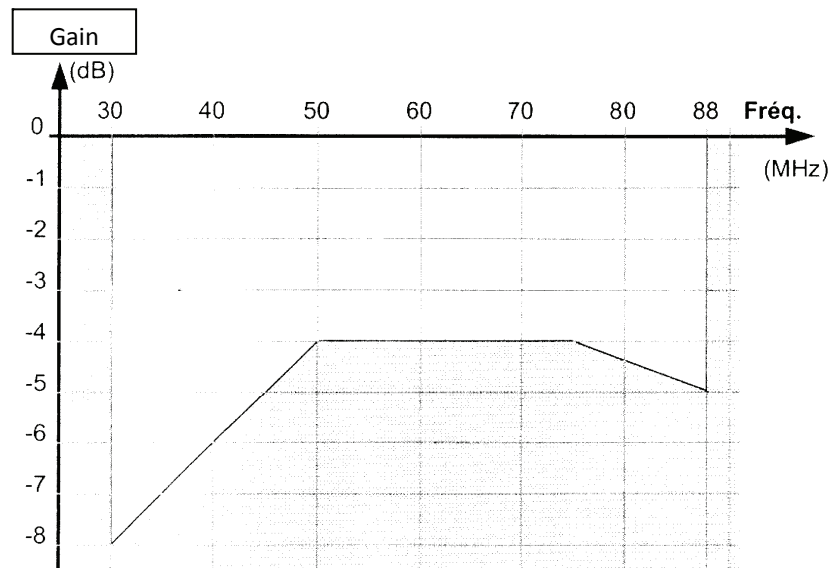
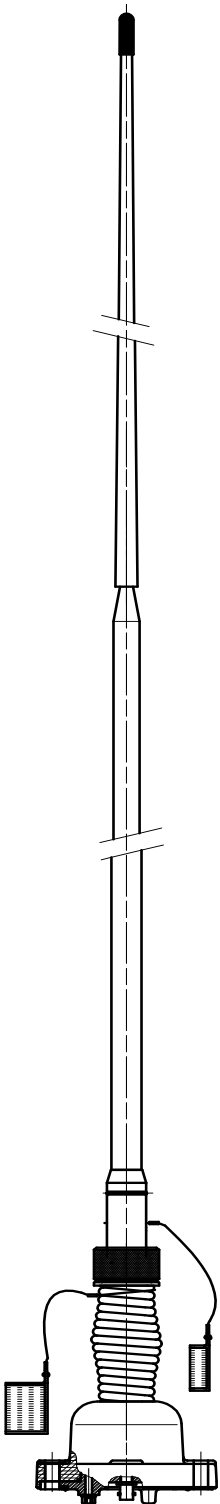


GENERAL DESCRIPTION AND APPLICATION

Center-Fed antenna type particularly designed for vehicles without ground plane. Works in E/R without tuning in the whole band 30-88MHz, with optional GPS antenna. Whips made of high resistance fiberglass reinforced Epoxy resin. Protected against EMP threat and compatible with all VHF hopping combat radios. A mast adapter is available as option (GPS antenna does not work when installed on

GENERAL SPECIFICATION

Description	LB3088SF/4E	LB3088SF/4E-GPS
Frequency	30-88 MHz	
Weight	3.4 kg	
Polarisation	Vertical	
VSWR (normal configuration)	≤ 3.5:1	
Impedance	50 Ω	
Gain	See below...	
Power	100 w	
Colour	Army Green or Sand	
Connection	BNC Female	VHF - BNC female
Length	3380 mm	3442 mm



