



## Airborne Instrumentation Antennas



- For High Performance Aircraft, Missiles, Drones and Unmanned Aerial Vehicles
- Telemetry
- Miss-Distance Indicators
- Beacons
- Broadband, Omni-Directional
- Linear Polarization

For airborne vehicular instrumentation applications, TECOM offers this family of economical aerodynamic, bi-convex blade antennas. Each is pretuned to a specific frequency range. Models are available for both high and lower temperature regimes, and all are designed to work alone, or in arrays of two, three or more. Matching power dividers, specifically for multi-antenna use are also available from TECOM.

### Electrical Performance Specifications

#### Normal Thermal Environment

Type Number	Frequency Range	Function	Continuous Temperature		20 Seconds Temperature		VSWR	Drag (Lbs/Kg)**		Height (In/Cm)		Weight (oz/g)	
101002	1.435 - 1.54 GHz	Telemetry	400°F	205°C	840°F	450°C	1.5:1	1.25	0.57	1.58	4.02	1.5	42.5
104001	1.71 - 1.85 GHz	MDI	400°F	205°C	840°F	450°C	1.6:1	0.95	0.43	1.45	3.70	1.5	42.0
102002	2.2 - 2.29 GHz*	Telemetry	400°F	205°C	840°F	450°C	1.5:1	0.80	0.36	1.18	3.0	1.5	42.0
107001	4.5 - 5.0 GHz	MDI	400°F	205°C	840°F	450°C	1.75:1	0.40	0.18	0.75	1.90	0.85	24.0
106004	5.4 - 5.9 GHz	Beacon	400°F	205°C	840°F	450°C	1.75:1	0.35	0.16	0.60	1.52	0.75	21.0
108001	8.9 - 9.5 GHz	Beacon	400°F	205°C	840°F	450°C	2.0:1	0.30	0.14	0.50	1.25	0.65	18.0

#### Extreme Thermal Environment

Type Number	Frequency Range	Function	Continuous Temperature		20 Seconds Temperature		VSWR	Drag (Lbs/Kg)**		Height (In/Cm)		Weight (oz/g)	
101017	1.435 - 1.54 GHz	Telemetry	800°F	427°C	1100°F	600°C	1.5:1	1.25	0.57	1.58	4.02	2.2	62.0
104013	1.71 - 1.85 GHz	MDI	800°F	427°C	1100°F	600°C	1.6:1	0.95	0.43	1.45	3.70	1.7	48.0
102028	2.2 - 2.29 GHz*	Telemetry	800°F	427°C	1100°F	600°C	1.5:1	0.80	0.36	1.18	3.0	1.4	39.0
107002	4.5 - 5.0 GHz	MDI	800°F	427°C	1100°F	600°C	1.75:1	0.40	0.18	0.75	1.90	1.3	37.0
106020	5.4 - 5.9 GHz	Beacon	800°F	427°C	1100°F	600°C	1.75:1	0.35	0.16	0.60	1.52	1.3	37.0
108012	8.9 - 9.5 GHz	Beacon	800°F	427°C	1100°F	600°C	2.0:1	0.30	0.14	0.50	1.25	1.2	34.0

#### Common Electrical Performance Data:

- 1) Impedance: 50 Ohms
- 2) Average Power Handling: 20W

Note: These antennas are tuned to perform over a solid metallic ground plane

\*Also available 2.2 - 2.4 GHz \*\*Mach 2.5 at 50,000 ft

*Innovative Antenna Solutions*