Product Brief

CW-RCL Series
2.4 GHz Right-Angle Whip Antenna

The ANT-2.4-CW-RCL antenna is designed for 2.4 GHz WiFi/WLAN and ISM applications including Bluetooth® and ZigBee®.

The right-angle rotating design of the ANT-2.4-CW-RCL antenna allows for the antenna to be positioned for optimum performance.

The ANT-2.4-CW-RCL antenna is available with an SMA plug (male pin) or RP-SMA plug (female socket) connector for FCC Part 15 compliant applications.

Features

- Performance at 2.4 GHz to 2.485 GHz
  - VSWR: ≤ 1.5
  - Peak Gain: 2.3 dBi
  - Efficiency: 77%
- 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

- Single-band WiFi/WLAN
  - 802.11b/g
- ISM applications
  - Bluetooth®
  - ZigBee®
  - IEEE 802.15.4
- Internet of Things (IoT) devices
- Sensing and remote monitoring
- Smart Home networking

Ordering Information

Part Number	Description
ANT-2.4-CW-RCL-SMA	2.4 GHz right-angle whip antenna with SMA plug (male pin)
ANT-2.4-CW-RCL-RPS	2.4 GHz right-angle whip antenna with RP-SMA plug (female socket)

Available from Linx Technologies and select distributors and representatives.

Electrical Specifications

ANT-2.4-CW-RCL	2.4 GHz		
Frequency Range	2.4 GHz to 2.485 GHz		
VSWR (max)	1.5		
Peak Gain (dBi)	2.3		
Average Gain (dBi)	-1.2		
Efficiency (%)	77		
Polarization	Linear	**Impedance**	50 Ω
Radiation	Omnidirectional	**Max Power**	5 W
Wavelength	1/2-wave	**Electrical Type**	Dipole
Operating Temp. Range	-20 °C to +85 °C	**Weight**	13.0 g (0.46 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.

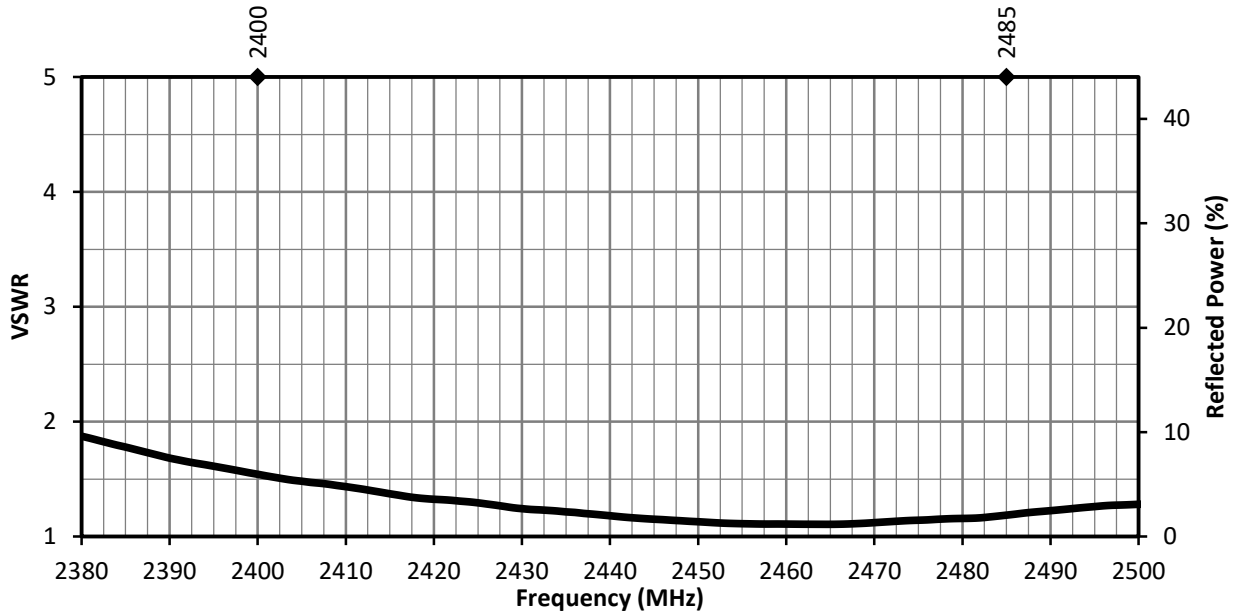

Figure 1. ANT-2.4-CW-RCL VSWR

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.