3. Accessing the Web Interface

For advanced configuration and monitoring, access the modem's web-based administration interface.

1. Ensure your device is connected to the Skyus 160 (via Wi-Fi or Ethernet).
2. Open a web browser and enter the default IP address (e.g.,192.168.1.1 or refer to the device's documentation for the exact address).
3. Enter the default username and password when prompted. These are typically found on a label on the device.
4. From the web interface, you can configure network settings, Wi-Fi security, view connection status, and manage other features.

# 4. Maintenance

## 4.1. Firmware Updates

Regularly check for and install firmware updates to ensure optimal performance, security, and access to new features. Firmware updates are typically managed through the device's web interface.

## 4.2. Cleaning

Keep the device clean by wiping it with a soft, dry cloth. Avoid using liquid cleaners or abrasive materials.

## 4.3. Battery Care

The built-in battery provides backup power. To prolong battery life, avoid exposing the device to extreme temperatures and ensure it is regularly charged.

# 5. Troubleshooting

## 5.1. No Internet Connection

- **Check SIM Card:** Ensure the SIM card is correctly inserted and active with your carrier.
- **Check Signal Strength:** Observe the Signal Strength LED. If it's red or off, try relocating the modem to an area with better cellular coverage.
- **Check Antennas:** Verify that all external antennas are securely connected.
- **Reboot Device:** Power cycle the modem by disconnecting and reconnecting the power adapter.
- **Carrier Issues:** Contact your cellular carrier to confirm there are no network outages in your area or issues with your data plan.

## 5.2. Slow Connection Speed

- **Signal Strength:** A weak cellular signal can lead to slow speeds. Improve antenna placement or relocate the device.
- **Network Congestion:** Speeds can be affected by network congestion, especially during peak hours.
- **Wi-Fi Interference:** If using Wi-Fi, try changing the Wi-Fi channel in the web interface to avoid interference from other devices.
- **Device Load:** Too many devices connected or heavy data usage can slow down the connection.

## 5.3. Device Not Powering On

- **Power Adapter:** Ensure the AC power adapter is securely connected to both the modem and a working electrical outlet.
- **Test Outlet:** Try plugging another device into the same outlet to confirm it has power.

## 5.4. Factory Reset

If issues persist, a factory reset can resolve many problems by restoring the device to its default settings.**Warning:** This will erase all custom configurations.

1. With the device powered on, locate the reset button (often a small pinhole).
2. Use a paperclip or similar pointed object to press and hold the reset button for approximately 10-15 seconds until the LEDs indicate a reset.
3. Release the button and allow the device to restart.

## 6. TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Model Number** | SK160NE-ACR |
| **Brand** | Inseego |
| **Connectivity Technology** | Ethernet, Wi-Fi |
| **Compatible Devices** | Laptop, Personal Computer |
| **Total Ethernet Ports** | 2 |
| **Wi-Fi Technology** | Wi-Fi 5 (802.11 b/g/n/ac) |
| **GPS** | NMEA or TAIP Protocol |
| **Antenna Connectivity** | 2x SMAs for External Cellular Antennas; 1x SMA for External GNSS Antenna, Internal Wi-Fi/BT Antennas |
| **Item Weight** | 1 pounds |

| | |
|---|---|
| **Package Dimensions** | 9.25 x 6.81 x 2.05 inches |
| **Color** | AC Power |

# 7. WARRANTY AND SUPPORT

## 7.1. Warranty Information

Inseego products typically come with a limited warranty. Please refer to the warranty card included with your product or visit the official Inseego website for detailed warranty terms and conditions specific to the Skyus 160 modem.

## 7.2. Customer Support

For technical assistance, troubleshooting beyond this manual, or to inquire about repairs, please contact Inseego customer support. Support contact information can usually be found on the Inseego website or in your product's packaging.

- **Online Resources:** Visit the Inseego support portal for FAQs, drivers, and firmware downloads.
- **Contact Information:** Refer to the official Inseego website for phone numbers or email support.