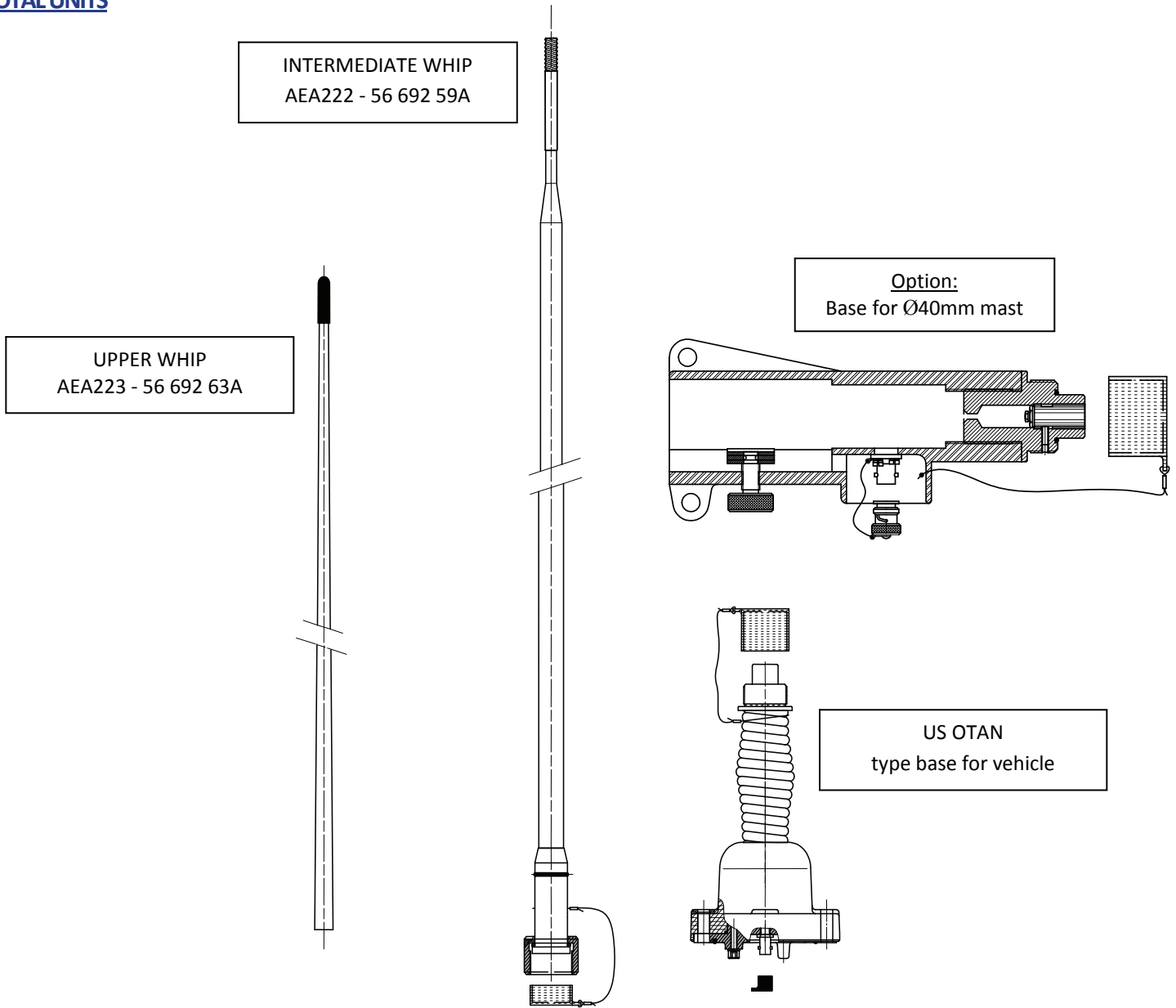
Sketch 0: Typical value of gain vs. Reference dipoles

Test	Severity	Norm
MECHANICAL CHARACTERISTICS		
Sinusoid vibrations	3 axes	GAM-T13, 1 st part, sheet n°41-02, BA331 MIL-STD-810E, method 514-4
Mechanical chocks	3 chocks ½ Sinus	GAM-T13, 1 st part, sheet n°43, 3F1 MIL-STD-810E, method 516-3, procedure I
Free fall down	26x1,20m fall down on a pine sheet	GAM-T13, 1 st part, sheet n°46, BB1 MIL-STD-810E, method 516-4, procedure IV
Passage under gantry	25 passages at 40km/h	-
Endurance test	8h	-
Whip threading strength	225daN during 1 minute	-
ENVIRONMENTAL CHARACTERISTICS		
Minimal temperature for operation	-40°C / 16h	GAM-T13, 1 st part, sheet n°01-01, BD1 MIL-STD-810E, method 502-3, procedure II
Minimal temperature for storage	-40°C / 72h	GAM-T13, 1 st part, sheet n°01-02, CD1 MIL-STD-810E, method 502-3, procedure I
High dry temperature for operation	+70°C / 16h	GAM-T13, 1 st part, sheet n°02-01, BC1 MIL-STD-810E, method 501-3, procedure II
High dry temperature for storage	+70°C / 72h	GAM-T13, 1 st part, sheet n°02-02, CC2 MIL-STD-810E, method 501-3, procedure I
High wet temperature for operation	+40°C to 93% HR	GAM-T13, 1 st part, sheet n°03-01, 1 CA1 MIL-STD-810E, method 507-3, procedure III
High wet temperature for storage	+40°C to 93% HR	GAM-T13, 1 st part, sheet n°03-02, 10 CA1 MIL-STD-810E, method 507-3, procedure III
Salt fog	96 hours at 35°C	GAM-T13, 1 st part, sheet n°04-01, AE2 MIL-STD-810E, method 509-3
Altitude (operation)	-40°C, 570mbar, 16 hour	GAM-T13, 1 st part, sheet n°05-01, BB1 MIL-STD-810E, method 500-3, procedure II
Air transport	-40°C, 330mbar, 16 hours	GAM-T13, 1 st part, sheet n°05-01 MIL-STD-810E, method 500-3, procedure I
Solar radiation	168 hours at Xenotest 168 hours at 1120 W/m ²	GAM-T13, 1 st part, sheet n°09, 168C1 MIL-STD-810E, method 505-3, procedure II
Rain	500 ±100mm/h, 30mn	GAM-T13, 1 st part, sheet n°12 MIL-STD-810E, method 506-3, procedure III
Immersion	depth 1m, 2 hours	GAM-T13, 1 st part, sheet n°15, AB1 MIL-STD-810E, method 512-3, procedure I
Sand and dust	16h / 3 directions	GAM-T13, 1 st part, sheet n°18, AA2 MIL-STD-810E, method 510-3, procedure I
Ice, condensation, unfreezing	5 cycles -10°/-20°	GAM-T13, 1 st part, sheet n°22, 5AB2 MIL-STD-810E, method 521-1
ELECTROMAGNETIC CHARACTERISTICS		
Ground continuity	B : r ≤ 10mW	GAM-T13, 1 st part, sheet n°61
Dielectric strength	Tension of 50Hz, 1500V eff., 1 minute	GAM-T13, 1 st part, sheet n°82 MIL-STD-202, method 301
EMP-HA	Compliant with PR4G specification	

