### Portable Duck Antennas for WLAN



# 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, 1710-1990 MHz PCS, 2400 to 2483.5 MHz ISM and 5725-5825 MHz 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.

#### **General Specifications:**

902 MHz, PCS, 2.4 GHz and 5.8 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 0°-90° pivot and 180° swivel movement allowing vertical orientation of the antenna, regardless of the orientation or position of the wireless device.



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



## Specifications

Electrical Specifications							
Model #	Frequency Range	Factory Tuned Frequency	Wave Length	VSWR at Resonance	Maximum Power	Gain	
MHWS5800MSMA	5725-5825 MHz	5775 MHz	1/2 wave	<1.5:1	50 Watts	2.0 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	
MHWS2400BN	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	1850-1990 MHz	1800 MHz	1/2 wave	<1.5:1	50 Watts	1.0 dBi	
MHWS1850BN	1850-1990 MHz	1800 MHz	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	915 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi	
MEXE902BN	902-960 MHz	915 MHz	1/2 wave	<1.5:1	50 Watts	2.0 dBi	

Mechanical Specifications							
Model #	Connector Type	Design	Antenna Height	Temperature Range	Special Features		
MHWS5800MSMA	Male SMA	Coaxial dipole	4.5" (114.3 mm)	-40°C to +85°C	360° swivel, 0°-90° knuckle		
MHWS2400MSMA	Male SMA	Coaxial dipole	4.5" (114.3 mm)	-40 $^{\circ}$ C to +85 $^{\circ}$ C	$360^{\circ}$ swivel, $0^{\circ}\text{-}90^{\circ}$ knuckle		
MHWS2400C	Male TNC	Coaxial dipole	7.0" (177.8 mm)	-40°C to +85°C	$360^{\circ}$ swivel, $0^{\circ}\text{-}90^{\circ}$ knuckle		
MHWS2400BN	Male BNC	Coaxial dipole	7.0" (177.8 mm)	-40°C to +85°C	$360^{\circ}$ swivel, $0^{\circ}\text{-}90^{\circ}$ 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 Plug	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	Coaxial dipole	9.5" (241.3 mm)	-40°C to +85°C	$360^{\circ}$ swivel, $0^{\circ}\text{-}90^{\circ}$ knuckle		
MHWS1850BN	Male BNC	Coaxial dipole	9.5" (241.3 mm)	-40 $^{\circ}$ C to +85 $^{\circ}$ C	$360^{\circ}$ swivel, $0^{\circ}\text{-}90^{\circ}$ knuckle		
MHWS902RPC	Reverse Polarity TNC Plug	Coaxial dipole	10" (254.0 mm)	-40°C to +85°C	360° swivel, 0°-90° knuckle		
MEXC902SM	Male SMA	Quarter wave	4.0" (101.6 mm)	-40 $^{\circ}$ C to +85 $^{\circ}$ C			
MEXE902SM	Male SMA	Coaxial dipole	9.5" (241.3 mm)	-40 $^{\circ}$ C to +85 $^{\circ}$ C			
MEXE902TN	Male TNC	Coaxial dipole	9.5" (241.3 mm)	-40 $^{\circ}$ C to +85 $^{\circ}$ C			
MEXE902BN	Male BNC	Coaxial dipole	9.5" (241.3 mm)	-40°C to +85°C			

### **Connector Options**



Model / Connector Type	Reverse Polarity BNC Plug	Male SMA	Reverse Threaded Male SMA	Male TNC	Reverse Polarity TNC Plug	Reverse Polarity Male SMA Plug	BNC Plug	Female SMA
MHWS5800MSMA		х						
MHWS2400MSMA		х						
MHWS2400C				х				
MHWS2400BN							х	
MHWS2400MSMARP						Х		
MHWS2400MSMART			х					
MHWS2400MTNCRP					х			
MHWS2400RPBN	х							
MHWS1850C				х				
MHWS1850BN							х	
MHWS902RPC					х			
MEXC902SM		х						
MEXE902SM		х						
MEXE902TN				х				
MEXE902BN							х	