

RE050 Indoor/Outdoor Cellular Antenna Kits



Indoor/Outdoor Cellular Antenna Kits are designed to increase cellular performance for Connect+™, BAT-Fire™, and BAT-Connect™.

Features

- Omni-directional radiation pattern
- Robust design for all weather operation
- IP66 rated
- Mounting bracket included
- 4', 20', 50', and 100' coaxial cable lengths available

Installation

- 1. For BAT-Fire, skip to step 6.
- For Connect+ or BAT-Connect, install the SMA to MMCX adapter cable. Remove the internal antenna connected to the Antenna 1 or ANT1 location on the circuit board by pulling up gently on the internal antenna's connector to release it from the cellular module. Remove the internal antenna.
- 3. Break out the plastic knock-out at the top or side of the enclosure.
- 4. Install the large (SMA) end of the supplied cable in the hole of the enclosure and secure it with the supplied nut.
- 5. Snap the small (MMCX) end of the adapter cable onto the circuit board at the Antenna 1 or ANT1 antenna mounting connector.
- 6. Select a location and antenna mounting configuration (see below). Mount the antenna vertically for best performance. Antennas need to be in open air to communicate and should not be mounted inside a metal enclosure. **Note:** for BAT-Fire, the mounting bracket must be isolated from earth ground in commercial fire applications.
 - **A. If mounting to a wall**, use the mounting holes labeled below [A]. Secure to the wall using appropriate 1/4 inch screws (not provided).
 - B. If mounting to a pole, connect the U-bolt labeled below [B] using the hardware provided.



- 7. Attach the coaxial cable to the SMA connector at the top or side of the enclosure.
- 8. Attach the larger end of the coaxial cable to the antenna.



Pro Tips

- Select the appropriate cable length for the installation. Excessive cable may lead to unnecessary dB loss.
- Do not cut the cable.
- Mount the antenna as high as possible to optimize cellular strength.
- Locate the antenna away from metal objects (appliances, ducts).

specifications	
Physical	
Physical Contents	Antenna w/mounting bracket, coax cable, adapter cable, U-bolt kit (includes U-bolt, pipe bracket, washers, and nuts)
Antenna Type	Omni-directional antenna
Antenna Dimensions	18.78 inches (477 mm)
Antenna Color	White
Coax Cable	Premium low-loss UV resistant cable
Coax Cable Connectors	N male and SMA male
Adapter Cable	SMA female to MMCX male
Mounting Hardware	Clamping U-bolt (included), up to 1-3/8 inch diameter pole
RF Performance	
Frequency Band	698 - 2700 MHz
Nominal Impedance	50 Ohm
Antenna Gain	3.5 - 7.0 dBi
VSWR	1.5:1 (maximum)
Cable Loss (4 feet)	0.3 dB @ 700 MHz
Cable Loss (20 feet)	1.7 dB @ 700 MHz
Cable Loss (50 feet)	4.3 dB @ 700 MHz
Cable Loss (100 feet)	8.6 dB @ 700 MHz
Environmental	
Operating Temperature	-22°F to 158°F (-30°C to 70°C)
Water Resistance	IP66
Compatibility	
Alula Products	Connect+, BAT-Connect, BAT-Fire
Part Numbers	
RE050-4	Antenna, Indoor/Outdoor, Cellular, 4' Coax, Kit
RE050-20	Antenna, Indoor/Outdoor, Cellular, 20' Coax, Kit
RE050-50	Antenna, Indoor/Outdoor, Cellular, 50' Coax, Kit
RE050-100	Antenna, Indoor/Outdoor, Cellular, 100' Coax, Kit
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Specifications

Specifications subject to change without notice.

TRADEMARKS

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