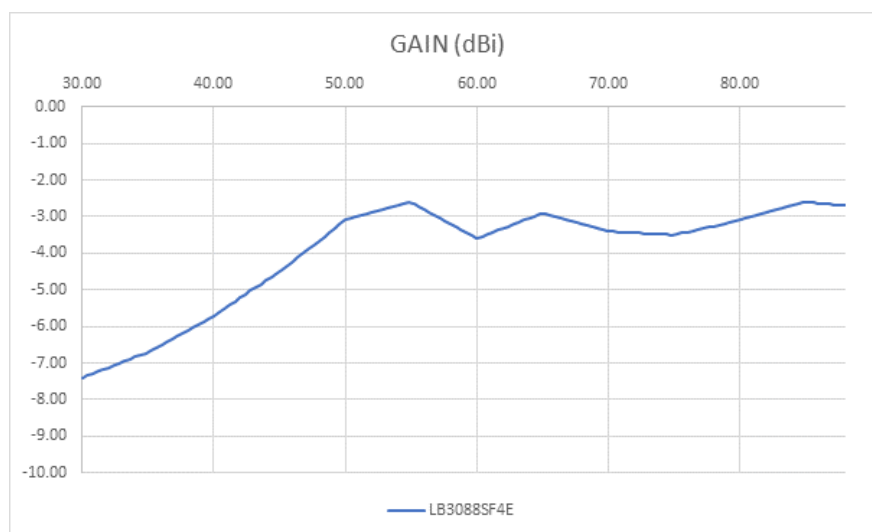


### GENERAL DESCRIPTION AND APPLICATION

LB3088SF/4E is a center-fed (dipole) antenna type particularly suited to vehicles without ground plane. Works in E/R without tuning in the 30-88MHz band, with optional GPS antenna. Whips are manufactured from high resistance fiberglass reinforced epoxy resin. Protected against EMP threat and compatible with all VHF hopping combat radios. A optional mast adapter is available to elevate the antenna.

