# **CHELTON**

# 20-200-F18LP

## **Broadband Passive Blade Antenna**

30 - 400 MHz

### **Key Features:**

- Multiband passive
- Suitable for high performance aircraft
- Lighting protection
- Gain ≤ -26dBi at 30MHz
- Height 312mm (12.3 inches)

The 20-200-F18LP is a broadband passive blade antenna intended for use over the VHF and UHF communications bands of 30-88 MHz, 108-174 MHz and 225-400 MHz, plus 960-1220 MHz.

It has been designed for full lightning protection and has a mechanical structure that makes it suitable for use on high performance aircraft. It is intended for general airborne applications.



Frequency	30 MHz - 88 MHz
	108 MHz118 MHz
	118 MHz174 MHz
	225 MHz400 MHz
Gain	a) +3.5 dBi at 30 MHz
	b) +4.0 dBi at 40 MHz
	c) +5.0 dBi at 76 MHz
	d) +5.0 dBi at 88, 118, 127.5, 137, 156, 174, 225, 250, 300, 350 and 400 MHz
Polarisation	Predominantly vertical (when mounted vertically)
Radiation Pattern	Omnidirectional in azimuth (nominal)
Power Rating	960-1220 MHz 1.5 kW peak 0.04% duty cycle
Impedance	50 ohm (nominal)
VCIAID	
VSWR	30- 88 MHz ≤ 2.5:1
VSWK	30- 88 MHz ≤ 2.5:1 108-118 MHz ≤ 5:1
VSWR	50 00 2 2.0
VSWR	108-118 MHz ≤ 5:1



#### **MECHANICAL**

Dimensions (LxWxH)	457 x 91 x 312 mm
Weight	1.8 kg (maximum)
Connector	TNC Female

#### **ENVIRONMENTAL**

Temperature	Continuous Operating Min: -51°C Continous Operating Max: 70°C
Altitude	50,000 feet
Standards	MIL-STD-810
Shock	MIL-T-5422, paragraph 4.3
Salt Fog	MIL-STD-810, Method 509.2, Procedure I
Vibration	MIL-STD-810E, Method 514.6, Proc I, cat 5
Humidity	MIL-STD-810, Method 507.2 Procedure III

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