

# Type 12-210

Broadband Antenna  
20 MHz - 2500 MHz

12-210-DS Issue 1

The most important thing we build is trust

# COBHAM



The **12-210 Broadband Antenna** is a passive blade antenna designed for receive only use over the frequency range 20 MHz to 2500 MHz in general airborne applications.

The **12-210** is configured as broadband fan monopole radiating element fed via a susceptance compensation network to enhance VHF gain, and minimal resistive loading to ensure compliance with the VSWR specification.

The **12-210** comprises a composite blade of aero foil section, which houses the electronic assembly, enclosed by an aluminium alloy baseplate that supports the single RF connector.

## Electrical Specification

Frequency	20 MHz - 2500 MHz	
Gain	dBi	MHz
	≥ -44	20
	≥ -12	88
	≥ -5	118
	≥ 0	174
	≥ 0 average	225 MHz - 2.5 GHz
Polarisation	Predominantly vertical when mounted vertically	
Radiation Pattern	Essentially omnidirectional in azimuth	
Impedance	50 Ohm nominal	
VSWR	< 3.0:1	
Connector	RF Type N female	

## Mechanical Specification

Dimensions (mm)	307.34 x 298.70 x 91.44
Weight (kg)	1.7
Mounting	6 holes fixed location

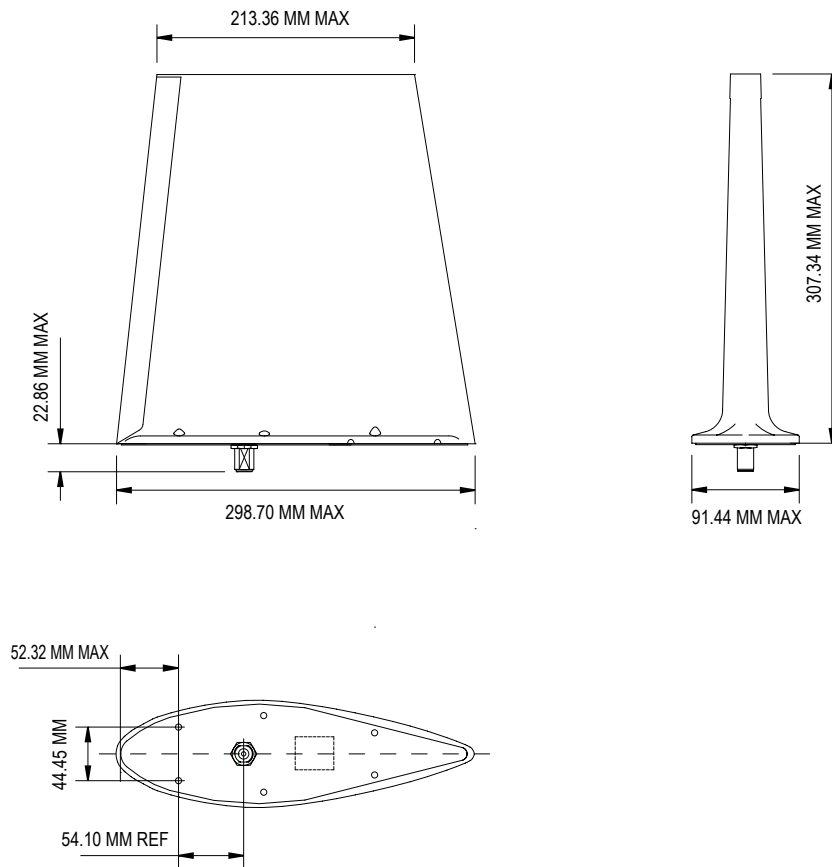
## Environmental Specification

High Temperature	MIL-STD-810E, Method 501.3, Procedures I and II
	Continuous Operation: +55°C
	Intermittent Operation: +71°C
	Storage: +85°C
Low Temperature	MIL-STD-810E, Method 502.3, Procedures I and II
	Operational: -54°C
	Storage: -57°C
Altitude	MIL-STD-810E, Method 500.3, Procedures I and II
	Operational: 50,000 feet
	Storage: 50,000 feet
Shock	MIL-STD-810E, Method 516.4, Procedures I and V
	Functional: 20 g, 11 ms, sawtooth
	Crash Hazard: 40 g, 11 ms, sawtooth
Vibration	MIL-STD-810E, Method 514.4, Procedure I, Category 5
Temperature Shock	MIL-STD-810E, Method 503.3
Magnetic Effect	Less than 1 deflection at 300 mm

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