

# LB3088D/4E and LB3088D/4E-GPS

VHF sectional vehicle whip, monopole, (GPS), 2.7 m, 30-88 MHz

## Tactical Antennas: Vehicle Mount



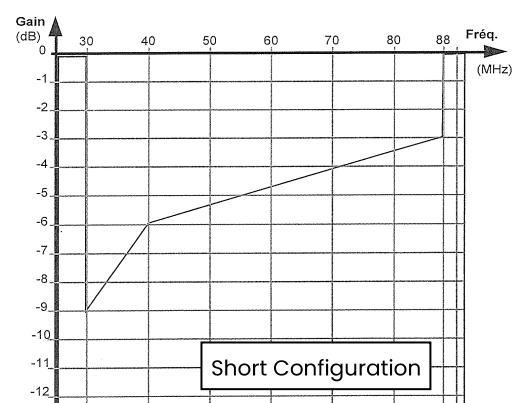
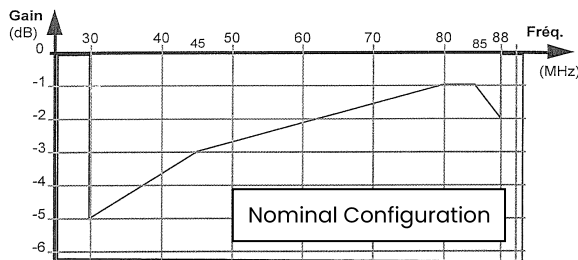
### General Description and Application

End-Fed antenna type particularly designed for vehicles with ground plane. Works in E/R without tuning in the whole band 30-88MHz. Protected against EMP threat and compatible with all VHF hopping combat radios.

Works in Short (1 whip) or Nominal (2 whips) configurations to allow full omnidirectional communication pattern even on high vehicles (no need to tie-down).

### General Specifications

Description	LB3088D/4E	LB3088D/4E-GPS
Frequency	30-88 MHz	
Weight	2.5 kg	
Polarisation	Vertical	
VSWR (Normal Configuration)	≤ 3:1	
VSWR (Short Configuration)	≤ 4:1	
Impedance	50 Ω	
Gain	See below	
Power	100 W	
Colour	Army Green or Sand	
Connection	BNC Female	VHF - BNC female GPS - SMA or TNC female
Length (Normal Configuration)	2750 mm ± 25 mm	2794 mm ± 25 mm
Length (Short Configuration)	1500 mm ± 25 mm	1544 mm ± 25 mm



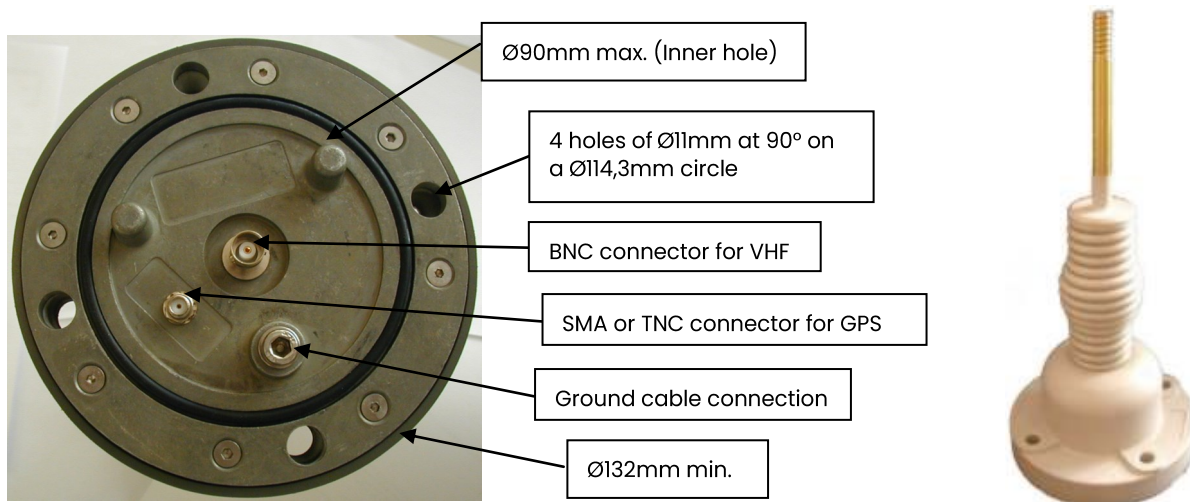
Test	Severity	Norm
<b>Mechanical Specifications</b>		
Sinusoid Vibrations	3 axes	GAM-T13, 1 <sup>st</sup> part, sheet n°41-02, BA331 MIL-STD-810E, method 514-4
Mechanical Chocks	3 chocks ½ Sinus	GAM-T13, 1 <sup>st</sup> part, sheet n°43, 3F1 MIL-STD-810E, method 516-3, procedure I
Free Fall Down	26 x 1.20m 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 Specifications</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

Test	Severity	Norm
<b>Electromagnetic Specifications</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)

