

Sutron Antenna - Package Contents



Antenna (1)



Top Bracket (1)



Bottom Bracket (1)



LMR 400 RF cable (1)



**U-bolts (2)
Flanged screws (5)
Flat washers (4)
Split Washers (4)
Hex nuts (4)**



**Moisture-proof tape
(1 or 2)**



LMR 195 RF cable (1)

Model	Description
GEO-ANT-GPS	Geostationary antenna with GPS
GEO-ANT-GPS-K1	Geostationary antenna with GPS and mounting bracket
GEO-ANT-GPS-K2	Geostationary antenna with GPS, mounting bracket, and UHF RF cable
GEO-ANT-GPS-K3	Geostationary antenna with GPS, mounting bracket, and UHF RF and GPS cables

Sutron Antenna Installations

Antenna installation and aiming

1. Attach antenna to the top bracket using three (3) flanged screws
2. Attach the top bracket and bottom bracket using two (2) flanged screws
3. Attach the bottom bracket to a 2½" metal pipe, using the two (2) U-bolts, flat and split washers and bolts
4. Connect one end of the LMR 400 RF cable to the RF input port of antenna, and other end of the cable to the transmitter
5. Connect one end of the LMR 195 RF SMA cable to the GPS input on the antenna, and other end to the transmitter's GPS port, if integrated GPS antenna is required.
6. Use 10" moisture- proof tape to seal the connector to prevent moisture entry. After wrapping the tape, mold to form a smooth surface and force out air.
7. Using an antenna aiming guide, point the antenna towards the sky using the calculated Azimuth and elevation angles. Pointing need not be accurate for Sutron antenna.
 - a. A typical antenna pointing guide can be found here: http://www.sutron.com/wp-content/uploads/2013/12/AntennaPointingGuide_TelephoneDefinitions.pdf ; If using Sutron's LinkComm, try the "antenna aim" feature in the app.

Antenna power setting

1. Satellite transmitter output power must be set to follow the EIPR requirements specified for various data rates. Recommended EIRP is 37 to 41 dBm for 300 baud and 43 to 47 dBm for 1200 baud. The max power with this antenna and a 1 dB loss cable shall be 5.0 Watts and 2.5 Watts nominal.
2. For Sutron antenna and provided RF cable, transmit power shall be set to "Dome" antenna option in LinkComm.
3. Any antenna's transmit power must be set according to the following equation:
$$Tx\ Power = Max\ EIPR + Cable\ loss - Antenna\ gain$$
4. If using Sutron Satlink3 and LinkComm, for 1 dB cable loss, following settings can be followed:
 - a. For 300 baud rate – 2.5W
 - b. For 1200 baud rate – 10 W