LT-ANTL144-174-6.7

Vertical Fibergalss Base Antenna | 144-174 MHz | 6.7 dBd

Key Features :

- Frequency Range: 144-174 MHz
- Gain: 6.7 dBi
- Impedance: 50 Ohms
- Construction: Durable fiberglass radome with a protective ultraviolet-inhibiting coating
- VSWR: ≤ 1.5:1
- Power Rating: 200 W

Product Overview :

The LT-ANTL144-174-6.7 is a high-performance omnidirectional base station antenna designed for VHF wide-band applications. Its collinear design is enclosed in high-density white fiberglass, providing durability and protection against environmental factors. The antenna is lightweight and easy to install, with included tuning instructions to optimize communication system performance.

Applications :

- Public Safety Communications (TETRA, LTE Band 28)
- Land Mobile Radio (LMR)
- Base Station Antenna Systems
- Remote Monitoring and IoT Gateways
- Oil & Gas / Utility Infrastructure

Specification :

LT-ANTL144-174-6.7	
Antenna Gain	6.7 dBd
VSWR	less than 1.5:1
Frequency Range	144-174 MHz (VHF Band) (by antenna element cut-tuning)
Polarization	Vertical
Impedance	50 Ω
Power Capacity	200 W
Connector	SO-239
Omnidiretional	7/8λ over 7/8λ design
Length	2.95 meters (2 sections)
Weight	About 1.0 Kg
Max. Wind	130 mph (55m/sec)

Cutting Chart		
Frequency (MHz)	Length (mm)	
	L1	L2
144	1152	1370
146	1130	1335
148	1090	1290
150	1055	1260
152	1030	1230
154	990	1200
156	940	1180
159	900	1155
162	845	1135
165	815	1105
168	770	1080
171	740	1065
174	720	1055

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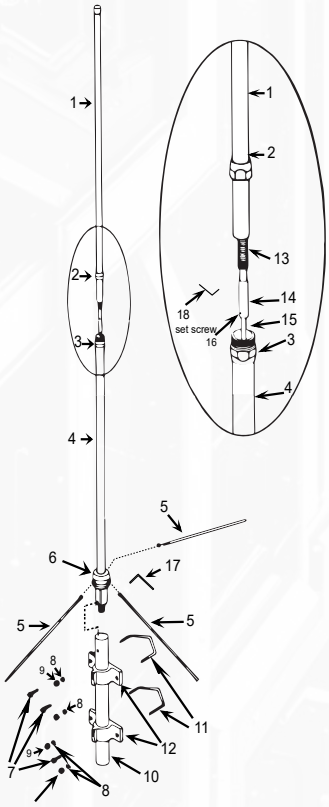

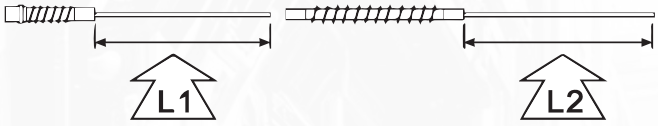

Assembly

1. Refer to drawing (rear side of this instruction). Install upper radiator element (part #13) onto lower radiator element (part #15) by inserting element joint (part #14) fully onto lower radiator element and tightening set screw (part #16) securely with wrench (part #8).
2. Slide upper outer tube (part #1) into lower outer tube (part #4). Thread upper outer tube joint (part #2) onto lower outer tube joint (part #3) and tighten securely.
3. Put the locking nut and washer onto the ground plane radials, then screw the three radials (part #5) into threaded holes on the metal antenna base (part #6) and tighten them by fingers. Secure the radials by tightening locking nuts with wrench.
4. Secure support pipe (part #10) to mounting pole (not included) in desired location using brackets (part #12), U-bolts (part #11), locking screws (part #7), lock washers (part #8), and either self-locking nuts or nuts (part #9) and lock washers (part #8) supplied. Tighten securely with wrench (not included).
5. Run up the cable from radio through supporting pipe (part #10) and screw PL-259 on cable end tightly onto SO-239 connector at the bottom of antenna. Assemble antenna into support pipe with open threaded hole turned so that it will align with hole on support pipe for locking screw. Screw the locking screw (part #7) into hole and tighten it securely with wrench or screw driver.

Parts

No.	Description	Qty.
1	Upper outer tube	1
2	Upper outer tube joint	1
3	Lower outer tube joint	1
4	Lower outer tube	1
5	Radials & nut, spring washer	3
6	Metal antenna base	1
7	Locking screw	3
8	Locking washer	4
9	Nut	4
10	Supporting pipe	1
11	U-Bolt	2
12	Bracket	2
13	Upper radiator element	1
14	Element joint	1
15	Lower radiator element	1
16	Set screw	1
17	Wrench (larger one)	1
18	Wrench (smaller one)	1