APPENDIX B: ANTENNA SPECIFICATIONS

Please refer to the following pages.

Portable Duck Antennas for WLAN

MAXRAD™

An ISO-9001 Registered Company

902 MHz and 2.4 GHz ISM Portable Antenna Series

The MAXRAD portable antennas are designed to cover the band of frequencies from 902-928 MHz ISM and 2.400 to 2.4835 GHz ISM with a VSWR of less than 1.5:1 at resonance. Their rugged, flexible design makes them suitable for use in a wide variety of applications, including office LAN environments, factory floors, remote telemetry and other harsh environments.

2.4 GHz ISM portable antennas are ideal for data collection applications in factories, retail establishments, warehouses and office buildings.

General Specifications:

902 MHz and 2.4 GHz ISM portable duck antennas

Polarization:

Linear, vertical

Nominal Impedance:

50 Ohms

Features and Benefits:

Ground plane independent, half-wave coaxial dipole design. Provides improved antenna performance, higher gain and installation flexibility.

Flexible design. Added durability that allows use in demanding wireless environments.

Articulating knuckle provides 0º-90º pivot and 180º swivel movement allowing vertical orientation of the antenna, regardless of the orientation or position of the wireless device.

Specifications

Electrical Specifications

Model #	Frequency Range	Frequency	Length	Resonance	Power	Gain
MQWS2400RPC	2400-2483.5 MHz	2450 MHz	1/2 wave	<2.0:1	50 Watts	0 dBi
MHWS2400MSMA	2400-2483.5 MHz	2450 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MHWS2400C	2400-2483.5 MHz	2450 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MHWS2400MSMARP	2400-2483.5 MHz	2450 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MHWS2400MSMART	2400-2483.5 MHz	2450 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MHWS2400MTNCRP	2400-2483.5 MHz	2450 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MHWS2400RPBN	2400-2483.5 MHz	2450 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MHWS1850C	1710-1990 MHz	1.8 GHz	1/2 wave	<1.5:1	50 Watts	1.0 dBi
MHWS902RPC	902-928 MHz	915 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MEXC902SM	902-960 MHz	915 MHz	1/4 wave	<1.5:1	50 Watts	unity
MEXE902SM	902-960 MHz	915 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi
MEXE902TN	902-960 MHz	917 MHz	1/2 wave	<2:1	50 Watts	2.0 dBi

Mechanical Specifications

Model #	Connector Type	Design	Antenna Height	Temperature Range	Special Features
MQWS2400RPC	Reverse Polarity TNC	1/2 wave	4.0" (101.6 mm)	-40°C to +85°C	360° swivel, 0°-90° knuckle
MHWS2400MSMA	Male SMA	Coaxial dipole	4.5" (114.3 mm)	-40°C to +85°C	360° swivel, 0°-90° knuckle
MHWS2400C	Male TNC/BNC	Coaxial dipole	7.0" (177.8 mm)	-40°C to +85°C	360° swivel, 0°-90° knuckle
MHWS2400MSMARP	Reverse Polarity SMA Plug	Coaxial dipole	4.5" (114.3 mm)	-40°C to +85°C	360° swivel, 0°-90° knuckle
MHWS2400MSMART	Reverse Threaded SMA Plug	Coaxial dipole	4.5" (114.3 mm)	-40°C to +85°C	360° swivel, 0°-90° knuckle
MHWS2400MTNCRP	Reverse Polarity TNC	Coaxial dipole	5.7" (144.8 mm)	-40°C to +85°C	360° swivel, 0°- 90° knuckle
MHWS2400RPBN	Reverse Polarity BNC Plug	Coaxial dipole	7.0" (177.8 mm)	-40°C to +85°C	360° swivel, 0°- 90° knuckle
MHWS1850C	Male TNC	1/2 wave	4.5" (114.3 mm	-40°C to +85°C	360° swivel, 0°- 90° knuckle
MHWS902RPC	Reverse Polarity TNC	1/2 wave dipole	10" (254.0 mm)	-40°C to +85°C	360° swivel, 0°- 90° knuckle
MEXC902SM	Male SMA	1/4 wave	4.0" (101.6 mm)	-40°C to +85°C	
MEXE902SM	Male SMA	1/2 wave dipole	8.0" (203.2 mm)	-40°C to +85°C	
MEXE902TN	Male TNC	1/2 wave dipole	8.0" (203.2 mm)	-40°C to +85°C	

Connector Options

Model / Connector Type	Reverse polarity BNC plug	SMA, male	Reverse threaded SMA, male	TNC, Male	Reverse polarity TNC plug	Reverse Polarity SMA Plug
MQWS2400RPC					X	
MHWS2400MSMA		X				
MHWS2400C				X		
MHGS2400MSMARP						X
MHGS2400MSMART			X			
MHWS2400MTNCRP					X	
MHWS2400RPBN	X					
MHWS902RPC					X	
MEXC902SM		X				
MEXE902SM		X				
MEXE902TN				X		