

Product Brief



CW-RCL Series 916 MHz Right-Angle Whip Antenna

The 916-CW-RCL antenna is designed for sub-1 GHz and low-power, wide-area (LPWA) applications including LoRaWAN® and ISM band applications in the 902 MHz to 930 MHz band.

The right-angle rotating design of the 916-CW-RCL antenna allows for the antenna to be positioned for optimum performance.

The 916-CW-RCL is available with an SMA plug (male pin) or RP-SMA plug (female socket) connector for FCC Part 15 compliant applications.



Features

- Performance at 902 MHz to 930 MHz
 - VSWR: ≤ 1.8
 - Peak Gain: 4.2 dBi
 - Efficiency: 72%
- Compact size
 - 97.7 mm x 18.7 mm x 10.5 mm
- Rotating base allows for optimal positioning
- SMA plug (male pin) or RP-SMA plug (female socket)

Applications

- Low-power, wide-area (LPWA) applications
 - LoRaWAN®
 - WiFi HaLow™
- Internet of Things (IoT) devices
- Smart Home networking
 - Security systems
 - Home weather stations
- Remote sensing, monitoring and control
 - Security systems
 - Industrial machinery
 - AMR (automated meter reading)

Ordering Information

Part Number	Description
ANT-916-CW-RCL-SMA	916 MHz right-angle whip antenna with SMA plug (male pin)
ANT-916-CW-RCL	916 MHz right-angle whip antenna with RP-SMA plug (female socket)

Available from Linx Technologies and select distributors and representatives.

Electrical Specifications

ANT-916-CW-RCL	916 MHz		
Frequency Range	902 MHz to 930 MHz		
VSWR (max)	1.8		
Peak Gain (dBi)	4.2		
Average Gain (dBi)	-1.5		
Efficiency (%)	72		
Polarization	Linear	Impedance	50 Ω
Radiation	Omnidirectional	Max Power	5 W
Wavelength	1/4-wave	Electrical Type	Monopole
Operating Temp. Range	-20 °C to +85 °C	Weight	12.5 g (0.44 oz)
Connection	SMA plug (male pin) or RP-SMA plug (female socket)		
Dimensions	97.7 mm x 18.7 mm x 10.5 (3.80 in x 0.74 in x 0.41 in)		

Electrical specifications and plots measured with a 102 mm x 102 mm (4.0 in x 4.0 in) reference ground plane.

VSWR

Figure 1 provides the voltage standing wave ratio (VSWR) across the antenna bandwidth. VSWR describes the power reflected from the antenna back to the radio. A lower VSWR value indicates better antenna performance at a given frequency. Reflected power is also shown on the right-side vertical axis as a gauge of the percentage of transmitter power reflected back from the antenna.

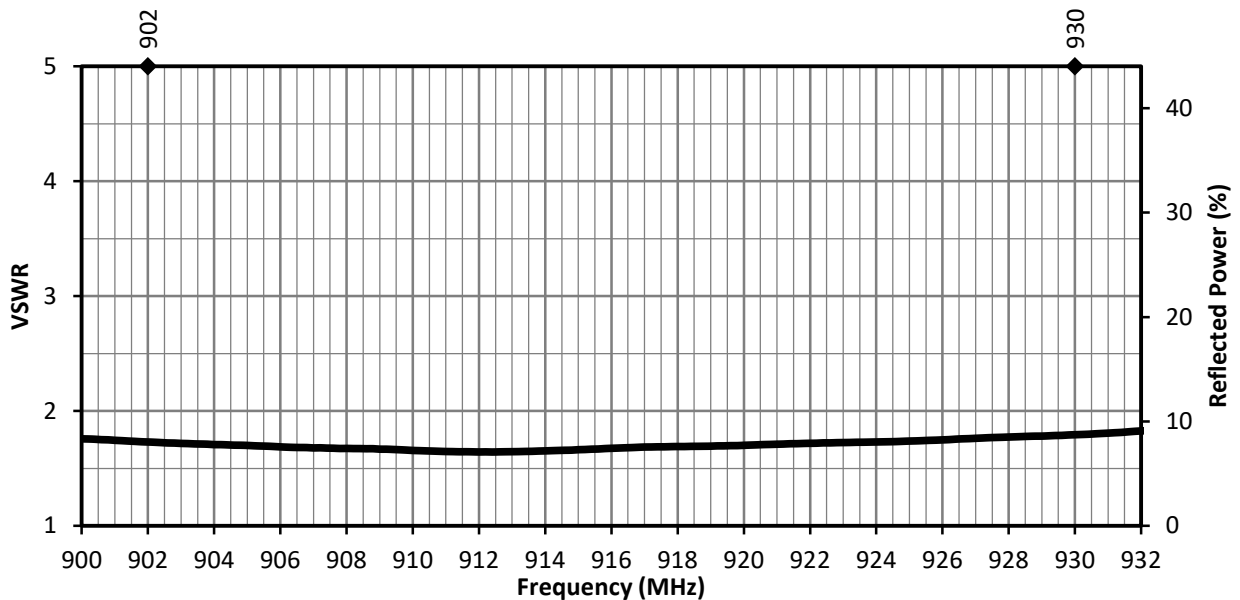


Figure 1. ANT-916-CW-RCL VSWR

Packaging Information

The CW-RCL series antennas are packaged, 50 pcs in a clear plastic bag, 500 pcs per inner box, and 2000 pcs per export box. Distribution channels may offer alternative packaging options.

Website: <http://linxtechnologies.com> • Phone: +1 (541) 471-6256 • E-MAIL: info@linxtechnologies.com • Linx Offices: 159 Ort Lane, Merlin, OR, US 97532

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