



## WPD136M6C-001

### Multi-Band Mobile Antenna

**136-174 MHz/380-520 MHz/760-870 MHz**

Laird Connectivity's patent-pending WPD136M6C-001 multi-band mobile antenna is a commercial, heavy-duty vehicular antenna. It has an omnidirectional pattern and is vertically polarized with a 50Ω match. It also has excellent quality and RF performance and is specifically designed as a full spectrum public safety voice and data communications antenna.

### FEATURES AND BENEFITS

- High-performance, broad-banded, multi-band coverage
- Heavy-duty design
- Injection molded housing and base
- No base radiators (all enclosed coils)
- Solid brass chrome-plated ferrules with dual set screw lock

### APPLICATIONS

- General analog and digital voice/data communications
- VHF (high), UHF, 700/800
- Tetra PMR and P25 public safety
- Transportation, utilities, government, military, PAMR, commercial and industry, oil and gas

### ELECTRICAL SPECIFICATION

Model Name	WPD136M6C-001		
Operating Frequency (MHz)	136-174	380-520	760-870
VSWR - Max	≤ 2.5:1		
Gain (dBi)	Unity		
Peak Gain (dBi) – Azimuth Cut (Phi = 0°)	-0.7	-3.7	3.1
Peak Gain (dBi) – Elevation Cut (Phi = 0°)	0.2	4.8	8.1
Nominal Impedance (Ohms)	50		
Max Power - Ambient 25°C (W)	100		
Polarization	Vertical		
Pattern	Omnidirectional		
Vertical Plane 3 dB Beamwidth	90°	40°	60°
Horizontal Plane 3 dB Beamwidth Port 1	360°	360°	360°

## MECHANICAL SPECIFICATION

Dimensions - round base x height - cm (inches)	6.35 x 50.8 (2.5 x 20.0)
Connector	NMO
Radome Material	High impact PC/ABS

## ENVIRONMENTAL SPECIFICATION

Ingress Protection Rating	IP66
Material Substance Compliance	RoHS

## VHF BAND (136-174 MHz)

PEAK GAIN (dBI)	AZIMUTH PATTERN	ELEVATION PATTERN
136 MHz	-2.4	0.2
146 MHz	-2.7	-1.8
156 MHz	-0.7	-3.1
174 MHz	-3.5	-4.1

## UHF BAND (380-520 MHz)

PEAK GAIN (dBI)	AZIMUTH PATTERN	ELEVATION PATTERN
380 MHz	-11.3	6.1
400 MHz	-7.0	7.7
440 MHz	-4.1	4.8
460 MHz	-3.7	3.0
500 MHz	-5.5	3.3
520 MHz	-6.6	3.5

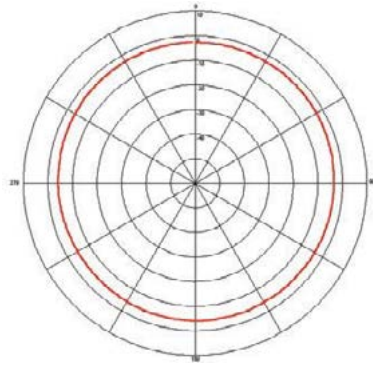
## UHF BAND (760-870 MHz)

PEAK GAIN (dBI)	AZIMUTH PATTERN	ELEVATION PATTERN
760 MHz	3.1	3.1
815 MHz	-0.2	7.9
870 MHz	-8.8	8.1

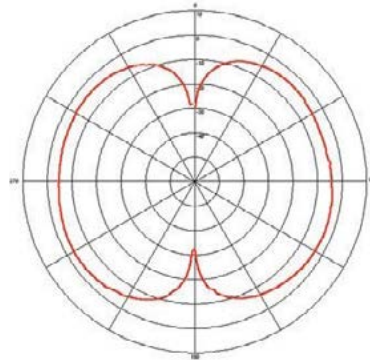
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## RADIATION PATTERNS

156 MHz

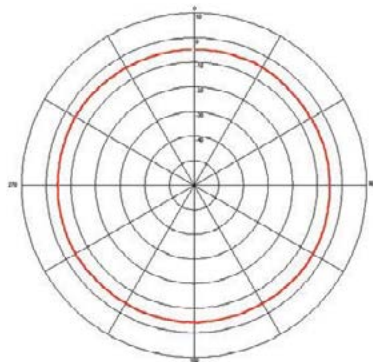


Azimuth Cut,  $\Phi=0^\circ$

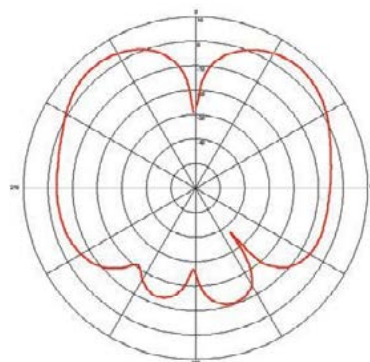


Elevation Cut,  $\Phi=90^\circ$

440 MHz

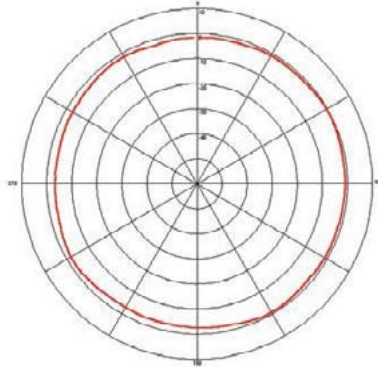


Azimuth Cut,  $\Phi=0^\circ$

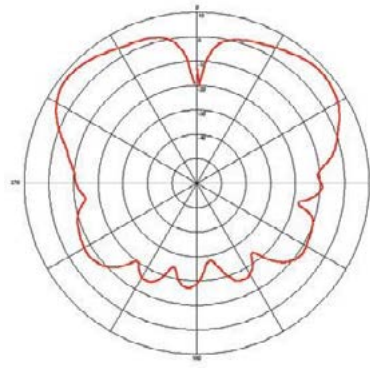


Elevation Cut,  $\Phi=90^\circ$

## 815 MHz



Azimuth Cut,  $\Phi=0^\circ$



Elevation Cut,  $\Phi=90^\circ$

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