Documents - Inseego – SK160NE-ACR
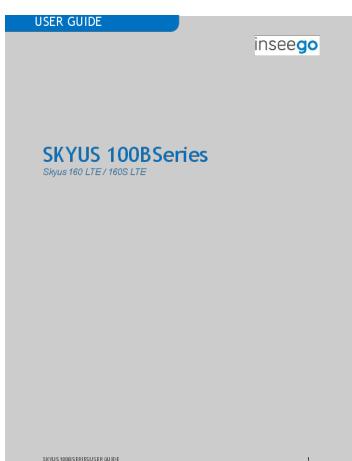
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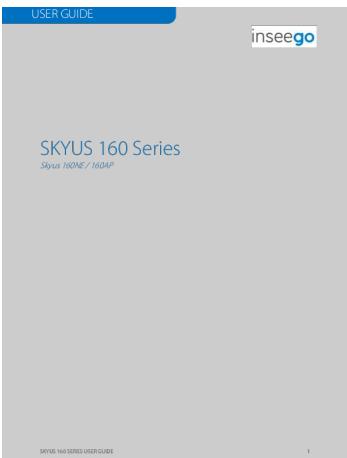
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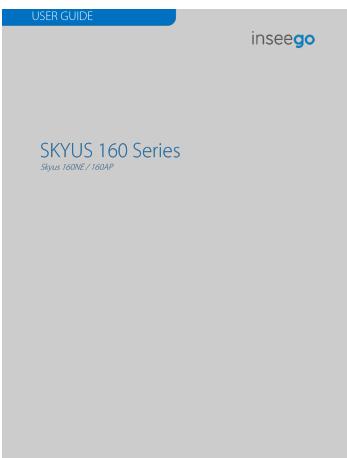


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[pdf] Specifications Datasheet

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TECHNOLOGY: Global Cat-6 LTE, Wi-Fi and Bluetooth SkyusTM 160 LTE Gateway for High-Speed Connectivit ... , battery life and charge time may vary depending on the number of connected devices and activity. **SK160NE-ACR** MKT-00060 Rev3 ... lang:en score:30 filesize: 711.74 K page_count: 2 document date: 2020-07-20

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TECHNOLOGY: Global Cat-6 LTE, Wi-Fi and Bluetooth SkyusTM 160 LTE Gateway/Router High-Speed and Mul ... ct Specifications Technology Product SK160NE SK160AP SKUs SK160NE-DCR Mobile/Remote Install **SK160NE-ACR** Fixed Install SK160AP-ACR Fixed Install Model SKG1EM7455 SKG1EM7430 Cellular Ba...
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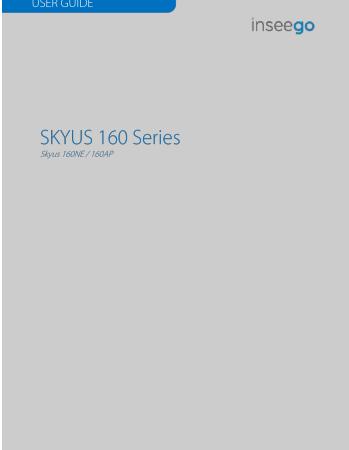
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[pdf] Specifications

Skyus 160 LTE Gateway for High Speed Connectivity in Fixed and Mobile Product Specifications Network Connectivity1 4G CAT 6 B1 B5 B7 B8 B12 B13 B20 B25 B26 B29 B30 B41 Supports 2 Carrier Aggregation Downlink Inseego Skyus® IoT Router rugged co uk amfile file 995 product 2606 ||| TECHNOLOGY: Global Cat-6 LTE, Wi-Fi and Bluetooth SkyusTM 160 LTE Gateway for High-Speed Connectivit ... , battery life and charge time may vary depending on the number of connected devices and activity. **SK160NE-ACR** MKT-00060 Rev4 ... lang:en score:28 filesize: 198.8 K page_count: 2 document date: 2021-06-01



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