GEO INSTRUMENTS

Lid-Link[®] Traffic-Rated Antenna

Lid-Link Antenna

The Lid-Link[®] is flush-mount, traffic-rated antenna designed to transmit RF signals from data loggers and sensors that are installed below grade.

Applications

Lid-Links are deployed in city streets and sidewalks, airport taxiways, container ship piers, and other locations where wireless telemetry is required but conventional antennas are impractical due to traffic, vandalism, or accidental damage.

The antenna exceeds AASHTO HS-20 loading standards and features a non-skid surface to enhance pedestrian and vehicle safety.

Installation

Installation typically follows these steps: First, drill a hole wide enough and deep enough to fit the logger package and the Lid-Link inspection frame. Fill that with bentonite. Next, drill the instrument borehole through the bentonite to the required instrument depth. Install the instrument and grout it. Then remove excess bentonite to allow placement of the logger package and inspection frame. Finish with a ring of cement around the frame. Make adjustments to the logger as needed, then connect and place the antenna.

Specifications

RF Bands: Lid-Link antennas can be supplied for two ranges: 850-940 Mhz and 2.3-2.6 Ghz.

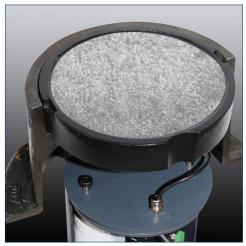
RF Connector: 18-inch coax cable with SMA connector.

Load Designation: Ductile iron castings are are rated for 40,000 to 100,000 pounds on a 9" x 9" area, providing a large safety factor above ASSHTO HS-20 specifications.

Antenna Size: 10-inch OD, 3-inch height. Seats flush with top of inspection frame and is secured by bolts.

Inspection Frame: 12-inch OD at top, 16-inch OD at bottom, 8.5-inch height.

Lid-Link is a registered trademark of GEO-Instruments.



Lid-Link antenna and inspection frame. Cable connects the antenna to the logger package.



Conventional antennas were impractical at this airport project. Lid-Link antennas were the solution.



Lid-Link transmits measurements from an instrument installed below the road surface.



This photo shows two Lid-Link installations. The AMTS is monitoring road prisms.



Installation of instrument and logger package.



Placing the antenna in the finished installation.