

Lightweight ILS VOR/LOC Antenna

The 19-78 antenna, in conjunction with an appropriate phasing coupler unit, provides for reception of LOC (Localiser) and VOR (VHF Omni Range) signals.

The antenna comprises a pair of blades for horizontally opposed mounting on an aircraft, one on each side of the vertical stabiliser or fuselage.

The balanced loop design assures an omnidirectional radiation pattern at the horizon to obtain maximum signal for standard VOR/LOC.

The 19-78 is designed to be used with a Type 7-47-1 or 7-78 coupler.

The antenna is available with either a TNC or BNC RF connector.

Each loop assembly is housed within a one-piece glass-fibre moulding. The loop assembly is protected against the effects of moisture.



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ELECTRICAL

Frequency	108 MHz - 118 MHz	
VSWR	≤ 5.0:1	
Polarisation	Essentially horizontal when mounted horizontally	
Radiation	Nominally omnidirectional in azimuth	
Power Rating	25 W CW maximum 30 MHz-512 MHz 1.5 kW peak 0.04% duty cycle 1000 MHz-1100 MHz	
Impedance	50 ohm (nominal)	
Connectors	Model	Connector
	19-78	TNC Female
	19-78B	BNC Female

ELECTRICAL

Dimensions (LxWxH)	150 x 365 x 48.3 mm (maximum)
Weight	0.5 kg (maximum)
Mounting	4 holes fixed location

ENVIRONMENTAL

Altitude	RTCA/DO160C, Section 4, Category D2 15240 metres
Temperature	RTCA/DO160B, Section 4, Category C2 Operational: -55°C to +70°C Occasional: -55°C to +70°C Storage: -55°C to +85°C RTCA/DO160C, Section 4, Category D2
Temperature Variation	RTCA/DO160B, Section 5, Category A
Humidity	RTCA/DO160B, Section 6, Category C
Operational Shocks and Crash Safety	RTCA/DO160B, Section 7 Operational: 18 shocks, 6 g, 11 ms Crash Safety: 6 shocks, 15 g, 11 ms (Impulse) Crash Safety: 12 shocks, 3 s in 6 directions (Sustained)
Vibration	RTCA/DO160B, Section 8, Categories L, J, R
Explosion Proofness	RTCA/DO160C, Section 9, Category X
Waterproofness	RTCA/DO160B, Section 10, Category R
Fluids Susceptibility	RTCA/DO160C, Section 11, Category F
Sand and Dust	RTCA/DO160C, Section 12, Category X
Fungus Resistance	RTCA/DO160C, Section 13, Category F
Salt Spray	RTCA/DO160C, Section 14, Category X
Magnetic Effect	RTCA/DO160B, Section 15, Zone Z

