

Installation Manual

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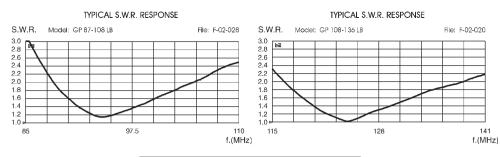
DESCRIPTION

 $1/4 \lambda$ Ground Plane wide-band antenna for base station service. It is made of aluminium and hiquality materials to get the best efficiency and robustness. Its radial whip is earthed to be protected against the static discharges. GP 87-108 LB is developed for FM radio band and GP 108-136 LB is particularly recommended for the aereonautic band service.

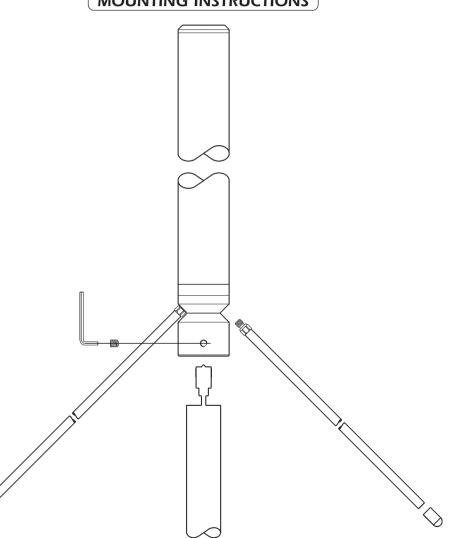
SPECIFICATIONS

Electrical Data Tuna

Туре	:	1/4 λ Folded Ground Plane
Frequency Range		
GP 87-108 LB	:	RADIO band: 87-108 MHz at V.S.W.R. ≤ 2.5 :1
GP 108-136 LB	:	VHF AIR. band: Rx 108-136 MHz; Tx 118-136 at V.S.W.R. ≤ 2:1
Impedance	:	50 Ω Unbalanced
Radiation (H-plane)	:	360° Omnidirectional
Radiation (E-plane)	:	Beamwidth at -3 dB = 78°
Radiation angle deg.	:	0°
Polarization	:	Vertical
Gain	:	0 dBd - 2.15 dBi
Bandwidth at V.S.W.R. 2:1		
GP 108-136 LB	:	22 MHz
V.S.W.R. at res. freq.	:	≤1.2:1
Max Power		1000 Watts
Feed System / Position	:	Direct DC-Ground / Center
Connector		
GP 87-108 / 108-136 LB-U		LIHE Female
GP 87-108 / 108-136 LB-N		N Female
Mechanical Data		
Materials		Anodized Aluminium, Nylon, Stainless Steel
Wind Load / Resistance		7 a louizeu 7 autrin liutti, rayioti, stell liess steel
GP 87-108 LB		67 N at 150 Km/h / 160 Km/h
GP 108-136 LB		56 N at 150 Km/h / 160 Km/h
Wind Surface	•	
GP 87-108 LB	:	0.06 m ²
GP 108-136 LB	•	0.05 m ²
	•	0.05 11
Height (approx.)		1190 mm
GP 87-108 LB	•	
GP 108-136 LB		890 mm
Weight (approx.)		1500
GP 87-108 LB	:	1500 gr
GP 108-136 LB	:	1310 gr
Mounting Mast	:	Ø 36-40 mm



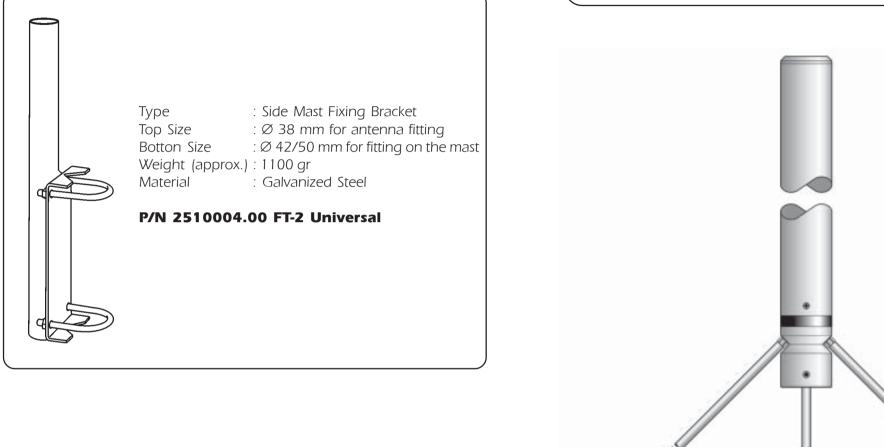
MOUNTING INSTRUCTIONS



OPTIONAL FT-2 FIXING BRACKET

Model GP I60 LB

VHF Base Station Antenna 145-175 MHz



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DESCRIPTION

MOUNTING INSTRUCTIONS

 $1/4~\lambda$ wide-band antenna for base station service covering the frequency range of 145-175 MHz. It as been developped according to the most modern technologies to assure a perfect protection against the worst atmospheric climates and to get the best performance. It is entirely made of aluminium to assure strength and robustness and its radial whip is earthed. Its 30 MHz bandwidth makes it particularly recommended for relay stations or two-party systems.

SPECIFICATIONS

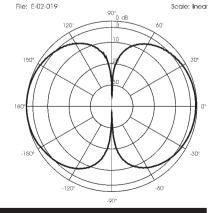
Electrical Data

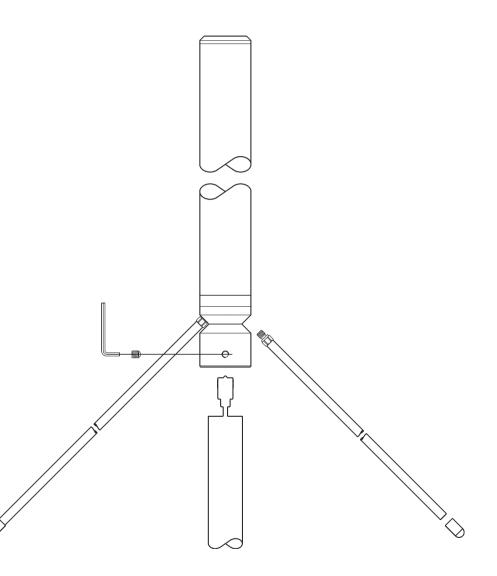
Type Frequency Range Impedance Radiation (H-plane) Radiation (E-plane) Radiation angle deg. Polarization Gain Bandwidth at V.S.W.R. 2:1 V.S.W.R. at res. freq. Max Power Feed System / Posistion Connector		1/4 λ Folded Ground Plane 145-175 MHz at V.S.W.R. $\leq 2:1$ 50 Ω Unbalanced 360° Omnidirectional Beamwidth at -3 dB = 78° 0° Vertical 0 dBd - 2.15 dBi 30 MHz $\leq 1.2:1$ 1000 Watts Direct DC-Ground / Center
Feed System / Posistion		
GP 160 LB - U GP 160 LB - N	:	UHF Female, gold plated central pin N Female, gold plated central pin and teflon insulator

Mechanical Data

Materials	:	Anodize
Wind Load / Resistance	:	43 N at
Wind Surface	:	0.04 m
Height (approx.)	:	700 mr
Weight (approx.)	:	1150 g
Mounting Mast	:	Ø 36-4

Anodized Aluminium, Nylon, Stainless Steel 13 N at 150 Km/h / 160 Km/h 0.04 m² 700 mm 150 gr 8 36-40 mm TYPICAL RADIATION PATTERN In E-plane at 160 MHz





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