



## Ultra Phantom Omnidirectional Antenna

Laird's unique patented Ultra Phantom® single-band antenna is a rugged low-profile antenna for outdoor or indoor applications. The Ultra Phantom features vertical polarization, low visibility, wide bandwidth and a low angle radiation pattern that is superior to traditional gain antennas in most applications.

The industry standard NMO mounting socket mates with all Laird magnetic, trunk lid and whole mounts.

### FEATURES AND BENEFITS

- Outperforms 3-dBi whip antennas in many applications
- IP67-rated for harsh environment applications
- U.S. patent numbers 5,977,931 - 6,292,156 and 7,209,096
- RoHS-compliant

### APPLICATIONS

- Public safety
- Transportation
- Utilities
- Military mobile
- Fixed radio applications

#### ELECTRICAL SPECIFICATIONS

Frequency Range	380-512 (see Model and Ordering Information)
VSWR - Avg	≤ 2.5:1
Gain (dBi)	2.0 - 4.1 (see Model and Ordering Information)
Max Power - Ambient 25°C (W)	100
Nominal Impedance (Ohms)	50
Pattern Type	Omnidirectional
Polarization	Vertical

#### MECHANICAL SPECIFICATIONS

Dimensions - diameter x height - mm (inches)	35.5 x 86.3 (1.4 x 3.4)
Weight - g (lbs.)	163.3 (0.36)
Mounting	NMO
Color	Black or white
Lightning Protection	

## ENVIRONMENTAL SPECIFICATIONS

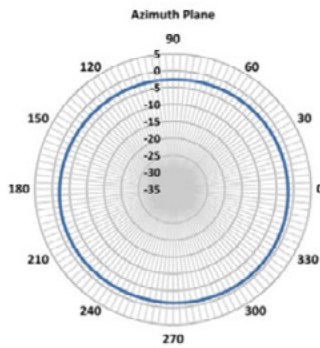
Operating Temperature - °C (°F)	-45 to +85°C (-49 to +185°F)
Storage Temperature - °C (°F)	-50 to +85°C (-58 to +185°F)
Wind Survival - km/hr (mph)	282 (175)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

## MODEL AND ORDERING INFORMATION

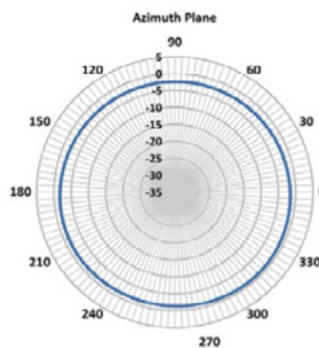
PART NUMBER	FREQUENCY (MHZ)	MAX. GAIN (DBI)	COLOR
UTRA4502S3NB/ UTRA4502S3NW	450-512	4.1	Black/White
UTRA4301S3NB/ UTRA4301S3NW	430-490	3.6	Black/White
UTRA4061S2NB/ UTRA4061S2NW	406-440	2.9	Black/White
UTRA3802S1NB/ UTRA3802S1NW	380-410	2.0	Black/White

## RADIATION PATTERNS

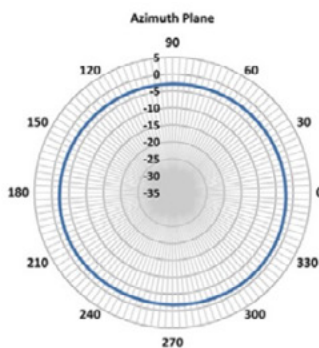
**450 MHz**



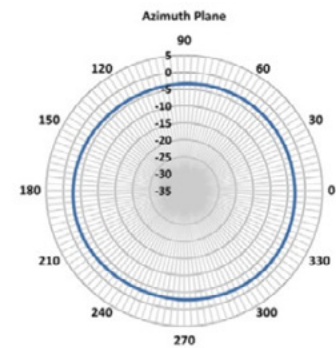
**430 MHz**



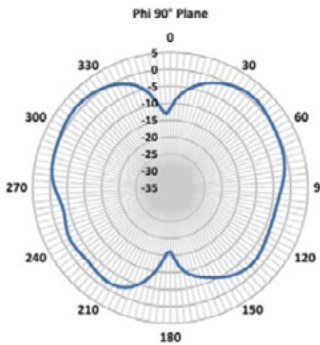
**406 MHz**



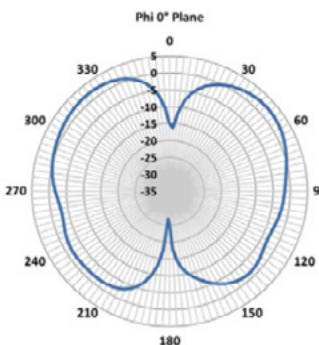
**380 MHz**



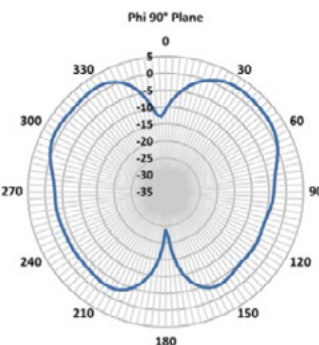
**512 MHz**



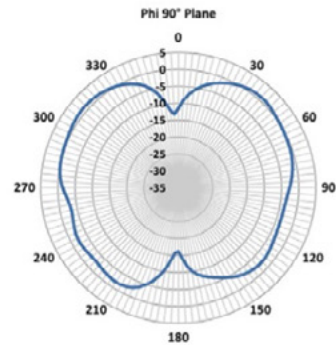
**490 MHz**



**440 MHz**



**410 MHz**



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