

# RF-MDWS-HP-S

## Antenna info

### Overview:

- **Antenna description:**

The antenna is a brose wire antenna. Shaped in a helical form and used in a monopole arrangement.

- **Applications**

- Door/window sensor
- 319.508 MHz ISM Band Systems

### Power:

- Unit is powered by a 3V CR2 lithium battery
  - Typical Capacity: 800 mAh (to 2.0 volts) (rated at 100 ohms at 21°C)
  - Typical Weight: 11 grams
  - Typical Volume: 5.2 cubic centimeters
  - Max Discharge: 1000 mA continuous (2500 mA pulse)
  - Max Rev Charge: 2 uA
  - Typical Li Content: 0.28 grams

### Antenna design:

Frequency 319.508 MHz

Length 5.3 inches

Diameter 0.065 inches

Capacitance 9.104 pF

Inductance 27.81 nH

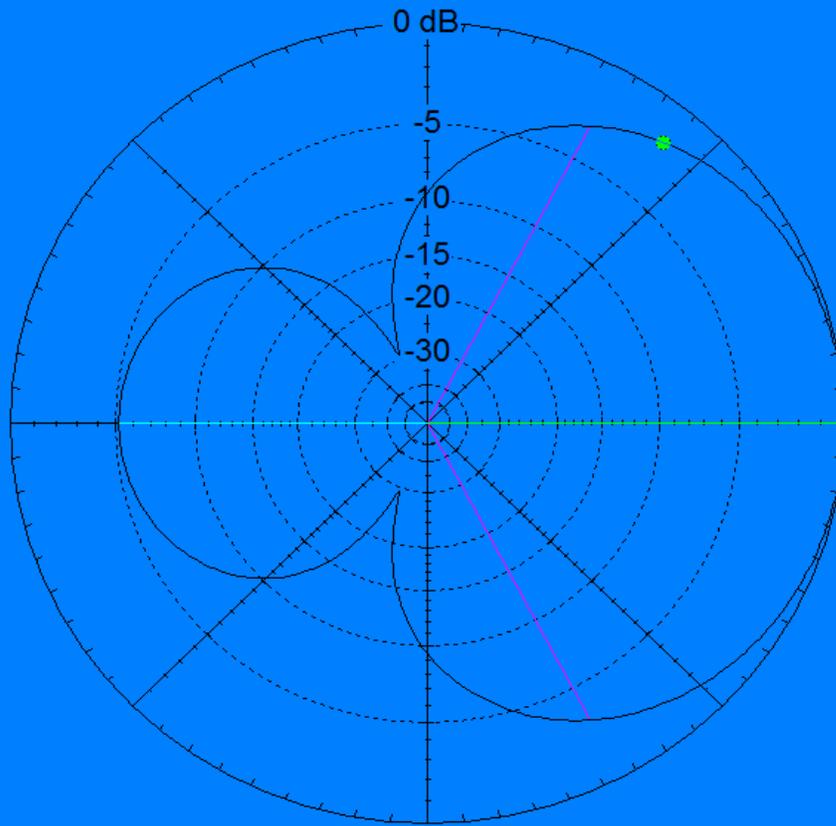
Quarter Wavelength 0.115 m

Antenna Length 65.10 %

Radiation Resistance 0.150 Ohms

Total Field

EZNEC Demo



319.508 MHz

Azimuth Plot  
Elevation Angle 0.0 deg.  
Outer Ring 9.7 dBi

Slice Max Gain 9.7 dBi @ Az Angle = 0.0 deg.  
Front/Back 5.17 dB  
Beamwidth 124.4 deg.; -3dB @ 297.8, 62.2 deg.  
Sidelobe Gain 4.53 dBi @ Az Angle = 180.0 deg.  
Front/Sidelobe 5.17 dB

Cursor Az 51.0 deg.  
Gain 7.92 dBi  
-1.78 dBmax