

LT-ANTL134-184-4.5

Vertical Fiberglass Base Antenna | 134-184 MHz | 4.5 dBd

Key Features :

- Frequency Range: 764-869 MHz
- Gain: 4.5 dBi
- Impedance: 50 Ohms
- Construction: Durable fiberglass radome with a protective ultraviolet-inhibiting coating
- VSWR: $\leq 1.5:1$
- Power Rating: 200 W

Product Overview :

The LT-ANTL134-184-4.5 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.

Specification :

LT-ANTL134-184-4.5	
Antenna Gain	4.5 dBd
VSWR	less than 1.5:1
Frequency Range	134-184 MHz (VHF Band) (by antenna element cut-tuning)
Polarization	Vertical
Impedance	50 Ω
Power Capacity	200 W
Connector	SO-239
Omnidirectional	$5/8\lambda$
Length	1.75 meter
Weight	About 1.0 Kg
Max. Wind	130 mph (55m/sec)

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



Cutting Chart

Frequency (MHz)	Length	
	inch	cm
134	64-1/8	163
136	63	160
141	60-1/4	153
146	57-7/8	147
151	55-1/2	141
156	53-3/4	136.5
160	51-15/16	132
165	50	127
170	48-7/16	123
174	47-1/4	120
179	45-5/8	116
180	44-1/2	113



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Adjustments

LT-ANTL134-184-4.5 works well on any frequency between 134-184 MHz by radiator element cut-tuning. Please refer to the drawing on the rear side of this instruction sheet. First, unfasten the locking screw on the metal antenna base (part #3) of LT-ANTL134-184-4.5. Pull the SO-239 connector out and slide the radiator element off the outer tube carefully. Cut the radiator element to proper length according to the cutting chart. Slide the radiator back into the outer tube and push SO-239 to proper position and fasten the locking screw with a wrench (part #10). Now you can follow below "Assembly step 1 to step 4 " to install LT-ANTL134-184-4.5.

Assembly

1. Refer to the drawing (page 2).
2. Put the locking nut and washer onto the ground plane radials, then screw the three radials (part #2) into the threaded holes on the metal antenna base (part #3) and tighten them by fingers. Secure the radials by tightening locking nuts with wrench.
3. Secure the supporting pipe (part #7) to the mounting pole (not included) in desired location using brackets (part #9), U-bolts (part #8), locking screws (part #4), locking washers (part #5), and locking nuts (part #6) supplied. Tighten them securely with a wrench or screw driver.
4. Run up the cable from radio through support pipe (part #7) and screw PL-259 on cable end tightly onto SO-239 connector at the bottom of antenna. Assemble the 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 #4) into the hole and tighten it securely with wrench or screw driver.

Parts		
No.	Description	Qty.
1	Outer tube	1
2	Radials with nut, spring washer	3
3	Mast	1
4	Locking screw	3
5	Locking washer	4
6	Nut	4
7	Support pipe	1
8	U-Bolt	2
9	Bracket	2
10	Wrench	1

