

LT-ANTD1-145-175-5

1-Element Dipole Array Antenna | 145-175 MHz | 2.15-5 dBi

The LT-ANTD1-145-175-5 is a high-performance 1-element dipole array antenna designed for VHF communications within the 145–175 MHz frequency range. Built for reliability and efficient signal transmission, this antenna offers a gain of 2.15 to 5 dBi, making it ideal for both fixed and mobile communication systems. Its robust design ensures consistent performance in demanding environments, making it suitable for applications such as public safety, transportation, industrial, and utility communications. Whether used for base stations or integrated into larger networks, this antenna delivers dependable coverage and signal clarity.

Key Features :

- Broadband, Low VSWR
- Low Gain
- 1-Element Dipole Array Antenna
- 300-Watt High Power
- Pattern Adjustable Offset Circular, Cardioids, or Bidirectional

Key Highlights :

- Optimized VSWR for efficient performance
- Weatherproof and UV-resistant materials
- Low wind load design for stability
- Flexible mounting compatibility
- Maintenance-free and durable
- Built-in lightning protection

Applications :

- VHF Band TETRA Communications
- Wireless Paging System
- Wireless Data Transmission System
- Wireless Video System



Specification :

LT-ANTD1-145-175-5	
Frequency Range	145-175 MHz
Gain (Dependent on Pattern)	2.5-5 dBi
Power Rating	300 W
Impedance	50 Ω
VSWR	≤ 1.5
Vertical Beamwidth	72°
Polarization	Vertical
Connector	N Female or 7/16 DIN (opt.) on harness feed cable
Dimensions (H x D) mm	14000 $\pm$ 10 x 1003
Weight Antenna + Clamps)	5.5 Kg
Lightning Protection	DC Grounded
Wind Rating	60 m/s



Installation Guide

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Before Assembling and Mounting

Utmost care has to be taken while choosing the installation location of the antenna. Be sure to look for surrounding buildings and electric power lines. Prepare all parts ready prior to installtion. Follow the safety precautions carefully to prevent electric shock accidents. Assemble the antenna and bracket on the ground before installing it at the chosen location to avoid the roatation of the antenna with the wind load.

Safety Precautions

Experience and skills are required to install, maintain and remove antennas. Make sure to consult an expert before attempting to do it yourself.

Safety devices and appropriate PPE for tower climbing and rigging activities must be well-grounded for lightning protection. Make sure the transmit power is turned off when the installation is performed. Failure to comply may result to serious injury.

Do not install on a wet or windy day or when lightning or thunder is in the area. Do not use metal ladder. To prevent electric shock accidents, install the antenna far from power, telephone and high voltage lines.

Lamatel disclaims any liability or responsiblity for the result of improper or unsafe installation practices.

Installation Sketch

1/4λ, L=470±10mm	H-plane,GAIN 5dBi
3/8λ, L=710±10mm	H-plane,GAIN 4.05dBi
1/2λ, L=900±10mm (Spacing from Tower)	H-plane,GAIN 5dBi

