## **Product Brief**



# CW-RCL Series 868 MHz Right-Angle Whip Antenna

The 868-CW-RCL antenna is designed for sub-1 GHz and low-power, wide-area (LPWA) applications including LoRaWAN<sup>®</sup>, Sigfox<sup>®</sup>, and ISM band applications in the 862 MHz to 876 MHz range.

The right-angle swivel design of the 868-CW-RCL antenna allows for the antenna to be positioned for optimum performance.

The ANT-868-CW-RCL antenna is available with an SMA plug (male pin) connector.



#### Features

- Performance at 862 MHz to 876 MHz
  - VSWR:  $\leq 1.9$
  - Peak Gain: 4.1 dBi
  - Efficiency: 71%
- Compact size
  - 97.7 mm x 18.7 mm x 10.5 mm
- Rotating base allows for optimal positioning
- SMA plug (male pin) connector

#### Applications

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

#### Ordering Information

Part Number	Description		
ANT-868-CW-RCL-SMA	868 MHz right-angle whip antenna with SMA plug (male pin)		

Available from Linx Technologies and select distributors and representatives.

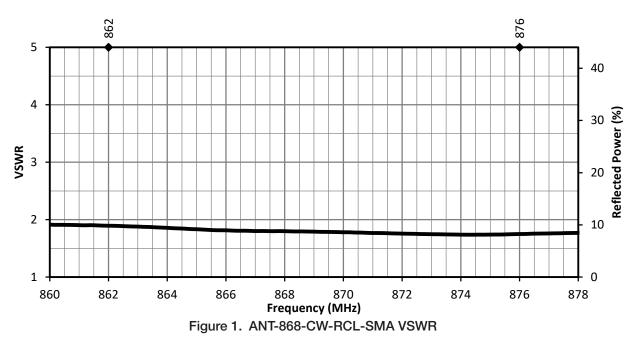
#### **Electrical Specifications**

ANT-868-CW-RCL	868 MHz				
Frequency Range	862 MHz to 876 MHz				
VSWR (max)	1.9				
Peak Gain (dBi)	4.1				
Average Gain (dBi)	-1.5				
Efficiency (%)	71				
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)				
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.



### 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

Linx Technologies reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.

Wireless Made Simple is a registered trademark of Linx Acquisitions LLC. LoRaWAN is a registered trademark of Semtech Corporation. Sigfox is a registered trademark of SIGFOX. Other product and brand names may be trademarks or registered trademarks of their respective owners.

Copyright © 2020 Linx Technologies. All Rights Reserved.



