



Haigh-Farr's Omnislot™ antennas provide the same radiation pattern characteristics as a stub or blade antenna in a thin, conformal, aerodynamic package. Omnislot™ antennas are preferable for use in applications where blade antennas may get damaged, such as net retrieval of RPV's and high aero-heating environments. Custom shape requirements are common.

Typical applications include data links for high-rate imaging and communications, as well as transponder signals. Designs are available from 300 MHz to 13 GHz.

The Omnislot™ antenna may be either flush mounted, or mounted directly to the exterior of the vehicle. The antenna may be secured to the vehicle using mechanical fasteners and/or adhesive bonding agents.

The antenna may be mounted inside a radome for enhanced ruggedization. For high aero-heating applications an ablative heat shield may be added.



Omnidirectional in Azimuth

FEATURES:

- Omnidirectional in Azimuth
- Designs from 300 MHz to 13 GHz
- Conformal - Flush or External Mounting
- Thin Fabrication .085" to .300"
- High Aero-Heating Protection Available
- Rugged Construction - Designed for Tactical Missile Environments
- Fastened or Bonded to Vehicle

APPLICATIONS:

- Data Links, Telemetry, Transponder
- Image Downlinks
- Aircraft
- Helicopters
- Drones
- Missed Distance Targets
- Missiles

DESIGN CAPABILITY:

Haigh-Farr has an over 50 year history of designing and producing exceptionally rugged, high-performance antennas. If you don't find an antenna meeting your requirements in our standard list of products, Haigh-Farr has the experience and modeling capability to customize a solution. Adaptations of existing designs can be done with very short lead times.

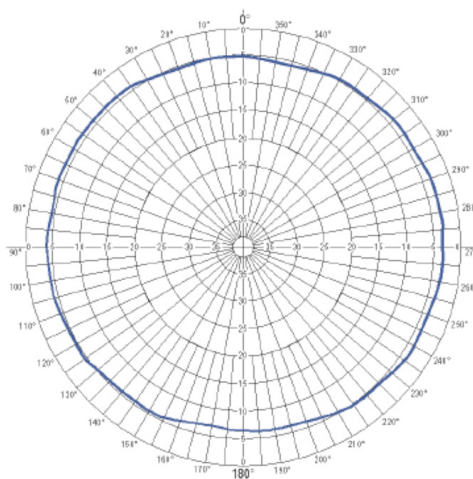
Contact Haigh-Farr for a review of your antenna requirements.



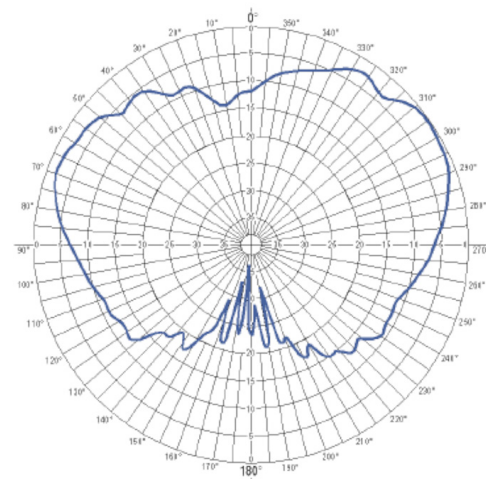
TYPICAL SPECIFICATIONS:

Operating Band:	300 MHz to 13 GHz
Input Impedance:	50 Ohms
Bandwidth:	Design parameter, 1% - 5%
VSWR (Across Band):	2:1 Max across Band
Power:	40 W cw, 5kW peak
Polarization:	Linear vertical
Radiation Pattern1:	See plots below
Connector:	SMA standard, other connector options available including direct cable feeds
Weight:	Function of electrical requirements 2.2 ounces (62g), basic S-Band antenna
Dimensions:	<ul style="list-style-type: none">• Design parameter• Basic S-Band antenna dimensions:<ul style="list-style-type: none">• Width: 3.7" (94 mm)• Length: 3.0" (76 mm)• Thickness: .16" (4 mm)
Mounting Surface:	Antenna is flexible and manufactured to naturally mate with specific cylindrical , conical or flat surface
Securing:	Screw and/or Bond
Altitude:	Any
Environment:	Design parameter, typical of tactical supersonic missiles and kinetic kill weapons

Omnidirectional in Azimuth



AZIMUTH (YAW) - 2300 MHz
ISOTROPIC - 6 dB



ELEVATION (PITCH) - 2300 MHz
ISOTROPIC - 6 dB

1 Radiation patterns are a function of the vehicle shape and size since the vehicle serves as the ground plane for the antenna. The patterns shown were measured on a typical smooth cylindrical ground plane.