### GENERAL SPECIFICATION

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

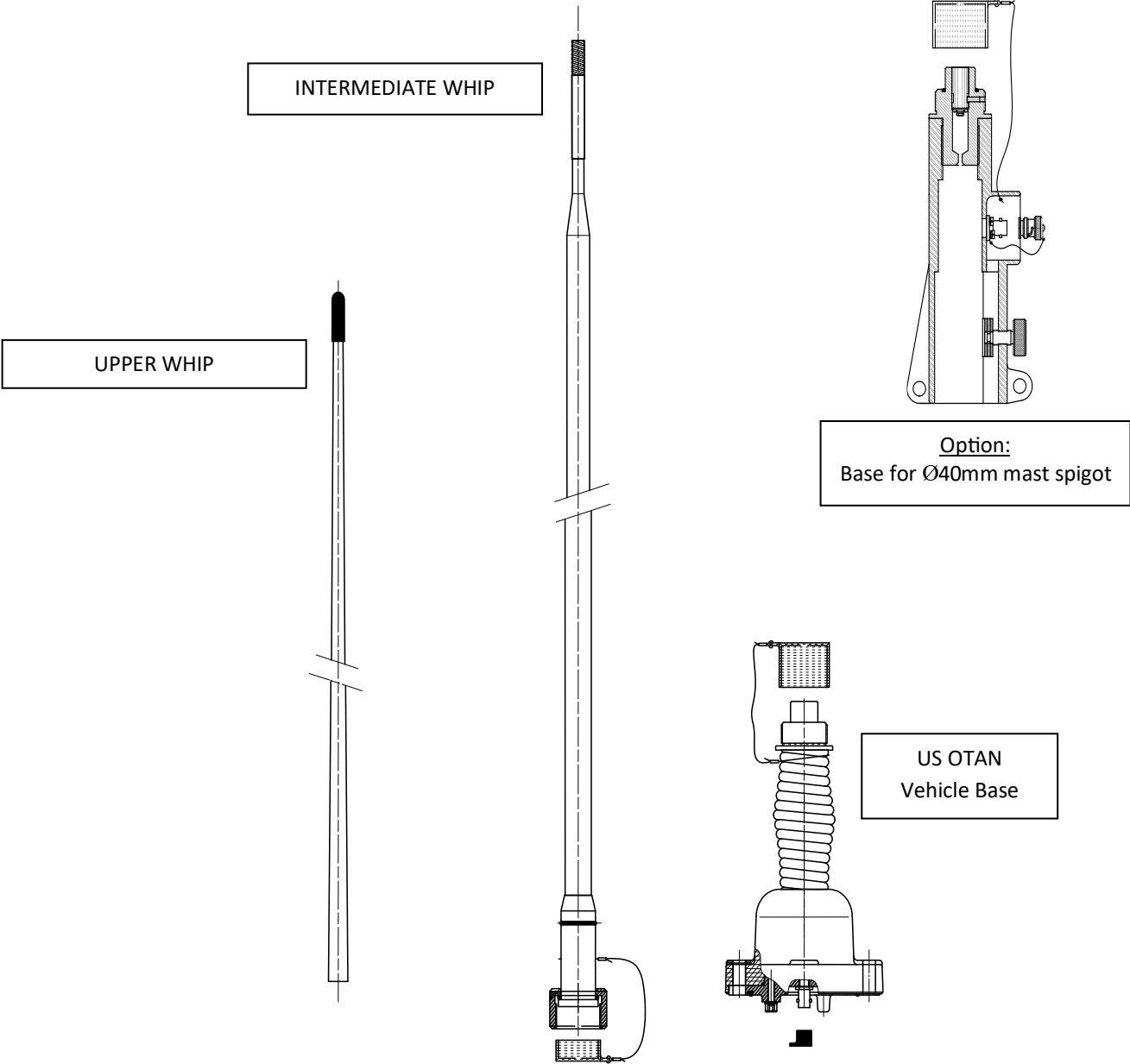


Test	Severity	Norm
<b>MECHANICAL CHARACTERISTICS</b>		
Sinusoid vibrations	3 axes	GAM-T13, 1 <sup>st</sup> part, sheet n°41-02, BA331 MIL-STD-810E, method 514-4
Mechanical chocks	3 chocks ½ Sinus	GAM-T13, 1 <sup>st</sup> part, sheet n°43, 3F1 MIL-STD-810E, method 516-3, procedure I
Free fall down	26x1,20m fall down on a pine sheet	GAM-T13, 1 <sup>st</sup> 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	-
<b>ENVIRONMENTAL CHARACTERISTICS</b>		
Minimal temperature for operation	-40°C / 16h	GAM-T13, 1 <sup>st</sup> part, sheet n°01-01, BD1 MIL-STD-810E, method 502-3, procedure II
Minimal temperature for storage	-40°C / 72h	GAM-T13, 1 <sup>st</sup> 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 <sup>st</sup> 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 <sup>st</sup> 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 <sup>st</sup> 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 <sup>st</sup> 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 <sup>st</sup> part, sheet n°04-01, AE2 MIL-STD-810E, method 509-3
Altitude (operation)	-40°C, 570mbar, 16 hour	GAM-T13, 1 <sup>st</sup> part, sheet n°05-01, BB1 MIL-STD-810E, method 500-3, procedure II
Air transport	-40°C, 330mbar, 16 hours	GAM-T13, 1 <sup>st</sup> 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 <sup>2</sup>	GAM-T13, 1 <sup>st</sup> part, sheet n°09, 168C1 MIL-STD-810E, method 505-3, procedure II
Rain	500 ±100mm/h, 30mn	GAM-T13, 1 <sup>st</sup> part, sheet n°12 MIL-STD-810E, method 506-3, procedure III
Immersion	depth 1m, 2 hours	GAM-T13, 1 <sup>st</sup> part, sheet n°15, AB1 MIL-STD-810E, method 512-3, procedure I
Sand and dust	16h / 3 directions	GAM-T13, 1 <sup>st</sup> part, sheet n°18, AA2 MIL-STD-810E, method 510-3, procedure I
Ice, condensation, unfreezing	5 cycles -10°/-20°	GAM-T13, 1 <sup>st</sup> part, sheet n°22, 5AB2 MIL-STD-810E, method 521-1
<b>ELECTROMAGNETIC CHARACTERISTICS</b>		
Ground continuity	B : r ≤ 10mW	GAM-T13, 1 <sup>st</sup> part, sheet n°61
Dielectric strength	Tension of 50Hz, 1500V eff., 1 minute	GAM-T13, 1 <sup>st</sup> part, sheet n°82 MIL-STD-202, method 301
EMP-HA	Compliant with PR4G specification	

