

Installation Guide

General

The Communication Module uses an internal dual band cellular antenna. In most cases, this antenna will provide sufficient received signal strength for a successful installation.

Honeywell offers remote antennas designed to increase cellular transmission capability. These durable, low-profile antennas are designed to allow flexible integration with cellular communication devices.

The Remote Weatherproof Antenna should be used in installations where the antenna must be mounted outdoors at some distance from the radio and gain is needed.

Signal Strength

For reliable service, the communication module should only be installed in locations where there is satisfactory signal strength. The signal strength (green) LED lights steady to indicate satisfactory signal strength.

The signal strength value measured in dBm can be viewed on the 7720P Programming Tool, by using the *shift <E>* command.



dBm is displayed as a negative value on the 7720P. A value closer to 0 represents a stronger signal. i.e., Signal strength of -60 dBm is stronger than that of -100 dBm.

Installation Guidelines

Use these guidelines you can maximize the performance of the communication module.

- Find the best coverage before final mounting by moving to several locations while monitoring the signal strength.
- The best signal strength can usually be found at the highest point in the building on an exterior wall. Avoid the basement.
- Do not mount the module on or near large metal objects such as steel I-beams, HVAC ducts, etc.

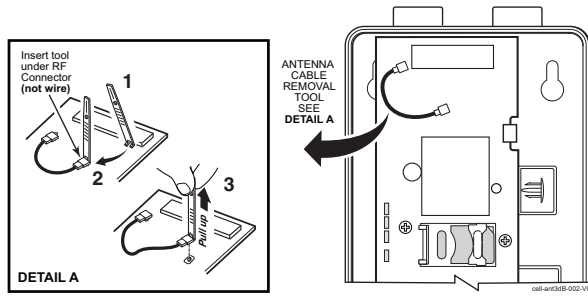
If consistent signal strength cannot be found with the internal antenna, an external antenna should be used.

External Antenna

The antenna is an exterior weatherproof antenna that can be mounted up to 50 feet away from the radio when the proper coax cable is used. Refer to Table 1 for coax cable selection. Install the antenna as follows:

1. Measure and record the communication modules signal strength using the internal antenna for reference.
2. Disconnect all power from the unit including the battery.
3. Remove plastic plug from the SMA mounting hole on top of the communication module housing and insert the SMA end of the adapter cable. Secure the SMA connector with the included nut.
4. Plug the u.FL connector on the other end of the adapter cable into the communication module's external antenna port and route cable as shown.
5. Attach the antenna to the mounting bracket as shown in Figure 1.
6. Find a suitable location so that the antenna will be mounted vertically. The best antenna location is usually at the highest point in the building.
 - Avoid the basement.
 - Avoid mounting on or near large metal objects.
7. Route the coax cable and make all required connections.
8. Restore power to the unit and check that the minimum signal strength (green) LED lights steady and compare the new value to the value recorded in Step 1.
9. Adjust the location of the antenna if needed until the minimum signal strength LED lights steady green.
10. Permanently mount the antenna vertically using the hardware as shown. The included silicon rubber tape is used to waterproof the antenna connection.

Figure 1 – CELL-ANT3dB Remote, Weatherproof Antenna



1. Slip the Antenna Cable Removal Tool (p/n 700-03513) under RF Cable connector as shown.



PLEASE: (1) **DO NOT** use the tool to pry the connector loose. Instead, pull directly upward, perpendicular to the circuit board. Do not pull on the cable. (2) **USE CAUTION** not to damage the adjacent components when inserting the Antenna Cable Removal Tool.

2. Pull directly upwards until the connector detaches from the module's receptacle as shown in Detail A. (This cable is no longer needed.)
3. Repeat step 1 and 2 to disconnect the cable from the GSMX4G. (This cable is no longer needed.)

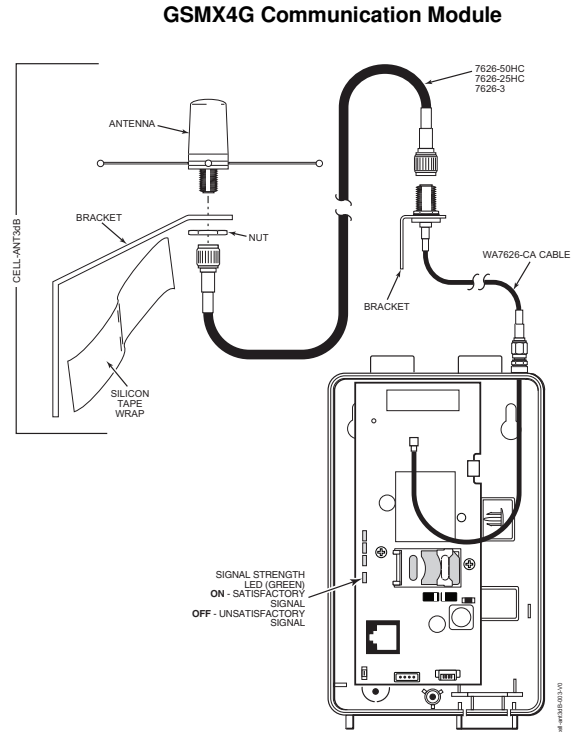


Table 1: CELL-ANT3dB Antenna Kits

Kit Part No.	
CELL3dB50KT	WA7626-CA, 7626-50HC
CELL3dB25KT	WA7626-CA, 7626-25HC
CELL3dBKT	WA7626-CA

IMPORTANT NOTE ABOUT EXTERNAL ANTENNAS

If an external cellular radio antenna is used, the antenna may be installed or replaced **ONLY** by a professional installer.

Specifications:

Frequency Range: 821-896 MHz
1850-1990 MHz

Average Gain: 3dBi

Maximum power: 100W

Nominal impedance: 50 ohms

Pattern: Omni Directional

Termination: N Female

Operating Temperature: -40° to 185° F (-40° C to 85° C)

Fully Weatherproof for Outdoor Application

Dimensions: 3.15" x 1.44"

Type: Dual band, field diverse

VSWR: <2:1

Random Material: ABS, black

Polarization: Vertical and Horizontal

RF Exposure

Warning – The internal or external antenna(s) used with this product must be installed to provide a separation distance of at least 7.8 in. (20 cm) from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

Mise en Garde

Exposition aux Fréquences Radio: L'antenne (s) utilisée pour cet émetteur doit être installée à une distance de séparation d'au moins 7,8 pouces (20 cm) de toutes les personnes.

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TO THE INSTALLER

The external antenna must not exceed a maximum directional gain (including cable loss) of 3.2 dBi at 850 MHz and 2.3 dBi at 1900 MHz.

For the latest warranty information, please go to: <http://www.security.honeywell.com/hsc/resources/wa/>



800-20800 8/15 Rev. B

2 Corporate Center Drive, Suite 100
P.O. Box 9040, Melville, NY 11747
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