

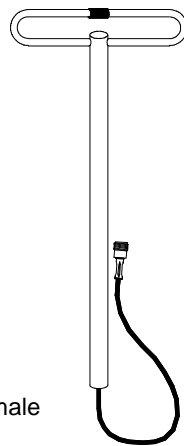


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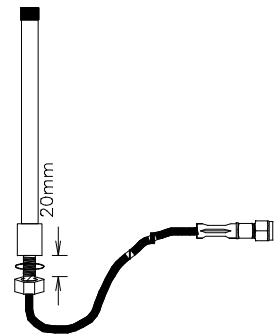
Technical Note TN-16

850-930 MHz OMNI Antenna Characteristics

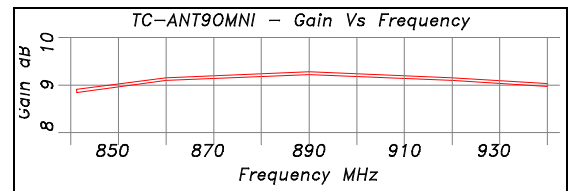
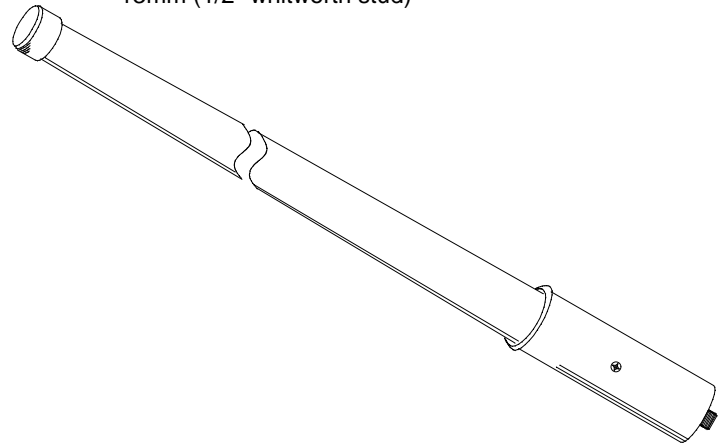
Type (model #)	TC-ANTOMNI
Gain (note 1)	Unity gain
Impedance	50 Ohm
Overall Length	20 cm (boom)
Tube Diameter	20 mm
Wind Loading (160 kph)	1.4 kg
Effective Wind Area	131 sq cm
Material	Stainless Steel
Pattern	Omni (note 2)
Bandwidth E Plane	$\pm 50^\circ$
Tail Connection	150 mm N type female
Mounting Hole	-



Type (model #)	TC-ANTDIPOLE
Gain (note 1)	Unity gain
Impedance	50 Ohm
Overall Length	395mm (+20mm)
Tube Diameter	16 mm (base 19mm)
Wind Loading (160 kph)	-
Effective Wind Area	-
Material	Fibreglass Tube (white)
Pattern	Omni
Bandwidth E Plane	$\pm 76^\circ$
Tail Connection	3m low loss RG58 with SMA connector
Mounting Hole	13mm (1/2" whitworth stud)

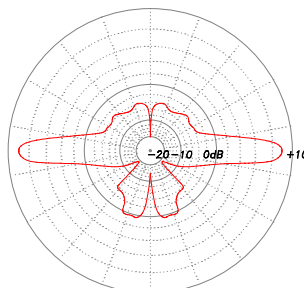


Type (model #)	TC-ANT9OMNI
Gain (note 1)	9dBd
Impedance	50 Ohm
Overall Length	3310 mm
Support Tube Dia.	63 mm
Support Tube Length	710 mm
Weight	7 kg
Wind Loading	7.2 kg (175 kph)
Lateral Thrust @ 175KM/h	0.3kN
Lightning Protection	DC Ground
Effective Wind Area	0.05 m ²
Material	Stainless Steel/fibreglass
Pattern	Omni (note 2)
Bandwidth E Plane	$\pm 7.5^\circ$
Connection	Direct mount N female



Note: Galvanised 90° U clamps (50mm dia max.) available Part # TC-CLAMPS.

E Plane Polar Characteristics



Note 1: Gain if referred to a standard dipole and varies with frequency as shown.

Note 2: Mounting omni antennas close to other structures will distort their circular pattern and affect gain and VSWR.