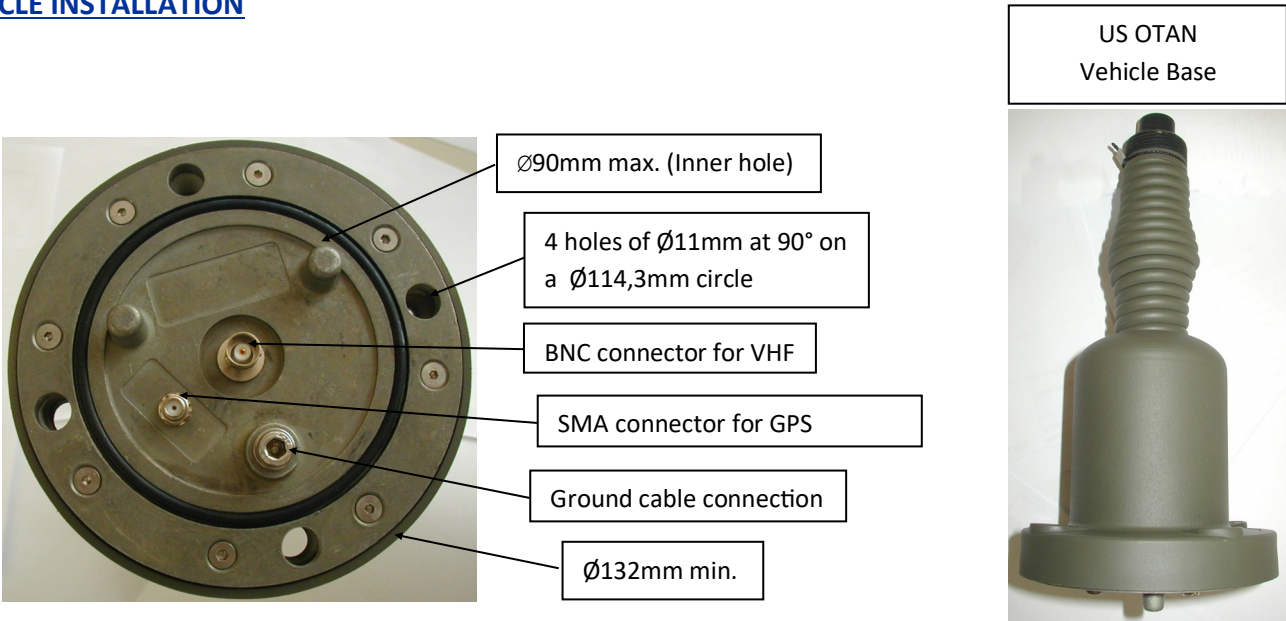
### OPTIONAL GPS ANTENNA+AMPLIFIER (3V or 5V supply)

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	

ANTENNA KIT CONTENTS



VEHICLE INSTALLATION



## INSTALLATION ON MAST

The LB3088SF/4E antenna may also be installed on a mast using the optional mast adapter. The adaptor is compatible with a Ø40mm spigot.

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



2 antennas on ULM-11/QESH mast



Optional mast adapter Ø40mm

This antenna kit comprises 1 upper whip, 1 intermediate whip and 1 universal mast adapter.

## CODIFICATION

Description	COMROD Reference No.
VHF Center-Fed antenna for vehicle	F3435-76560-2
VHF Center-Fed antenna for mast	F3435-76573-1
VHF Center-Fed antenna for vehicle with 3V GPS	F3435-76675-1
VHF Center-Fed antenna for vehicle with 5V GPS	F3435-76675-2
VHF Center-Fed antenna for mast with coaxial cable and transport bag	F3435-76815-1