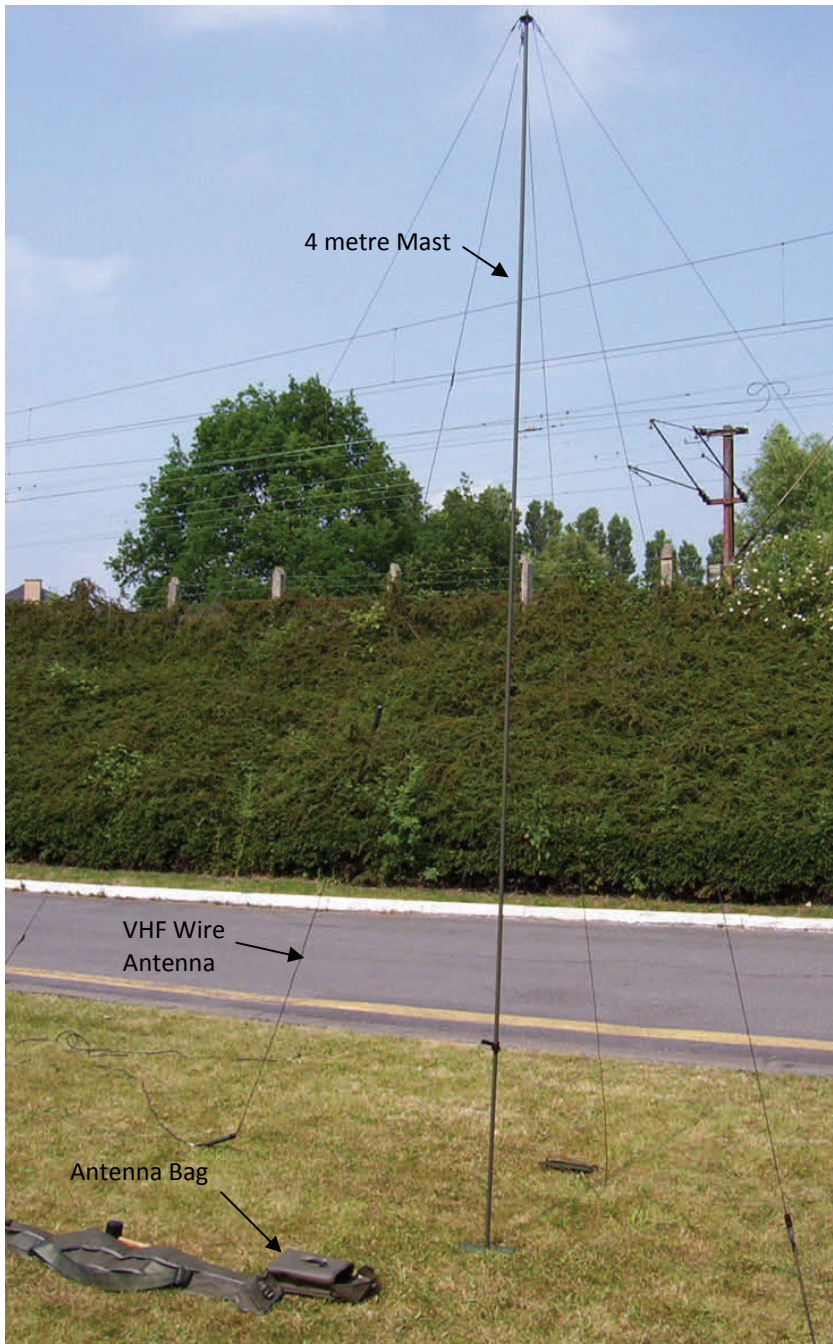


GENERAL DESCRIPTION

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



LB3088W antenna on a 4 metre mast

APPLICATION

For special forces needing performance with a compact and low weight.

This antenna can be unfolded using natural environment (trees,...) for high discretion.

COMROD proposes also two ultra-light masts, of 4 or 9m, each one compatible with special forces operational needs (3kg weight for the 9m mast).

CONSTRUCTION

The antenna is made of:

- a radiating wire with 30 to 88MHz matching unit and BNC/f connector
 - a coaxial cable (about 6m) with BNC/m connectors
 - a rope with a weight for antenna elevation in a tree
 - a winder for the rope and the wire antenna
- a transport bag

The color of the antenna is NATO Green 24x5

DIMENSIONS

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

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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 |

| 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 shocks | 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 | |

ULTRA-LIGHT MASTS ADAPTATED TO LB3088W ANTENNA

Those two masts are made of Fibreglass reinforced plastic composite material. They are particularly adapted to the LB3088W antenna when natural environment does not provide high points (trees) for lifting the wire antenna.

4 metre mast F3435-76686

The antenna LB3088W used with the 4m mast gives a range higher than a dipole VHF antenna on vehicle

The tubes are similar to the ones of a manpack antenna.

| | |
|--------------------------|------------|
| Height deployed | 4172mm |
| Guy radius | 2500mm |
| Mast sections length | 700mm |
| Number of mast sections | 6 sections |
| Weight (included hammer) | 2kg |
| Anchorage | 3 points |
| Setup time for 1 person | 5 min. |



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

All tubes (conical) are stored in the bigger one. They are extracted from bigger tube bottom and sleeved one into the others.

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

