

TRA9023

Phantom Antennas 902-928 MHz

The patented Laird Connectivity Phantom® is a tough low-profile antenna for outdoor or indoor applications. Measuring only 2.3" tall, the Phantom 902-928 MHz antenna is designed and performance engineered with vertical polarization components. This antenna provides frequency agility, low visibility, and a low angle radiation pattern that delivers superior performance in challenging application environments.

The industry standard NMO mounting socket mates with all Laird Connectivity magnetic, trunk lid, and hole mounts. Also available is optional threaded permanent stud mount model that is vandal resistant for mounting on brackets, panels, ceilings, or any other kind of housing.

The patented Phantom® antenna technology is beneficial when high performance is desired and extreme ruggedness and low profile is required.

FEATURES

- Mechanically robust for both indoor and outdoor applications
- NMO mount and vandal resistant permanent mount option
- IP67 rated for dust intrusion and temporary water immersion
- RoHS tested and compliant components

MARKETS - APPLICATIONS

- Cellular
- GSM and PCS
- Wi-Fi
- 802.11
- Bluetooth wireless applications

ELECTRICAL SPECIFICATIONS	
Model Name	TRA9023
Operating Frequency (MHz)	902-928
VSWR	<2.0:1
Gain (dBi)	3.0
Nominal Impedance (Ohms)	50
Max Power - Ambient 25°C (W)	100
Polarization	Vertical
Radiation Pattern	Omnidirectional
Vertical Plane 3 dB Beamwidth	360°
Horizontal Plane 3 dB Beamwidth	78°

MECHANICAL SPECIFICATIONS	
Dimensions – H x D – mm (inches)	58.42 x 36.6 (2.3 x 1.44)
Weight – g (lbs.)	TRA9023N: 184 (0.405) TRA9023NP: 240 (0.529)
Color	Black/Black Chrome or White/Chrome

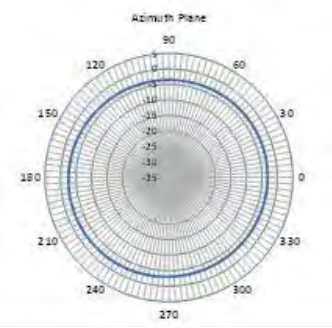
ENVIRONMENTAL SPECIFICATIONS	
Operating Environment (Indoor or Outdoor)	Indoor or outdoor
Operating Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Storage Temperature – °C (°F)	-45 to +85°C (-49 to +185°F)
Wind Rating – km/hr (mph)	282 (175)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

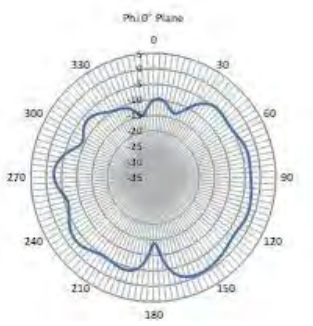
CONFIGURATION

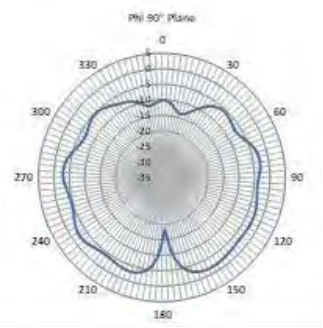
PART NUMBER	MOUNTING	COMMENTS
TRA9023	NMO Mount	-
TRA9023P	Permanent Stud Mount	-
TRA9023N	NMO Mount	No ground plane required
TRA9023NP	Permanent Stud Mount	No ground plane required

RADIATION PATTERNS

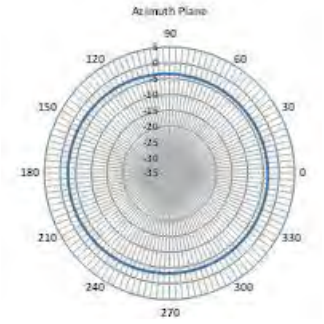
902 MHz

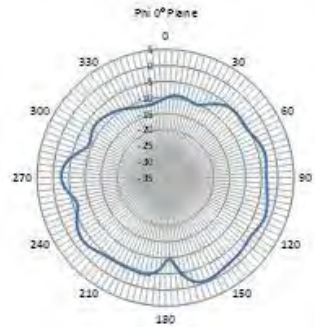


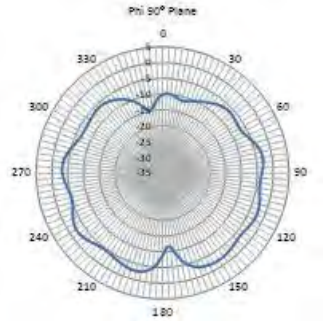




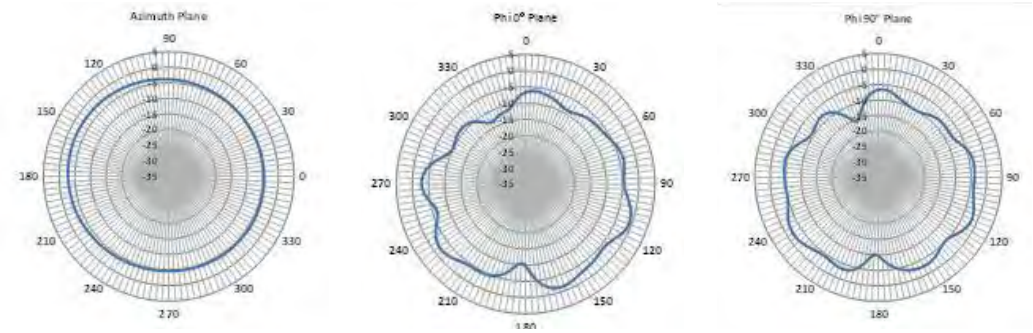
910 MHz







928 MHz



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