**LTE Expansion Card** is an LTE cellular device that provides network connectivity to the panel. It can be used as either the primary or backup connection method.

**Features**
- Connects panel to the LTE cellular network
- Provides primary or backup network connection

**Installation**

1. Set up an account in the AlulaConnect portal.
2. Install the communicator into the panel using the steps below:
   - Disarm and then power down the panel.
   - Plug the expansion card into Slot 1 of the panel.
   - Place Antenna 1 as shown at the bottom of the panel.
   - Place Antenna 2 as shown at the top of the panel.
   - Power up the panel.
   - Installation is complete.

**Events are reported** to both the monitoring receiver and the interactive server. All events use **Contact ID** reporting codes.

**Events Reported by Default:**
- Alarm
- Alarm Cancel
- Opening
- Closing
- System Low Battery
- System Low Battery Restore
- AC Power Fail
- AC Power Restore

**Interactive control and viewing** of the system can be done through AlulaConnect.com.

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Verify proper installation and operation using the panel’s installation manual.
**Reset the expansion card** by pressing the factory default switch until the expansion card’s LEDs flash once (roughly 5 seconds). This is normally never required.

**Cellular LED Indicators** are used to show the state of the expansion card. The CS and Platform LEDs are not used.

<table>
<thead>
<tr>
<th>LED</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (Green)</td>
<td><strong>ON and Flashing off once every second</strong> - Powered and running</td>
</tr>
<tr>
<td>Cellular (Red)</td>
<td><strong>ON</strong> - Registered with the local cellular network</td>
</tr>
</tbody>
</table>

**Note:** If the cell LED displays two quick flashes (then repeats every second), this indicates it was not able to connect to the network. There could be a delay before retrying the connection.

**Signal Strength** can be determined using the signal bar LEDs.

<table>
<thead>
<tr>
<th>Signal Bar</th>
<th>Cellular Signal Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Bad (0 to 14)</td>
</tr>
<tr>
<td>1</td>
<td>Marginal (15 to 19)</td>
</tr>
<tr>
<td>2</td>
<td>Acceptable (20 to 24)</td>
</tr>
<tr>
<td>3</td>
<td>Good (25 to 30)</td>
</tr>
<tr>
<td>4</td>
<td>Best (30+)</td>
</tr>
</tbody>
</table>

**Troubleshooting Cellular Expansion Card Problems:**

- Ensure antenna connectors are securely snapped into the circuit board
- Try repositioning the panel (move or rotate)
- Try moving the panel higher in the building
- Try moving the panel away from metal objects (appliances, ducts)
- Try moving the panel closer to a window
- Use a remote RE036 or RE046 antenna option (see below)
**Antenna Options**

**Internal antenna - RE048**
- Good Performance
- Offers a compact solution

**Wall drop antenna - RE036-0 (1-foot cable) and RE036 (10-foot cable)**
- Better performance
- Antenna can be hidden in the wall or mounted in a better location
- In this configuration, move the internal antenna to **Antenna 2** port and connect the wall drop antenna to the **Antenna 1** port, as shown below.

**Side mount antenna - RE046**
- Best performance
- Offers optimal cellular performance
- In this configuration, connect the side mount antenna to the **Antenna 1** port, as shown below.
### Specifications

<table>
<thead>
<tr>
<th>Physical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>4.1 x 1.9 x 0.8 inches</td>
</tr>
<tr>
<td>Weight</td>
<td>1.1 ounces</td>
</tr>
<tr>
<td>Current Draw</td>
<td>200mA (Nominal)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>32°F to 120°F</td>
</tr>
<tr>
<td>Maximum Humidity</td>
<td>85% non-condensing relative humidity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Certification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RE929R</td>
<td>FCC, Verizon™</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice

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**TRADemarks**

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**FCC NOTICE**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Alula could void the user’s authority to operate this equipment.

RF Exposure: To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended.