Field-proven Handhelds Mountable Trackers & Satellite Modems

NAL Research Corporation

SAF4070-II Flat Mount Dual Iridium® Antenna

General Description

Model SAF4070-II is a low-profile dual Iridium/Iridium antenna designed to operate with the NAL Research's A3LA and 9601 satellite modems and trackers. It provides continuous coverage from 1610.0 to 1626.5 MHz specifically for the Iridium network. The SAF4070-II is suitable for harsh environment and long term operations. It is impact, UV, chemical and jet fuel resistance.

Specifications

Mechanical

Dimensions:	5.03" L x 2.08" W x 0.69" H (12.77 cm x 5.28 cm x 1.75 cm)
Weight:	8.0 oz. (226 g)
Finish:	Skydrol Resistant Polyurethane Enamel and Base Iridite PerMIL-C-5441
Color:	Gloss White #17925, Lusterless Gray #36320, Olive Drab Green #34031, Lusterless Black #37038
Connector:	Iridium–TNC Female Connector
	GPS–SMA Female Connector
	(Option: SMA, TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX or Cable)
Material:	6061-T6 Aluminum Alloy Base Composite Radome
Mounting:	4x 10-32 screws

Electrical

Frequency:	1610.0 to 1626.5 MHz	
Radiation Pattern:	Hemispherical	
Polarization:	Right Hand Circular	
VSWR:	Less than 1.5 : 1	
Gain (dB):	With 4-Foot Ground Plane	Free Space
	90º Zenith +4.9	90º Zenith +5.0
	10º Elevation –1.0	10º Elevation –2.5
	20º Elevation +1.5	20º Elevation –0.5
	30º Elevation +2.4	30º Elevation +1.0
	60º to 90º Elevation > +3.3	60º to 90º Elevation > +2.7
Beam Width (3dB):	129º	98º
Axial Ratio:	2 dB	
Power Handling:	30 Watts	
Lightning Protection:	DC Grounded	
Cable loss between antenna and modem:	Must be kept < 3 dB	

Powered by iridium®

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Environmental

Operating Temperature:	–67ºF to +185ºF (–55ºC to +85ºC)
Operating Altitude:	70,000 ft (21 km)
Vibration:	> 30 G's
Leakage:	Hermetically Seal

Designed To

FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810 and SAE J1455

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