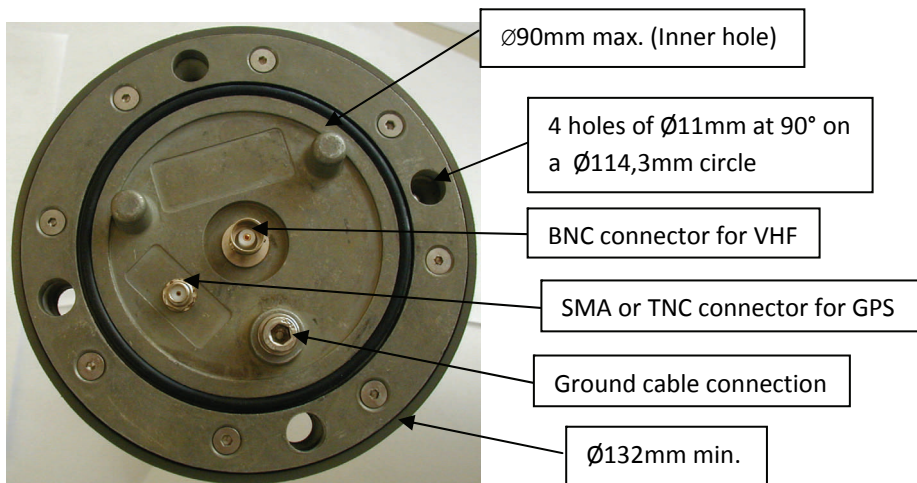
OPTIONAL GPS ANTENNA+AMPLIFIER (3V or 5V supply)

Overall specifications	LB3088SF/4E-GPS-3V (ref.76675-1)	LB3088SF/4E-GPS-5V (ref.76675-2)
Frequency range	1575.42 ± 1.023 MHz	
VSWR	2.0 max	
Polarization	RHCP	
Gain	27 ± 4 dBi	
Noise figure	1.6 dB max (+25°C)	2.0 dB max (+25°C)
input voltage	3.0V ± 0.3V	5.0V ± 0.5V
power consumption	15mA max	30mA max
connection	SMA	

TOTAL UNITS



VEHICLE INSTALLATION



US OTAN
type base for vehicle



INSTALLATION ON MAST

The LB3088SF/4E antenna may also be installed on a $\text{Æ}40\text{mm}$ mast, thanks to its mast adapter.

Both whips may be dismantled from vehicle and be used on mast adapter for mast installation. COMROD can also provide masts to support one or two antennas:



Sketch 1: 2 antennas on ULM-11/QESH mast



Sketch 2: Optional mast adapter $\text{Ø}40\text{mm}$

This antenna is composed of 1 upper whip, 1 intermediate whip and 1 universal mast adapter.

CODIFICATION

Description	COMROD reference	THALES Reference	NSN
VHF Center-Fed antenna for vehicle	F3435-76560	ANT213	5985-14-533-1266
VHF Center-Fed antenna for mast	F3435-76573	ANT215	
VHF Center-Fed antenna for vehicle with 3V GPS	F3435-76675-1	ANT223	
VHF Center-Fed antenna for vehicle with 5V GPS	F3435-76675-2		