

Overview and Identification

The BAPI 900 MHz Dipole Antenna (BA/ANT900EA) feature a durable, unobtrusive housing that sticks permanently with integral adhesive to flat, non-conductive surfaces such as windows, drywall, ceiling tiles, plastic, etc. The cable comes in a standard 79" length or optional 180" length and a screw-on RP-SMA coax connector. The antenna has flexible dipole shafts and offers a horizontal Omni directional pattern when shafts are mounted vertically with a minimal vertical sensitivity.

The BAPI 900 MHz Whip Antenna (BA/ANT900) features a durable shaft and directly connects to the receiver with an RP-SMA connector.

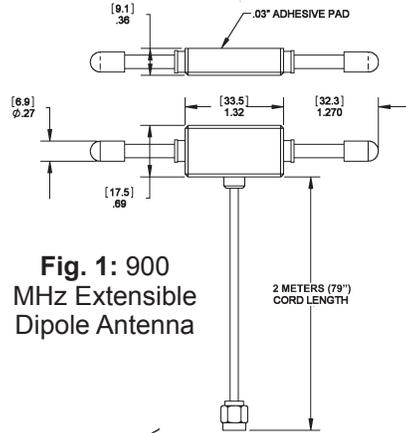


Fig. 1: 900 MHz Extensible Dipole Antenna

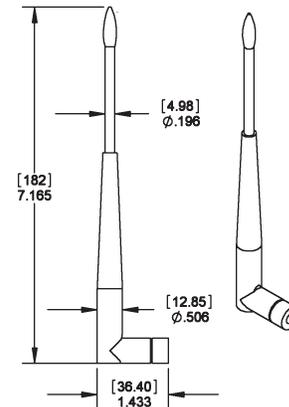


Fig. 3: 900 MHz Whip Antenna

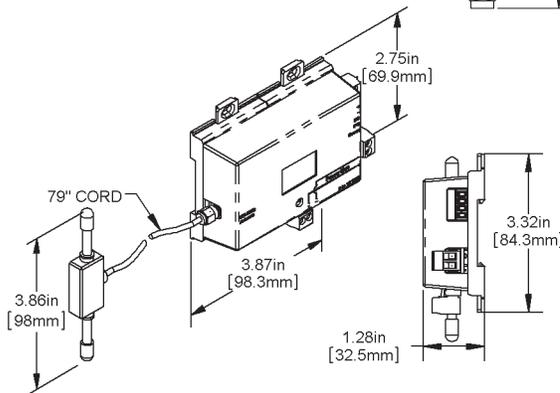


Fig. 2: 900 MHz Receiver with Extensible Dipole Antenna

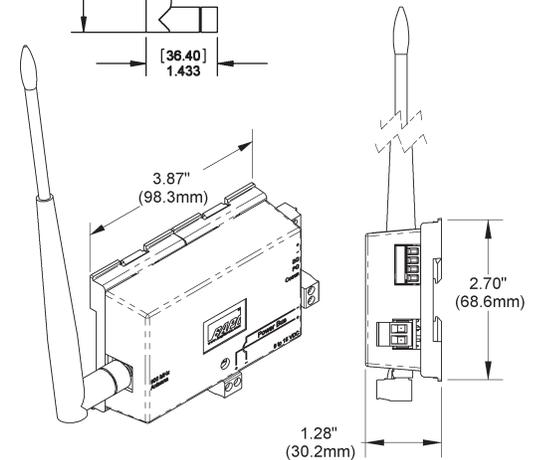


Fig. 4: 900 MHz Receiver with Whip Antenna

Mounting

To mount the 900 MHz Dipole Antenna, peel off the protective film from the adhesive pad and stick the antenna to a wall or other non-metallic support so that antenna is vertical for best reception. A wooden or plastic furring strip or PVC pipe attached to a ceiling beam w/U bolts makes a great mount. The antenna may be hung from any ceiling fixture using fiber or plastic twine, do not use wire. Do not use perforated metal strapping, commonly called plumbers tape. Antenna's should be mounted as far away from metal plates or bars as possible to avoid RF energy being reflected back or blocked on the other side of the metal. An antenna will not work inside a metal box. Mounting to drywall between studs, ceiling tiles, brick, or concrete is very common.

To mount the 900 MHz Whip Antenna just screw it into the receiver SMA connector labeled 900 MHz. Swivel the antenna at it's base so that it sits up or down vertically. It should never be mounted inside a metal enclosure. If this is unavoidable then an 900 MHz Dipole Extensible antenna will be required.

