

# 1/4 λ Glass fibre Ground-Plane Antenna for the 160 MHz Band

### **DESCRIPTION**

- > GP 160 is a glass fibre ground-plane antenna of the triple-leg type.
- > The antenna is tunable (by cutting) within its main frequency band: 145 175 MHz, but is further applicable up to 400 MHz.
- > The cutting diagrams below indicate the length of the radiator and the radials corresponding to a specific frequency. It is recommended to use the curves as a guide and fine-tune using an VSWR-meter.
- > The antenna comprises a GP-head made of chromed brass, one glassfiber radiator and three glass fibre radials.
- GP 160 is made of first-class materials and will endure "wear and tear" for years - no maintenance required.
- > LW-SS-1" mounting bracket and GP Adaptor is available as accessories.



### **SPECIFICATIONS**

Environmental

Operating temperature range

Electrical	
Model	GP 160
Frequency	Tunable by cutting within: 145 - 175 MHz (Also applicable: 175 - 400 MHz)
Antenna Type	Ground-plane
Max. Input Power	1 kW
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
VSWR	≤ 1.2 @ f. res.
Bandwidth	12 MHz @ 160 MHz (VSWR < 2.0) 30 MHz @ 400 MHz (VSWR < 2.0)

Mechanical	
Connection(s)	UHF(f) (fitting PL 259)
Materials	Shroud : Polyurethane-coated glass fibre Metal parts: Bright chromed brass
Colour	White (RAL 9003) / Bright chrome
Wind Area	0.0184 sq. m / 0.20 sq. ft
Wind Load	23 N (160 km/h)
Dia. At Top End	5 mm / 0.20 in.
Dia. At Bottom End	8 mm / 0.31 in.
Height	Approx. 870 mm / 34.25 in.
Weight	Approx. 1.0 kg / 2.20 lb.
Mounting	38 mm dia. mast tube (42 mm dia. as option, see note)
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-30 °C to +70 °C

## **ORDERING**

Model	Product No.
GP 160	100000104
GP 160/42 mm	100000105
Accessories	
Accessories LW-SS-1"	110000394

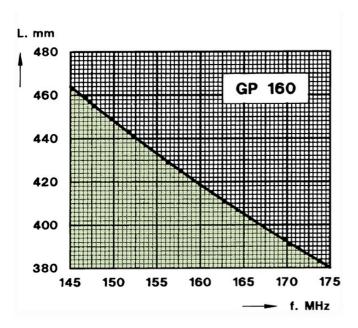
#### PLEASE NOTE

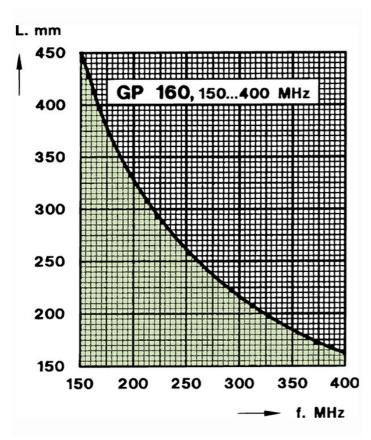
The GP 160 can be delivered with a GP-head for mounting on 42 mm dia. mast tube (standard is 38 mm) when ordering as option GP 160/42 mm.

The radiator is measured from its free end to the bottom of the black insulator, while the radials are measured from their free ends to where they meet the GP-head.



## **CUTTING DIAGRAMS**





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