

MICRONETIXX COMMUNICATIONS



- Channel 14 to 1400 MHz (Band IV/V) UHF Slot Antenna
- Elliptical and Circular Polarized Models
- Side Mounted Low Weight 8 and 9 Bay Models
- 5 kW Input Power Rating
- Standard and Low RFR Elevation Patterns
- Omnioid Azimuth Pattern

LPC Series UHF E/P and C/P Antennas

The LPC Series of UHF (Band IV/V) slot antennas are perfect for many applications, such as translators, gap fillers, and 700/800 MHz services. The vertical component may be specified from 10% (Elliptical Polarized) to a 50/50 ratio (Circular Polarized). The antennas are available in 8 or 9 bay sizes, and have an Omnioid azimuth pattern. Standard and low RFR elevation patterns are available, with beam tilts up to 1.75 degrees. The standard input power rating at 750 MHz is 5 kW and some models may be customized up to a 7.5 kW.

The antennas come with a 1-5/8" or 3-1/8" EIA input flange. Each antenna is built with stainless steel mounting brackets and a radome system. Extended radomes for high ice areas are available.

LPC Series Azimuth Pattern



Omnioid Azimuth Pattern Gain 1.70 (2.30 dB)

LPC Series Elevation Patterns

The LPC antennas are available in 8 or 9 bay models in either a standard or low RFR elevation pattern. The 9 bay options offer additional power gain to offset some of the additional transmitter power needed to operate in an E/P or C/P mode. The low RFR models have up to 25 dB of high axial angle radiation, allowing them to be mounted on rooftops and lower on towers. A secondary benefit of the low RFR models is a 10 to 20% high unit elevation gain over a standard model.

Elliptical polarized models are available from a 90H/10V power ratio to a full Circular polarized model with a 50H/50V power ratio.

Each LPC series antenna has customized beam tilt to provide the best coverage. Electrical beam tilts of up to 1.75 degrees are available.

Sample Elevation Patterns



8 Bay elevation patterns with 1.0 degree beam tilt ----RED standard pattern – gain 8.12 (9.09 dB) ---BLUE low RFR pattern – gain 9.11 (9.59 dB)



9 Bay elevation patterns with 1.0 degree beam tilt ----RED standard pattern - gain 9.02 (9.55 dB) ---BLUE low RFR pattern – gain 10.84 (10.35 dB)

Mechanical Information

The LPC series antennas are very rugged and feature full class 1-A chromate surface treatment. Stainless steel custom mounts are provided for each antenna to mount to a tower leg or outrigged pole. Antennas that have partial cantilever above the tower or monopole type are available. The antennas are designed for a basic wind speed of 80 M.P.H.

Each antenna comes with a radome system that wraps around the front of the pylon. The radomes are made from rugged UV stabilized Polyethylene. For high ice environments, extended radomes are available.

The RF input to the antenna is on the bottom and is available in a choice of 1-5/8" or 3-1/8" EIA input flanges.



The picture to the left shows the top end of a LPC antenna with the radome installed. The radome ensures excellent performance in high environment conditions. Rugged mounting tabs on the end of the antenna fasten to the mount brackets that are supplied.





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