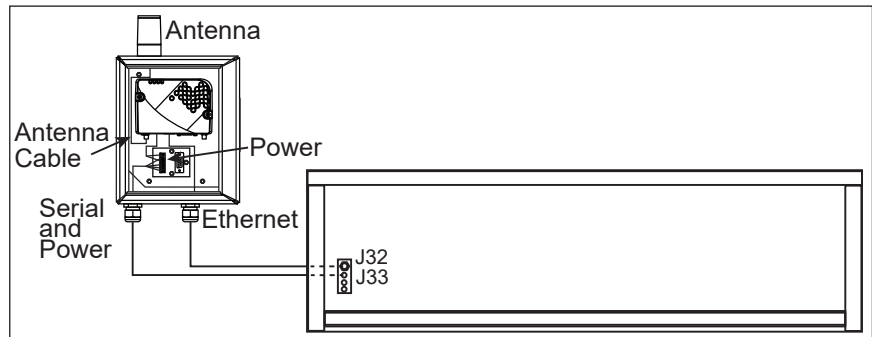


Install the modem within 25 feet of the display. The modem will be connected to the display through a pre-wired quick-connect input.

## Installation

1. Turn off power to the display during the installation of the modem.
2. Temporarily mount the cellular modem in the desired location with the **antenna pointing upward**. Refer to **Figure 1**.
3. Plug the serial and power cable into the quick-connect jack on the labeled J33, Aux (on the display back). Refer to **Figure 1**.

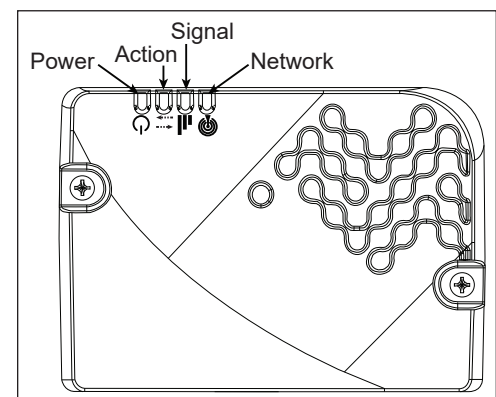


**Figure 1:** Cellular Antenna Installation Front View

4. Plug the Ethernet cable into the quick-connect jack labeled J32, Ethernet In (on the display back). Refer to **Figure 1**.
5. **Permanently fasten the modem vertically with the antenna pointing upward** once it has been proven effective in the location.

**Note:** The cellular modem is mounted in a watertight enclosure and should not need additional protection from the elements. The cable is also rated for outdoor use and does not have to be in conduit. However, the cable should be secured to protect it from weather and vandalism.

6. Turn display power on.
7. Observe the display boot sequence to verify proper modem connection.
  - Correct static IP address: 172.16.192.30
  - Any other static IP address (for example those beginning with 169. or 192.) denotes poor connectivity to the display
8. Observe cellular modem LEDs to verify modem operation. Refer to **Figure 2**.
  - Power LED: Steady Green
  - Activity LED: Occasionally flashes Green
  - Signal Strength LED: Steady Green
  - Network LED: Steady Green



**Figure 2:** Modem Diagnostic LEDs

## Limitation of Liability





The warranty will be nullified if:

- The modem enclosure is modified
- The modem is improperly installed
- The modem enclosure is damaged
- The modem has water damage due to improper orientation. The modem enclosure must be mounted with the antenna pointing upward.

## Troubleshoot Connectivity Issues

1. Open the enclosure with a flathead screw driver.
2. Verify all the connections - including the server and antenna - inside the enclosure are tight.
3. Check the diagnostic LEDs inside the cellular modem enclosure. **Figure 2** shows diagnostic LED locations.

The following table describes the indicator lights on the front of the modem and what they show during different modes:

LED	Color/Pattern	Description	LED Power Saving Mode
	Off	No power or input voltage $\geq 36$ VDC or $\leq 7$ VDC.	
	Solid Green	Power is present.	
	Green with Amber Flash	Power is present and the gateway has a GPS fix.	
	Solid Red	Standby mode.	
	Flashing Green	When pressing the reset button, flashing green indicates when to release the reset button to reboot the gateway.	
	Flashing Red	When pressing the reset button, flashing red indicates when to release the reset button to reset the gateway to the factory default settings.	
	Solid Green	Good signal (equivalent to 4-5 bars)	Off
	Solid Amber	Fair signal (equivalent to 2-3 bars)	Off
	Flashing Amber	Poor signal (equivalent to 1 bar) If possible, move the gateway to a location with a better signal.	
	Flashing Red	Inadequate (equivalent to 0 bars) Move the gateway to a location with a better signal.	
	Solid Green	Connected to an LTE network	Off
	Flashing Green	Connecting to the network	
	Flashing Red	No network available	
	Flashing Red/Amber	Network Operator Switching is enabled, but the gateway is unable to locate the required firmware. For more information, refer to the ALEOS Software Configuration User Guide (Admin chapter).	
	Occasional Flashing Green	Communication of data is being transmitted between modem and display player.	
	Off	No data transfer caused by a possible player failure or a connection failure.	

4. Contact the cell service provider to ensure service is available.
5. Contact Daktronics at 800-325-8766 for assistance troubleshooting display hardware or software.