

# DATASHEET

Patent Pending

## Antenna model UL-4180-319

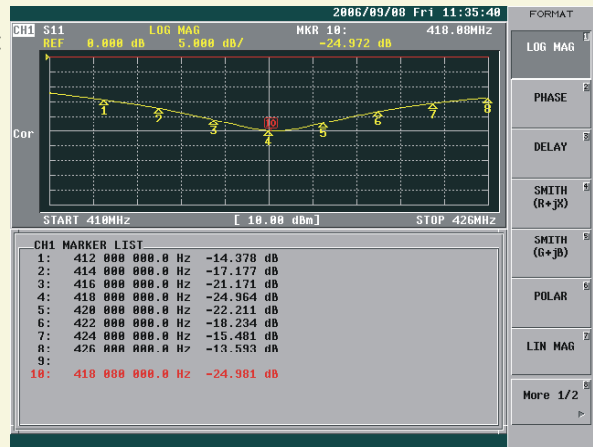
A broadband, rugged, mobile radio antenna featuring a high ESD (Electro-Static Discharge) isolation. With modest dimensions of 1.5"/4 cm (OD) x 4"/10 cm (height), this antenna radiates with a typical peak omnidirectional gain of +4 dBil, when mounted on a large metal surface of at least 16"/40 cm radius. This antenna will survive a 20 ft drop onto asphalt and continue operating. Internally, the radiating element is DC grounded and the feedpoint is DC isolated beyond 1 kV.



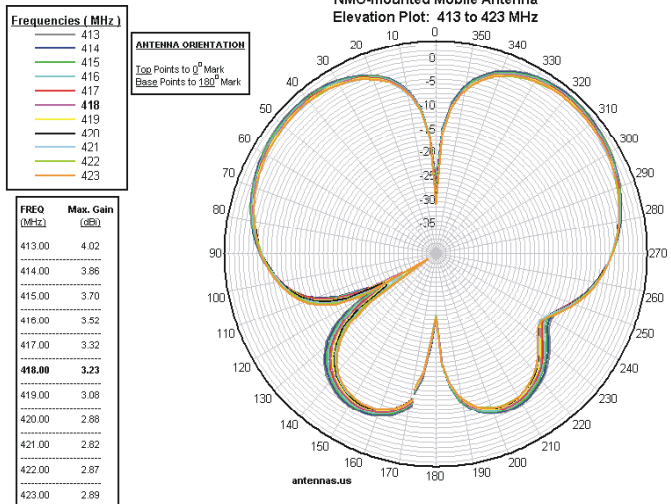
- Frequency range:** 415-421 MHz
- Coverage:** Omni-directional, low azimuthal ripple
- Polarization:** Linear, Vertical
- Gain:** +3 dBil
- Nominal Impedance:** 50 ohm (RF), Open Circuit (DC) 1 kV isolation
- VSWR:** 2.0
- Connector:** NMO, Female
- Dimensions:** Housing 3.8 cm (1.5") OD x 10.3 cm (4.05") h  
Bottom flange 5 cm (2") OD x 3 mm (0.12") h
- Mounting:** direct NMO connector mount
- Operating Temperatures:** -40°C to +85°C
- Shock:** Operates after drop from 6 m/20 ft onto asphalt
- Weight:** 100 g / 0.25 lbs
- Shipping Weight:** 200 g / 0.45 lbs

**NOTES:**

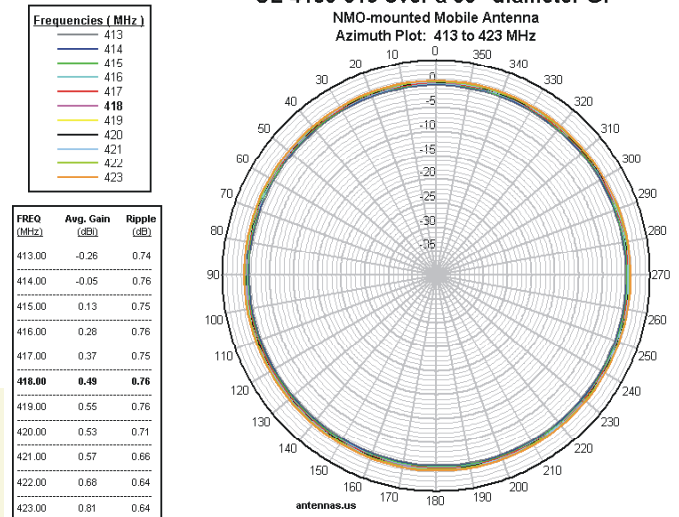
Requires a ground plane (normally mounts on a metal body)



**UL-4180-319 over a 36" diameter GP**  
NMO-mounted Mobile Antenna  
Elevation Plot: 413 to 423 MHz



**UL-4180-319 over a 36" diameter GP**  
NMO-mounted Mobile Antenna  
Azimuth Plot: 413 to 423 MHz



Specifications subject to change without notice