

Phantom® Antennas Patented Whipless Performance



Features & Benefits

Our patented Phantom® is a rugged antenna for outdoor or indoor applications. The Phantom® revolutionary design features field diversity with both vertical and horizontal polarization components. This gives the antenna diversity, frequency agility, 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 Antenex® magnetic, trunk lid, and hole mounts. The Phantom® patented technology is beneficial when high performance is desired and ruggedness and low profile is required.

The TRAT1420 (142-160 MHz) Phantom antenna is also available in a black housing under part number TRABT1420.

The radiation pattern on page 2 is typical for the TRAT1420 and represents a far field measurement taken in an outdoor environment on a 4ft by 4ft metallic ground surface approximately 45 inches above the ground at 10λ from the illuminating antenna in the normal mounting condition (E-plane). The readings were measured against a known standard by a network analyzer. See page 3 for detailed product specifications.

PRODUCT SPECIFICATIONS:

PHANTOM TECHNOLOGY™ ANTENNA (TX & RX)

MOUNTING

DESIGNED TO: 4'X4' metallic ground plane
Mobile applications

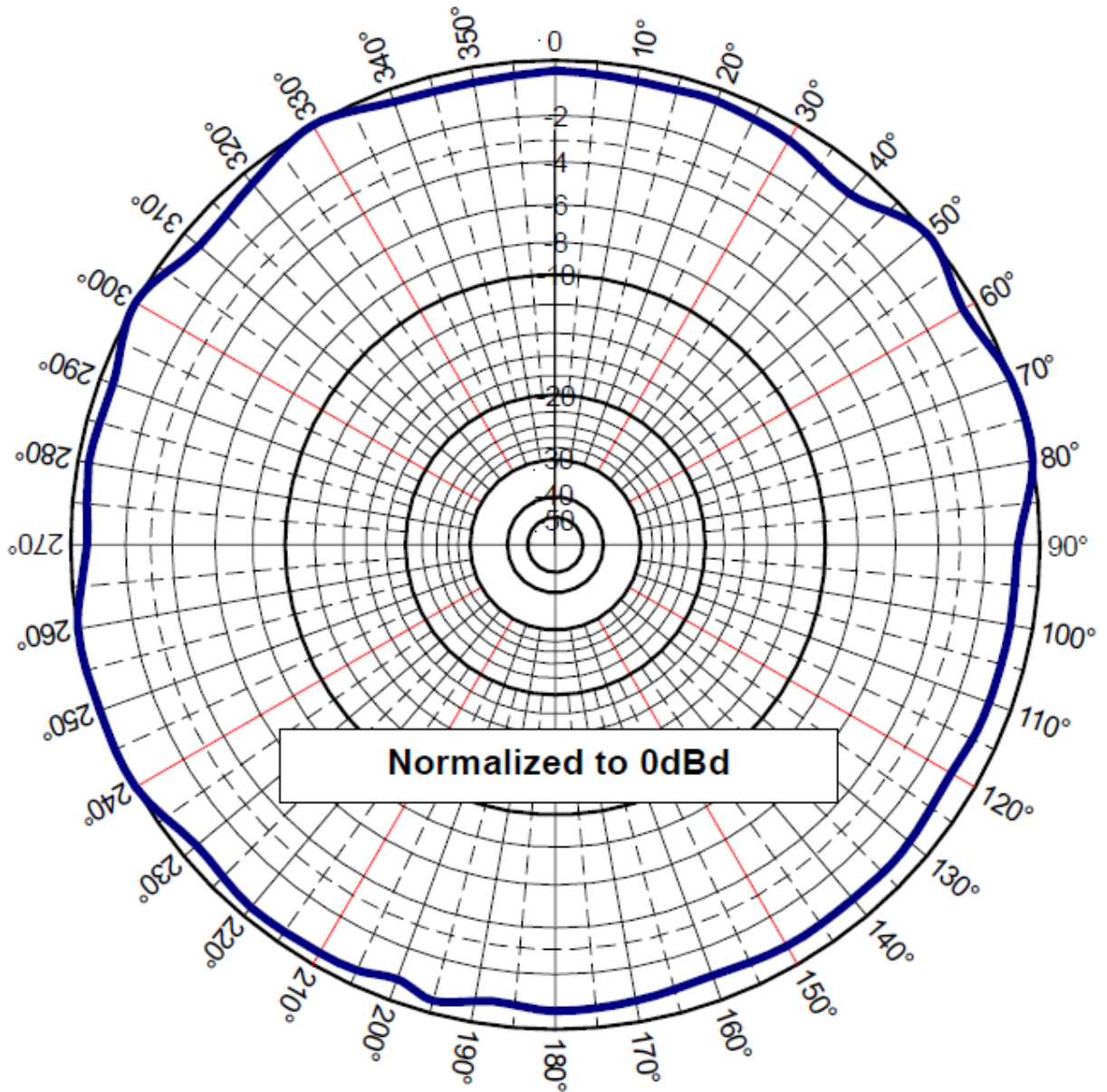
ELECTRICAL

FREQUENCY RANGE: 142-160 MHz
FREQUENCY BANDWIDTH: 2.0 MHz
VSWR: < 2.0:1
RETURN LOSS: -10dB min
NOMINAL GAIN: Unity
3 dB-MEG (elevation = 0°)
5 dBi (elevation = 45°)
-11 dBi (elevation = 90°)
MAXIMUM POWER: 60W
NOMINAL IMPEDANCE: 50Ω
POLARIZATION: Vertically polarized
PATTERN: Omni-Directional
VERTICAL BEAMWIDTH: 80°
LIGHTNING PROTECTION: AC Ground
CABLE: None
TERMINATION: NMO
TUNING: Tunable Coil with tuning key provided

MECHANICAL

SIZE: Width = 3 – 1/4"
Height = 3 – 1/2"
WEIGHT: 0.25 lbs
FINISH: GE X-17 ABS
COLOR: White (Black also available)

ANTENNA RADIATION PATTERN



Representative Azimuthal Field Pattern for Antenex Part Number: TRAT1420