Transmission distance performance will vary based on environment and antenna orientation. 1000 feet is the maximum that can be expected if there are no obstructions (Open Air). In general, each obstruction will half the expected transmission distance. Obstructions include but are not limited to; walls, partitions, floors, ceilings, doors, tinted glass, the ground, many people, vehicles, foliage, rain, snow and fog. Metal (solid or screen) blocks the RF signal preventing propagation but also can bounce the signal around the potential obstacle. Wood, drywall, plaster, brick, and concrete attenuates the signal but will let it pass (if it's not too thick) at a reduced signal strength. Anything that holds water absorbs the signal to the point of blockage like rain, fog, people, ground, dense foliage etc. Elevator shafts and stairwells usually block RF signals.

Specifications subject to change without notice.

Wiring and Termination

After the dipole antenna is mounting, screw the connector into the receiver marked 900 MHz. The coax cable should never be kinked or crushed in any way. The cable should never be spliced or cut into. Extra cable should be loosely coiled with large coils. Do not kink the cable.

To mount the 900 MHz Whip Antenna, screw it into the receiver SMA connector labeled 900 MHz. Swivel the antenna at it's base so that it sits up or down vertically.

Specifications

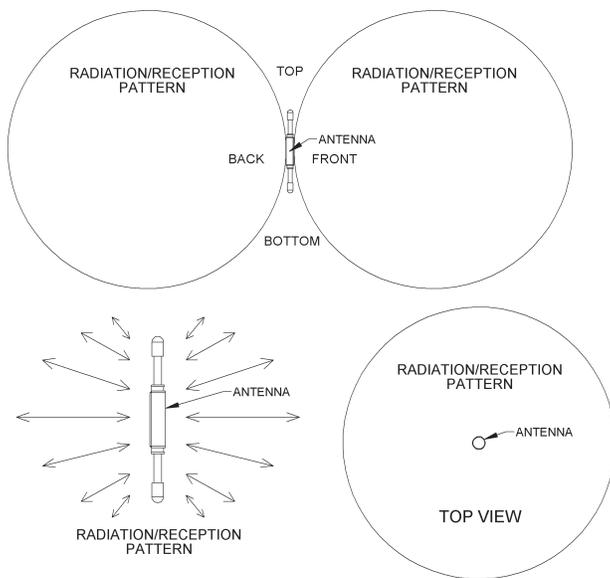
900 MHz Extensible Antenna (BA/ANT900EA)

Center Frequency.....916MHz
 Bandwidth136MHz (824MHz to 960MHz)
 Wavelength1/4-wave
 VSWR<1.5 typ. at center
 Impedance50 ohms
 ConnectorRP-SMA
 Cable Length78" or 180"
 Coax typeRG-174

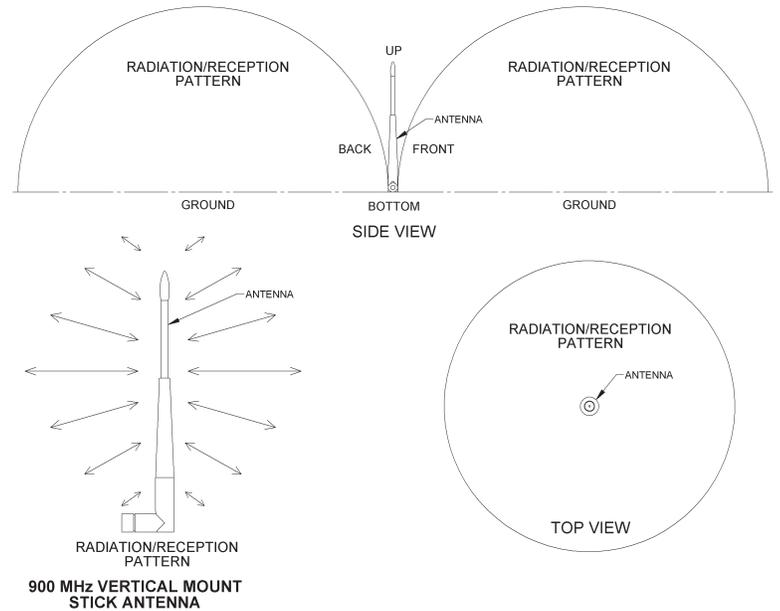
900 MHz Whip Antenna (BA/ANT900EA)

Center Frequency.....916MHz
 Bandwidth30MHz
 Wavelength1/2-wave
 VSWR<2.0 typ. at center
 Impedance50 ohms
 ConnectorRP-SMA
 Length.....7.1" (18.2cm)

Antenna Patterns



900 MHz DIPOLE ANTENNA



900 MHz VERTICAL MOUNT STICK ANTENNA

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