Cellular Communication Packages
For Use With LI-COR Greenhouse Gas (GHG) and Biomet Systems

- Remotely check the integrity of flux stations from your office, home, or on the go
- Add the SMARTFlux™ System to view fully corrected eddy covariance (EC) flux data in real time
- Transfer raw data from your site automatically, or at specified intervals
- Configure instruments and sensors at your site(s), from your office, or home computer
- Avoid unnecessary site visits and respond quickly to any problems that arise

LI-COR Cellular Communication Modules use Sierra Wireless™ AirLink® LS300 or Hongdian H7921 modems - rugged, military-grade radios designed for the harshest environments. Cellular radios are available for both Global System for Mobile Communications (GSM) and Code Division Multiple Access (CDMA) communication protocols used by most major cellular carriers around the world.

The cellular communication modules use machine-to-machine data plans provided by the carrier of your choice. Simply arrange a service agreement with your cellular provider, configure the system, and connect to your flux station from any networked Windows® computer.

Configurations

**GHG System - For EC Systems without LI-COR Biomet**

**Includes:** Weatherproof enclosure, cellular modem (AirLink® or Hongdian), high-gain antenna, power cables, data cables, and additional hardware to support LI-COR eddy covariance systems.

**GHG/Biomet System - For EC Systems with LI-COR Biomet**

**Includes:** Cellular modem (AirLink® or Hongdian), high-gain antenna, Ethernet switch, power cables, data cables, and hardware to mount module in LI-COR 7900 Biomet System enclosure. The Ethernet switch enables integration of four additional instruments with the Biomet system.
### Ordering Information

<table>
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<tr>
<th>Configuration</th>
<th>Region</th>
<th>Cellular Protocol</th>
<th>Carrier</th>
<th>Part Number</th>
<th>Modem or Modem/Switch Included</th>
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<tr>
<td><strong>GHG System</strong></td>
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<td>7900-700</td>
<td>AirLink® LS300 Modem</td>
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<tr>
<td></td>
<td>Canada</td>
<td>HSPA+ (GSM)</td>
<td>Rogers</td>
<td>7900-700</td>
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<td>United States</td>
<td>EVDO (CDMA)</td>
<td>Verizon</td>
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<td>China</td>
<td>EVDO (CDMA)</td>
<td>China Telecom</td>
<td>7900-710</td>
<td>Hongdian H7921 Modern</td>
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<tr>
<th><strong>GHG with Biomet System</strong></th>
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<td>7900-701</td>
<td>AirLink® LS300 Modem and Stride™ 5-Port Ethernet Switch</td>
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<td>Canada</td>
<td>HSPA+ (GSM)</td>
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<td>EVDO (CDMA)</td>
<td>China Telecom</td>
<td>7900-711</td>
<td>Hongdian H7921 Modem and Stride™ 5-Port Ethernet Switch</td>
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</tbody>
</table>

1. If your region is not listed, contact LI-COR for more information.
2. Data plans must be arranged by end user. Before purchasing a Cellular Communication Package, make sure that compatible cellular service is available at your site, and that the carrier supports Machine-to-Machine (M2M) communication.
3. The GHG with Biomet System modem and Ethernet switch are installed in the LI-COR 7900 Biomet System enclosure.

### Specifications*

#### GHG System
- **Dimensions**: 25.5 cm x 18.5 cm x 12.5 cm (10 x 7.5 x 5 in.), 35.5 cm x 23.5 cm x 9.5 cm (14 x 9.25 x 3.75 in.).
- **Weight** (enclosure and modem): 2.25 kg (4.96 lb.) with AirLink LS300 modem, 2.36 kg (5.2 lb.) with Hongdian H7921 modem.

#### GHG with Biomet System
- **Weight** (modem/switch only): 0.55 kg (1.22 lb.) with AirLink LS300 modem/Stride switch.

#### Sierra Wireless™ AirLink® LS300 Modem
- **Communication Protocols**: GSM Cellular Networks (LI-COR p/n 7900-700, 7900-701), CDMA Cellular Networks (LI-COR p/n 7900-702, 7900-703, 7900-704, 7900-705), Ethernet.
- **Regional Availability**: U.S., Canada, Europe, India.
- **Power Requirements**:
  - **Input Voltage**: 7-28 VDC (12 VDC nominal).
  - **Power Standby Mode**: <35 mA@12VDC.
- **Operating Temperature Range**: -30 to 70 °C (-22 to 158 °F)
- **Humidity Range**: Non-condensing.

#### Hongdian H7921 Modem
- **Communication Protocols**: CDMA Cellular Networks (LI-COR p/n 7900-710, 7900-711), Ethernet.
- **Regional Availability**: China.
- **Power Requirements**:
  - **Input Voltage**: 5-36 VDC.
  - **Power Consumption**: Idle: 80mA@12VDC, Standby: 20mA@12VDC.
- **Operating Temperature Range**: H8922: -30 to 70 °C (-22 to 158 °F)
  - H7921: -30 to 70 °C (-22 to 158 °F)
- **Humidity Range**: <95% (non-condensing).

#### Stride™ 5-Port Industrial Ethernet Switch
- **Communication Standard**: Ethernet.
- **Power Requirements**:
  - **Input Voltage**: 10-30 VDC.
  - **Power Consumption**: 3W maximum.
- **Operating Temperature Range**: -40 to 85 °C (-40 to 185 °F)
- **Humidity Range**: 5 to 95% (non-condensing).

#### Laird Technologies® Direct Omni-directional Antenna
- **Dimensions**: 24.8 cm x 2.45 cm (9.8 x 1 in.).
- **Cable Length**: 5m (16.4 ft.).
- **Antenna Mounting Post**: 1.5m (4.9 ft.).
- **Weight**: 156g (5.5 oz.).
- **Power Requirement**: 10W maximum.
- **Operating Temperature Range**: -30 to 70 °C (-22 to 158 °F)

* Specifications subject to change without notice.

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