



Innovative **Technology**
for a **Connected** World

Phantom Elite® UHF Antennas



PHANTOM ELITE® UHF ANTENNA COMBINES PERFORMANCE WITH LOW-PROFILE DESIGN

Freewave Technologies' unique patented Phantom Elite® is a tough low-profile antenna for outdoor or indoor applications. Measuring only 3.4" tall, the Phantom Elite® UHF antenna's 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 Freewave Technologies' magnetic, trunk lid, and hole mounts. A threaded permanent stud mount model is also available for vandal resistant mounting on brackets, panels, ceilings or any other kind of housing.

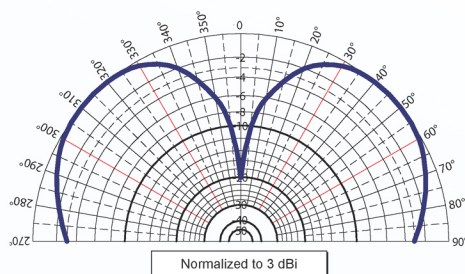
FEATURES

- True Field Diversity design ensures uninterrupted transmissions in urban canyons and rural drop off areas
- Phantom® outperforms a 3dB whip in many applications
- U.S. Patent Nos. 5,977,931; 6,292,156 and 7,209,096

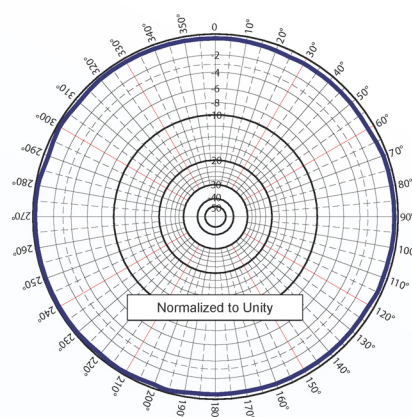
MARKETS

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

ANTENNA PATTERNS



Elevation Pattern (Y, Z, or H-plane)



Azimuth Pattern (X,Y, or E-plane)

global solutions: local support™



Innovative **Technology**
for a **Connected** World

Phantom Elite®

UHF Antennas

SPECIFICATIONS

ELECTRICAL	
VSWR	< 2:1
Nominal Gain	3 dBi
Maximum Power	100 W
Nominal Impedance	50 Ω
Polarization	Vertical
Pattern	Omnidirectional
Half-Power Beamwidth (Elevation° x Azimuth°)	146° x 360°
Coaxial Cable Length & Type	None
Terminations	NMO Socket or, type N-female

MECHANICAL

Color	Black or White
Height (initially)	3½"
Diameter	1.438"
Weight	0.15 lb
Material	ABS
Mounting Information	NMO or Permanent Mountable
Noise Suppressor	BlackHawk NS1535 1-35 VOLT, 15 Amp Noise Suppressor (Sold Separately)

MODEL AND ORDERING INFORMATION

MODEL	DESCRIPTION
ETRA4103	410-430 MHz 3 dBi Phantom Elite® ¾ NMO, White Radome
ETRAB4103	410-430 MHz 3 dBi Phantom Elite® ¾ NMO, Black Radome
ETRA4303	430-450 MHz 3 dBi Phantom Elite® ¾ NMO, White Radome
ETRAB4303	430-450 MHz 3 dBi Phantom Elite® ¾ NMO, Black Radome
ETRA4503	450-470 MHz 3 dBi Phantom Elite® ¾ NMO, White Radome
ETRAB4503	450-470 MHz 3 dBi Phantom Elite® ¾ NMO, Black Radome
ETRA4703	470-490 MHz 3 dBi Phantom Elite® ¾ NMO, White Radome
ETRAB4703	470-490 MHz 3 dBi Phantom Elite® ¾ NMO, Black Radome
ETRA4903	490-512 MHz 3 dBi Phantom Elite® ¾ NMO, White Radome
ETRAB4903	490-512 MHz 3 dBi Phantom Elite® ¾ NMO, Black Radome
Sealtube3	Heat shrink tubing 3"x1" DIA Elite install (use for jaw protector on installation wrench)

Permanent Mounting Option:

Please order by antenna model and insert letter "P" to indicate permanent mounting option (ETRA4503P).