

GENERAL DESCRIPTION

The LB3088W is a VHF 30-88 MHz wire dipole antenna designed to give higher performance than a VHF Dipole antenna (at the same power) in a compact and flexible solution. The antenna is EMP protected.

APPLICATION

For special forces needing high performance with a compact and low weight. This antenna can be deployed using a lightweight mast or by hoisting using trees. COMROD proposes using the ultra-light 9 metre mast, just 3kg total weight.

CONSTRUCTION

The antenna is made of:

- Radiating wire with 30 to 88MHz matching unit and BNC/f connector
- Coaxial cable (about 6m) with BNC/m connectors
- Rope with a weight for antenna elevation in a tree
- Winder for the rope and the wire antenna
- Transport bag

The colour of the antenna is NATO Green 24x5

DIMENSIONS

Weight for transport: 1kg
Dimension of transport bag: 160x260x90mm

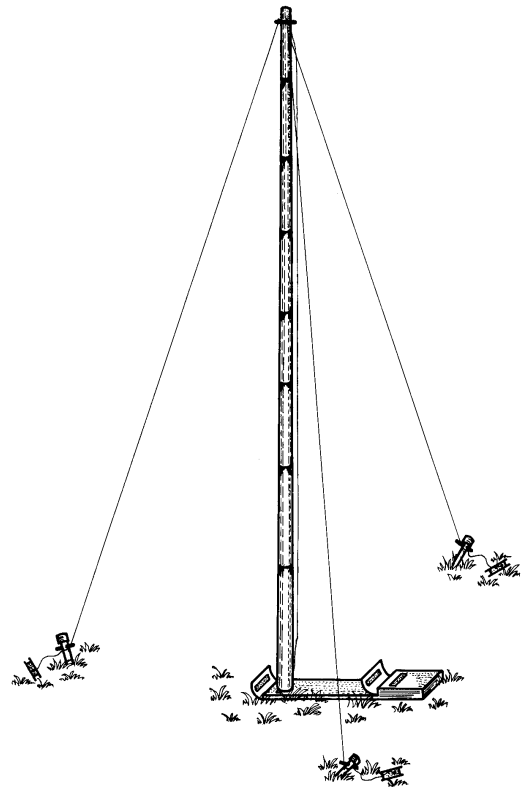
ELECTRICAL SPECIFICATIONS

Frequency	30-88 MHz`
Polarisation	Vertical
VSWR	≤ 5
Impedance	50 Ω
Gain	-4 dBd from 50-88 MHz -7dBd at 30 MHz
Power Handling	10 W (between -40°C and +70°C)
EMP Protection	Included

Recommended mast - MUL-9 9 metre mast - F3435-76639

The antenna LB3088W used with the 9m mast gives a range higher than a dipole VHF antenna on vehicle Mast tubes are tapered so can be stored inside each other. The tubes are then assemble together.

Height	9m
Tip diameter	22.5mm
Total unit weight	3 kg
Pillar weight	1.9 kg
Anchorage	3 points
Max. length (tube section)	1.2 m
Setup time for 1 person	5 min.



Test	Severity	MIL-STD-810E, Method (M) & Procedure (P)
<u>ENVIRONMENTAL CHARACTERISTICS</u>		
Minimal temperature for operation	-40°C during 16 hours	M502.3, P II
Minimal temperature for storage	-40°C during 72 hours	M502.3, P I
High dry temperature for operation	+70°C during 16 hours	M501.3, P II
High dry temperature for storage	+70°C during 96 hours	M501.3, P I
High wet temperature for operation	+40°C at 93% HR (1 cycle 16 hours)	M507.3, P III
High wet temperature for storage	+40°C at 93% HR (10 cycles 16 hours)	M507.3, P III
Salt fog	96 hours at 35°C	M509.3
Altitude (operation)	-40°C, 570mbar, 1 hour	M500.3, P II
Air transport	-40°C, 265mbar, 2 hours	M500.3, P I
Solar radiation	168C1: 168 hours at Xenotest	M505.3, P II
Rain	C1: 500 ±100mm/h, 30mn	M506.3, P I
Immersion	AB1: depth 1m, 2 hours	M512.3, P I
Sand and dust	AA2 for three directions	M510.3, P I
Ice, condensation, unfreezing	5AB2 (5 cycles)	M521.1
<u>MECHANICAL CHARACTERISTICS</u>		
Vibrations	BA331, 1h/axis	M514.4
Mechanical chocks	3F1 : 3 chocks ½ Sinus ; 50g/11ms	M516.3, P I
Free fall down	BB1 : 1,20m fall down on a pine sheet	M516.4, P IV
Resistance in traction (antenna wire)	15 daN	
Mechanical fuse rupture	10 daN	
<u>ELECTROMAGNETIC CHARACTERISTICS</u>		
Ground continuity	E : r £ 1W	GAM-T-13 – 1 st part - §61 Test 2
EMP-HA	Compliant with PR4G specifications	