

LT-ANT-420-480-3

UHF TETRA High-Gain Base Station Antenna

The Lamatel LT-ANT-420-480-3 is a rugged omnidirectional fiberglass antenna designed for UHF communication systems operating across the 420–480 MHz frequency band.

Built for base station and multipoint applications, it delivers 3 ± 1 dBi gain with 360° horizontal coverage, ensuring uniform signal strength and high reliability. Its fiberglass radome construction, IP65 weatherproof rating, and wide temperature tolerance make it ideal for outdoor environments subject to wind, humidity, and corrosion.

The LT-ANT-420-480-3 is perfectly suited for TETRA, wireless data transmission, paging, and telemetry systems, offering durable performance, low VSWR, and superior RF stability in demanding conditions.

Key Features

- Frequency Range: 420–480 MHz
- Gain: 3 ± 1 dBi omnidirectional coverage
- VSWR: ≤ 1.6 for efficient signal transfer
- Polarization: Vertical
- Power Handling: Up to 500 W (PIP 600 W)
- Connector: N-Female, bottom-mounted
- Construction: Heavy-duty fiberglass radome, IP

Parameter	Specification
Model	LT-ANT-420-480-3
Frequency Range	420–480 MHz
Gain	3 ± 1 dBi
Bandwidth	60 MHz
Polarization	Vertical
Horizontal Beamwidth	360°
Vertical Beamwidth	$68^\circ \pm 15^\circ$
VSWR	≤ 1.6
Impedance	50 Ω
Input Power	500 W (PIP 600 W)
Connector Type	N-Female
Antenna Dimensions	$\varnothing 70 \times (1050 \pm 5)$ mm
Weight	2.3 ± 0.05 kg (excluding bracket)
Radome Material	Fiberglass
Color	Blue
Operating Temperature	-40°C to $+70^\circ\text{C}$
Relative Humidity	5–95%
Wind Velocity Rating	60 m/s
Salt Spray Resistance	96 hrs Neutral (GB/T 2423.17-2008)
Waterproof Rating	IP65
Mounting Diameter	$\varnothing 80$ – $\varnothing 95$ mm
Mounting Kit	Butterfly Bracket



Applications

Tetra base station and repeater networks
Public safety and emergency communications
Aviation, marine, and transportation networks
Critical infrastructure coverage
Wide-area urban and rural deployments

Ordering Information

The LT-ANT300-320-DM9 belongs to the UHF TETRA High Power Antenna Series (3 ± 1 dBi, 500W, slim 3 m radome).

Additional models from the other series :

LT-ANT-400-480-3DF (400-480 MHz)

LT-ANT-400-440-3DF (400-440 MHz)

LT-ANT-138-174-3DF (138-174 MHz)

Custom options are available upon request, including specific frequency ranges, connector types, and channel bandwidths.

