

21-41

CHELTON

Tri-Band ELT Antenna

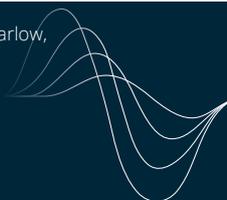
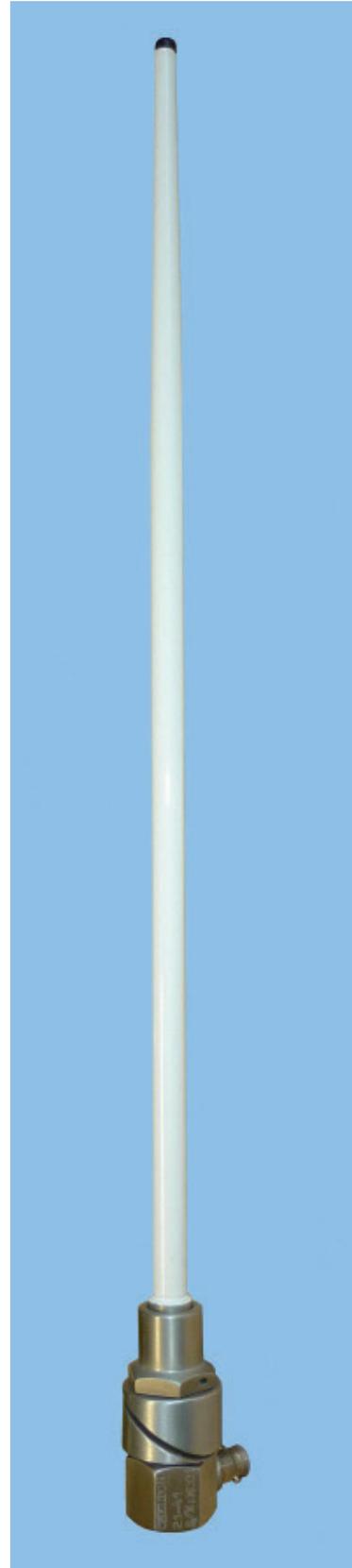
Key features:

- Lorem 1
- Lorem 2

The 21-41 Tri-Band ELT (Emergency Locator Transmitter) Antenna is a multiple frequency whip antenna for use in airborne applications.

It is fitted with decoupling circuits which prevent corruption of the radiation pattern at the upper frequencies and provides some loading to enhance performance at the lower frequencies.

The antenna consists of a tapered glass fibre sleeve supporting an aluminium alloy radiating element. The element assembly is fitted to a metal body carrying the coaxial connector.



Tri-Band ELT Antenna

ELECTRICAL

Frequency Range	121.5 MHz	± 1.8 MHz	
	243 MHz	± 2.5 MHz	
	406 MHz	± 0.1 MHz	
Gain	≥ 2 dBi at cardinal frequencies		
Polarisation	Predominantly vertical (when mounted vertically)		
Radiation Pattern	Essentially omnidirectional in azimuth		
Impedance	50 ohm (nominal)		
VSWR	121.5 MHz	±1.8 MHz	≤2.5:1
	243 MHz	±2.5 MHz	≤2.5:1
	406 MHz	±0.1 MHz	≤1.5:1

MECHANICAL

Overall Length	434 mm (maximum)		
Width of Body Base	23.4 mm (maximum) A/F		
Weight	0.14 kg (maximum)		
Mounting	Single hole self-fixing		

ENVIRONMENTAL

Temperature and Altitude	RTCA DO-160C, Section 4, Category C2		
	RTCA DO-160D, Section 4, Para 4.5.3		
	Operational:	+95°C Short Time	
	Survival:	+135°C for 5 mins	
Temperature Variation	RTCA DO-160C, Section 5, Category A		
Humidity	RTCA DO-160C, Section 6, Category C		
Shock	RTCA DO-160C, Section 7		
	Operational:	6g,	11ms
	Crash Safety (Impulse):	15g,	11ms
	Crash Safety (Sustained):	12g,	3secs
Vibration	RTCA DO-160C, Section 8, Category Y		
Waterproofness	RTCA DO-160C, Section 10, Category R		
Fluid Susceptibility	RTCA DO-160C, Section 11, Category F		
Fungus Resistance	RTCA DO-160C, Section 13, Category F		
Salt Spray	RTCA DO-160C, Section 14, Category S		
Magnetic Effect	RTCA DO-160C, Section 15, Class Z		

