

THE WORLD LEADER IN HIGH PERFORMANCE WRAPAROUND™ ANTENNAS.



BLADE ANTENNAS

Haigh-Farr's family of rugged Blade antennas are available in frequencies ranging from UHF to upper C-band, and may be provided in either straight or rounded blade configurations. These antennas have demonstrated proven reliability in over 30 years of high-performance airborne applications. Blade antennas are also used extensively in ground-based vehicles such as race cars, trucks, tanks, and motorcycles, to name a few.

These Blade antennas exhibit omnidirectional coverage in the azimuth plane with a filled-in null in the elevation plane.



FEATURES

- Omnidirectional Coverage (Azimuth)
- Overhead Null Filled In (Elevation)
- Frequencies From UHF to C-Band
- Small, Compact Footprint
- Aerodynamic Design
- Common Footprint For All Models
- Built to Withstand Extreme Shock & Vibration Environments

APPLICATIONS

- Data Links, Telemetry, Transponder
- Aircraft
- UAVs
- Helicopters
- Tactical Missiles
- Ships
- Ground-Based Vehicles
- Single or Array Implementations With Matching Power Dividers and Cables

DESIGN CAPABILITY

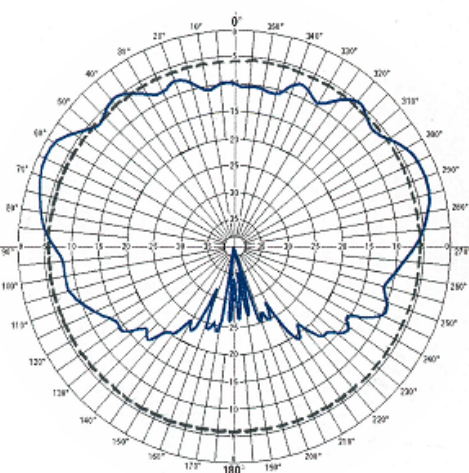
With over 30 years of design history, your antenna configuration/performance requirements may already exist, or extrapolations from similar Haigh-Farr designs may be possible with minimal effort. If a design meeting your requirements does not exist, Haigh-Farr has the experience and modeling capability to customize a solution. Contact Haigh-Farr for a review of your antenna requirements.

Round Blade P/N	Straight Blade P/N	Frequency Range GHz	VSWR MAX/TYPICAL	5KW ¹ ALTITUDE	PEAK ² POWER	Height Inches [mm]	Weight (SMA) OZ [grams]
6107	6007	1.060 ± .030	2.0:1/1.50:1	116	160 W	2.30 [58.4]	1.0 [28.3]
6108	6008	0.9165 ± .025	2.0:1/1.50:1	116	160 W	2.30 [58.4]	1.0 [28.3]
6109	6009	1.35 – 1.54	2.0:1/1.50:1	116	160 W	1.75 [44.3]	0.9 [26]
6110	6010	1.43 – 1.54	1.5:1/1.25:1	116	160 W	1.54 [39.1]	0.8 [23]
6110-2	6010-2	1.425 – 1.525	1.5:1/1.25:1	116	160 W	1.54 [39.1]	0.8 [23]
6110-3	6010-3	1.45 – 1.65	2.0:1/1.50:1	116	160 W	1.54 [39.1]	0.8 [23]
6110-4	6010-4	1.50 – 1.80	2.0:1/1.50:1	116	160 W	1.54 [39.1]	0.8 [23]
6115	6015	1.60 – 1.70	1.5:1/1.25:1	116	160 W	1.54 [39.1]	0.8 [23]
6120	6020	1.71 – 1.85	1.5:1/1.25:1	114	240 W	1.45 [36.8]	0.8 [23]
6125	6025	2.00 – 2.10	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6125-1	6025-1	2.00 – 2.30	2.0:1/1.50:1	110	350 W	1.19 [30.2]	0.7 [20]
6130	6030	2.20 – 2.30	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-1	6030-1	2.30 – 2.40	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-2	6030-2	2.40 – 2.50	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-3	6030-3	2.20 – 2.40	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-4	6030-4	2.30 – 2.50	1.5:1/1.25:1	110	350 W	1.19 [30.2]	0.7 [20]
6130-6	6030-6	2.20 – 2.50	2.0:1/1.50:1	110	350 W	1.19 [30.2]	0.7 [20]
6135-1	6035-1	3.10 – 3.30	1.5:1/1.25:1	106	350 W	1.19 [30.2]	0.7 [20]
6135-2	6035-2	3.45 – 3.55	1.5:1/1.25:1	106	350 W	1.19 [30.2]	0.7 [20]
6135-3	6035-3	3.65 – 3.85	1.5:1/1.25:1	106	350 W	1.19 [30.2]	0.7 [20]
6140	6040	4.50 – 5.00	1.5:1/1.25:1	104	1.5 kW	0.90 [22.9]	0.6 [17]
6150	6050	5.40 – 5.90	1.5:1/1.25:1	102	2.2 kW	0.75 [19.1]	0.6 [17]
6150-1	6050-1	5.27 – 5.75	1.5:1/1.25:1	102	2.2 kW	0.75 [19.1]	0.6 [17]
6150-2	6050-2	6.40 – 6.60	1.5:1/1.25:1	102	2.2 kW	0.75 [19.1]	0.6 [17]

- Thermal environments: -50°C to 150°C; 300°C Transient
- Polarization: Linear, predominately vertical Impedance: 50 Ohms Connector: SMA
- The above antennas are optionally available with TNC connectors or 100° inserts for M3 screws
- Lower frequency models available in different configurations
- Dimensions are provided on mechanical outline drawings available upon request

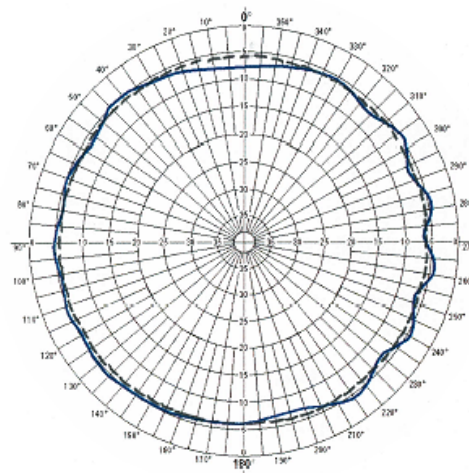
¹The 5kW altitude (k ft) is the approximate altitude at which the antenna will experience external corona with 5kW peak power.

²Peak power indicates the maximum power that may be radiated without experiencing external corona at any altitude. Blade antennas routinely handle average power in the 25-30W CW range. Sufficient airflow required at the higher power levels.



ELEVATION (PITCH)

Radiation Patterns in dB
Isotropic is 6 dB (dashed line)
Measured on a cylindrical groundplane



AZIMUTH (YAW)