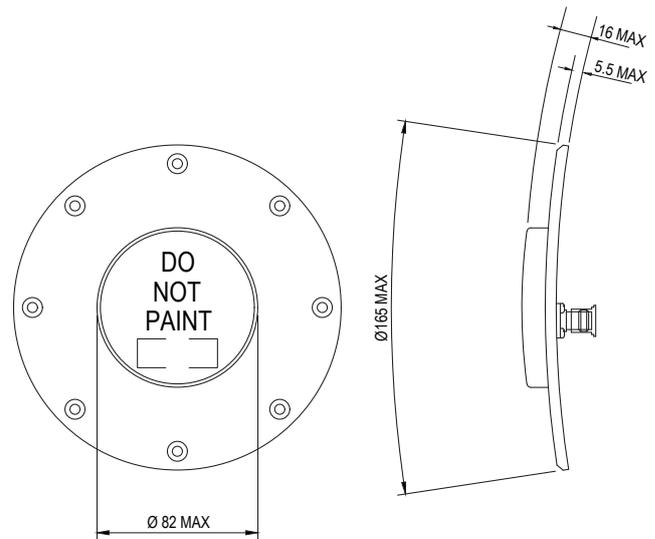


# 20-22

## Conformal L1 & L2 Low Profile GPS Antenna

# CHELTON



### Key features:

- L1 and L2 coverage
- Conformal
- Low profile

The 20-22 GPS antenna is designed to provide operation at both the L1 and L2 frequencies. It is of conformal construction and is supplied to meet local airframe contours. Interface with aircraft is via a TNC (female) coaxial connector.

### ELECTRICAL

<b>Frequency Range</b>	L1: 1565-1586 MHz L2: 1217-1238 MHz
<b>Polarisation</b>	Predominantly righthand circular polarization Axial ratio 3 dB max on boresight
<b>Impedance</b>	50 ohm (nominal)
<b>VSWR (Return Loss)</b>	>10.9 dB (<1.8:1)
<b>Radiation</b>	L1 and L2 nominally hemispherical coverage. Zenith Gain Nominally +7 dBiC L1 nominally -2.0 dBiC at 80° off zenith L2 nominally -3.5 dBiC at 80° off zenith Measured on 1m dia ground plane

### ENVIRONMENTAL

<b>Temperature</b>	Operational -55°C +95°C Intermittent -55°C +100°C
<b>Altitude</b>	100,100 ft
<b>Vibration</b>	Sine: MIL-STD-810D, Method 514.3, Proc I Random: DGT 23333-b, Zone 6, Fig 10 Gunfire: DGT 23333-b, zone 6, Fig 17
<b>Random Vibration</b>	DGT 23333-b, Zone 6, Fig 10
<b>Shock</b>	AIR 7306, Section 43 using test levels from NS 20702.
<b>Salt Atmosphere</b>	MIL-STD-810D, Method 509.2, Proc I
<b>Acceleration</b>	MIL-STD-810D, Method 513. 3, Proc I modified. 25.5 g
<b>Blowing Rain</b>	MIL-STD-810D, Method 506.2, Proc I

### MECHANICAL

<b>Height</b>	16 mm (0.63")
<b>Width</b>	166 mm (6.54")
<b>Length</b>	166 mm (6.54")
<b>Max Weight</b>	0.42 kg (0.93 lbs)
<b>Connectors</b>	TNC Female
<b>Mounting</b>	8 holes fixed location