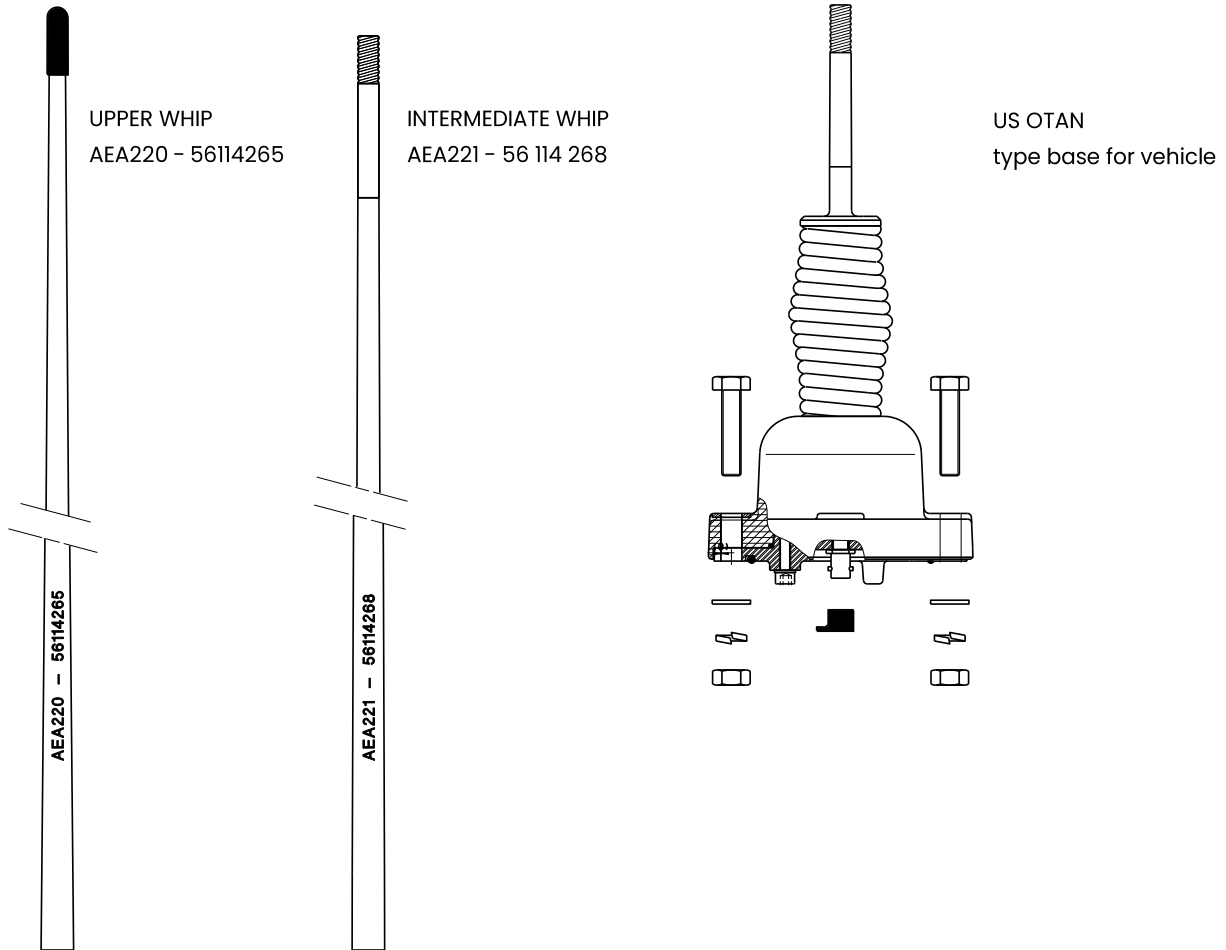
Overall Specifications	LB3088D/4E-GPS-3V (ref.76702-1)	LB3088D/4E-GPS-5V (ref.76702-2)
Frequency Range	1575.42 ± 1.023 MHz	
VSWR	2.5:1 max	
Polarisation	RHCP	
Gain	27 ± 4 dBi	
Noise Figure	1.6 dB max (+25°C)	2.0 dB max (+25°C)
Input Voltage	3.0V ± 0.3V	5.0V ± 0.5V
Power Consumption	15mA max	30mA max
Connection	SMA	

### Vehicle Installation



**NOTE:** A special design (vehicle base) is available for LEOPOARD I armoured vehicles.

## Total Units



## Codification

### Description

VHF End-Fed antenna for vehicle  
 VHF End-Fed antenna for vehicle with 3.3V GPS  
 VHF End-Fed antenna for vehicle with 5V GPS

### Comrod Reference

F3435-76423  
 F3435-76702-1  
 F3435-76702-2

### Thales Reference

ANT209  
 ANT222

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All specifications are subject to change without notice  
 The information contained herein is for reference only and does not constitute a warranty of performance

Partnered Supplier



sales@eylex.com.au  
 www.eylex.com.au

