

Quad-Helix Omnidirectional Antenna

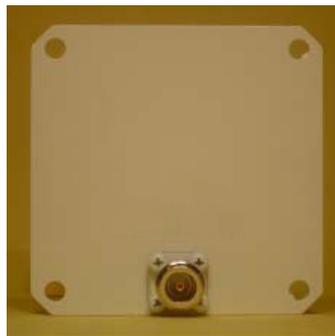
SVP Broadcast Microwave's quad-helix omni (AC-204 / AC-504) design brings the advantages of the characteristic quad-helix antenna radiation pattern to mobile ENG uplink/downlink applications.

The AC-204 / AC-504 antennas provide a circularly polarized omnidirectional radiation pattern with peak gain of 4 dBi at 30 degrees above the horizon, and then decreasing gain, with no nulls, as the elevation angle increases to the overhead 90 degree direction. The shape of this radiation pattern naturally compensates for the change in path loss as a mobile transmitter moves from the overhead direction out towards the horizon.

The circular polarization improves signal robustness in multipath environments and in motion links. It can be installed in the fuselage of the helicopter or in an actuator arm where it is usually located in the skid of the helicopter.



Example of antennas mounted on a cross-tube mount.
(www.darthelicopterservices.com)



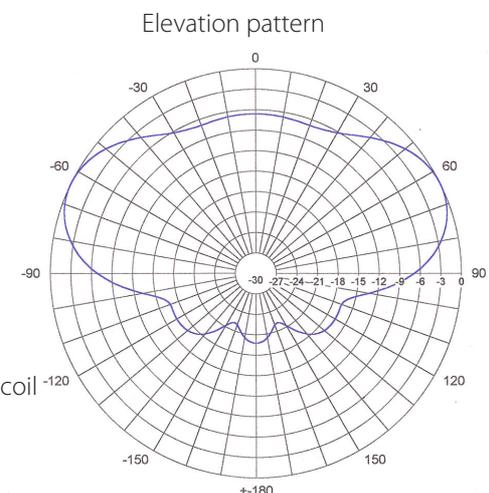
Through holes



Helicoil inserts

Characteristics

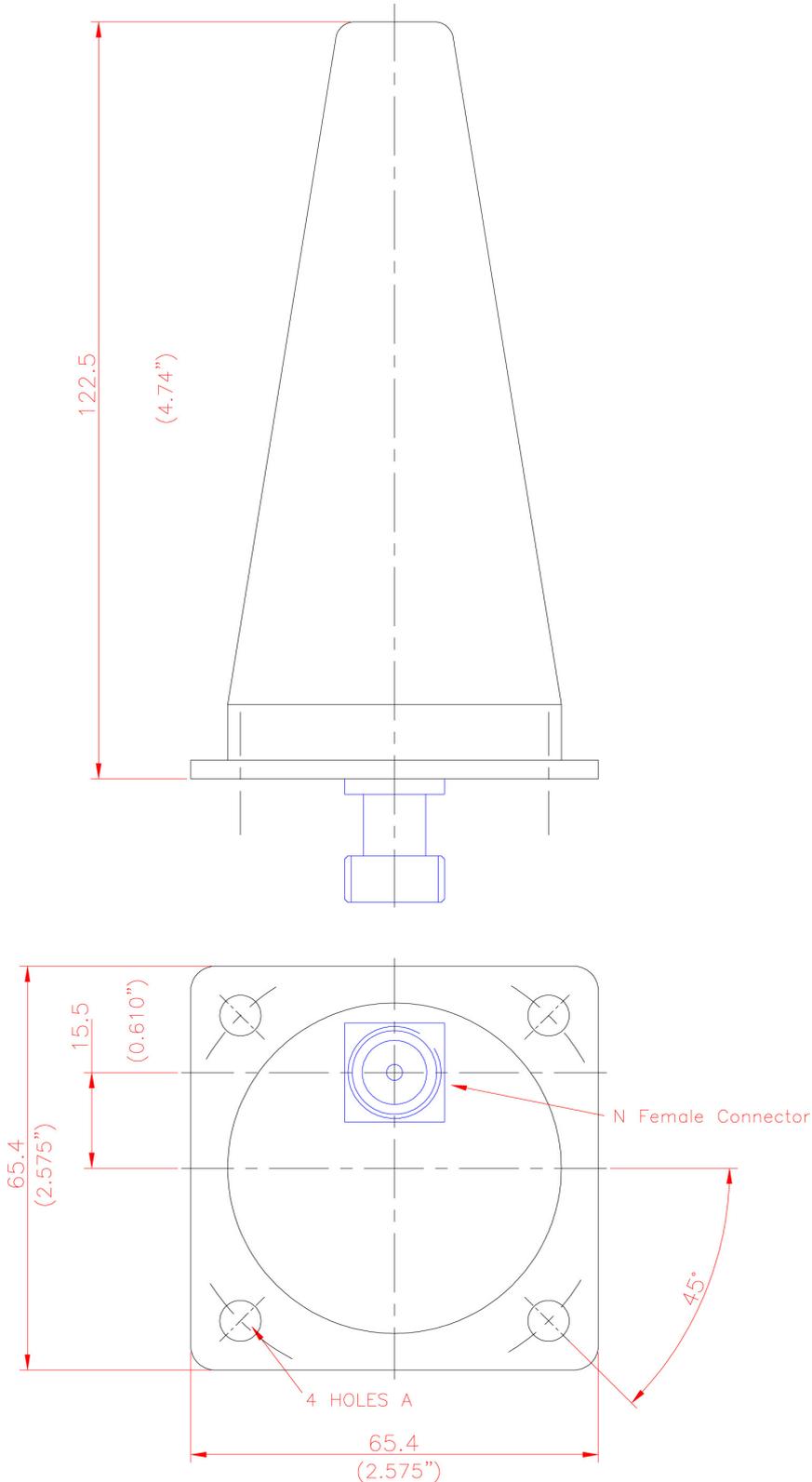
	AC - 204	AC - 504
Frequency	2.0 - 2.2 GHz 2.2 - 2.4 GHz	4.80 - 5.30 GHz
Bandwith	200 MHz	500 MHz
Gain	4 dBiC	4 dBi
Polarization	RHCP or LHCP (to specify)	RHCP or LHCP (to specify)
Return loss	14dB typical	14 dB typical
Connector	N female	N female
Diameter	95 mm	54 mm
Height	190 mm	122.5 mm
Mount	Flange with through holes or helicoil inserts in (solid) base (to specify)	Flange with through holes or helicoil inserts in (solid) base (to specify)



* For other frequency bands, please contact SVP: info@svpbm.com

Mechanical Drawing

AC-504



Design and specifications are subject to changes without prior notice. 01/19