

## Product Brief



# CW Series Connector-Mount Single-Band Antennas

CW series antennas are rugged, low-cost and easy to install. For applications operating in a standard frequency band, CW series single-band antennas make the job of antenna selection simple, outperforming multiband counterparts over target frequencies and rejecting signals from unwanted frequencies.

CW series LTE band antennas target LTE-M and NB-IoT cellular IoT with an easy-to-select LTE frequency range, while other CW antennas align with LoRaWAN® and Sigfox® low-power wide-area (LPWA) applications and license-free ISM band uses.



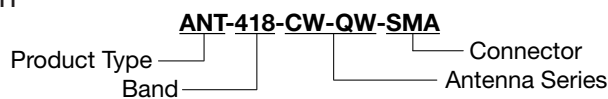
### Features

- Outperforms similar multiband solutions
- Durable, flexible main shaft
- Wide bandwidth
- Weather resistant for IP-rated applications<sup>1</sup>
- O-ring compatible base
- SMA plug (male pin), or RP-SMA plug (female socket) for FCC Part 15 compliant applications
- Compatible with plastic<sup>2</sup> and metal enclosures

### Applications

- LTE-M (Cat-M1) and NB-IoT cellular IoT
- LoRaWAN® and Sigfox®
- FirstNet® Public Safety
- ISM/Bluetooth®/ZigBee®
- Sensing and remote monitoring
- Hand-held devices
- Internet of Things (IoT) devices
- Low-power wide-area (LPWA) networks

### Ordering Information



Band	Frequency Range (MHz) <sup>3</sup>	VSWR	Peak Gain (dBi)	Efficiency (%)	Standard Bands	Connector
418	380 to 450	≤ 2.0 : 1	2.9	~	GSM, Remote Control	SMA, (blank) = RPS
433	400 to 470	≤ 2.0 : 1	3.3	~	LoRaWAN, ISM, LTE, GSM	SMA, (blank) = RPS
490	470 to 510	≤ 2.0 : 1	1.3	72	LoRaWAN, GSM	SMA
868	750 to 950	≤ 2.0 : 1	1.2	65	LoRaWAN, SIGFOX, LTE, GSM, UMTS	SMA, (blank) = RPS
916	865 to 965	≤ 2.0 : 1	1.6	68	LoRaWAN, SIGFOX, ISM, LTE, GSM, UMTS	SMA, (blank) = RPS
B5	800 to 900	≤ 2.0 : 1	1.2	65	LTE B5, LTE B6, GSM, UMTS	SMA
B8	870 to 960	≤ 2.0 : 1	1.6	68	LTE B8, GSM, UMTS	SMA
B13	740 to 790	≤ 2.0 : 1	1.7	77	LTE B13, UMTS	SMA
B14	750 to 800	≤ 2.0 : 1	1.9	80	LTE B14, FirstNet Public Safety	SMA
B20	790 to 870	≤ 2.5 : 1	1.6	72	LTE B20, UMTS	SMA
B28	700 to 810	≤ 2.7 : 1	1.7	73	LTE B17, LTE B28, LTE B44, GSM, UMTS	SMA
2.4	2350 to 2600	≤ 1.9 : 1	1.1	~	ISM	SMA, (blank) = RPS

Available from Linx Technologies and select distributors and representatives.

#### Notes

1 Use of an O-ring is recommended, IP-ratings cannot be guaranteed.

2 With appropriate counterpoise.

3 Suggested frequency range. Antennas may support wider bandwidth than listed. See individual datasheets.

Electrical Specifications (Common to all)

<b>Polarization</b>	Linear
<b>Radiation</b>	Omnidirectional
<b>Max Power</b>	10 W
<b>Wavelength</b>	1/4-wave (ANT-2.4-CW-QW-ccc is a 1/2-wave monopole)
<b>Impedance</b>	50 Ω
<b>Operating Temperature</b>	-40 °C to +90 °C

Electrical specifications and plots measured with a 102 mm x 102 mm (4 in x 4 in) reference ground plane.

Product Dimensions

Band	418	433	490	868	916
<b>Dimension A</b>	177.2 mm (6.98 in)	173.4 mm (6.83 in)	157.7 mm (6.21 in)	83.5 mm (3.29 in)	80.5 mm (3.17 in)

Band	B5	B8	B13	B14	B20	B28
<b>Dimension A</b>	83.5 mm (3.29 in)	80.5 mm (3.17 in)	98.4 mm (3.87 in)	94.2 mm (3.71 in)	89.7 mm (3.53 in)	98.4 mm (3.87 in)

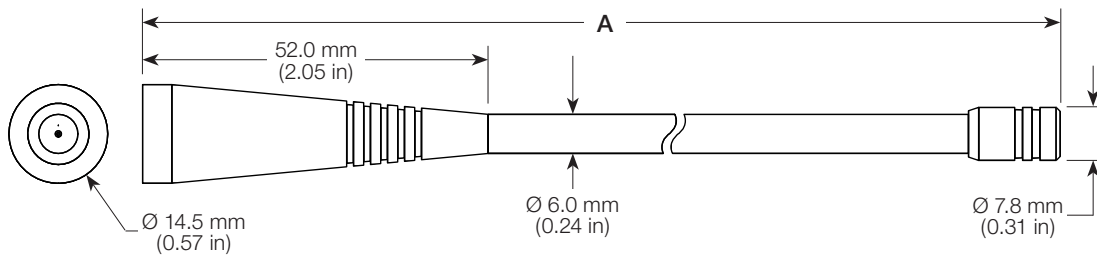


Figure 1. CW Series Antenna Dimensions (except 2.4 GHz)

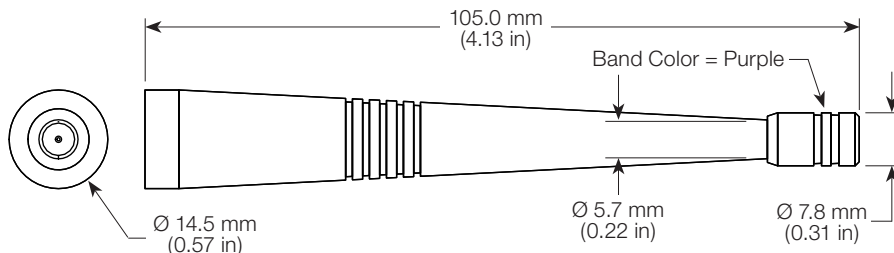


Figure 2. CW Series 2.4 GHz Antenna Dimensions

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