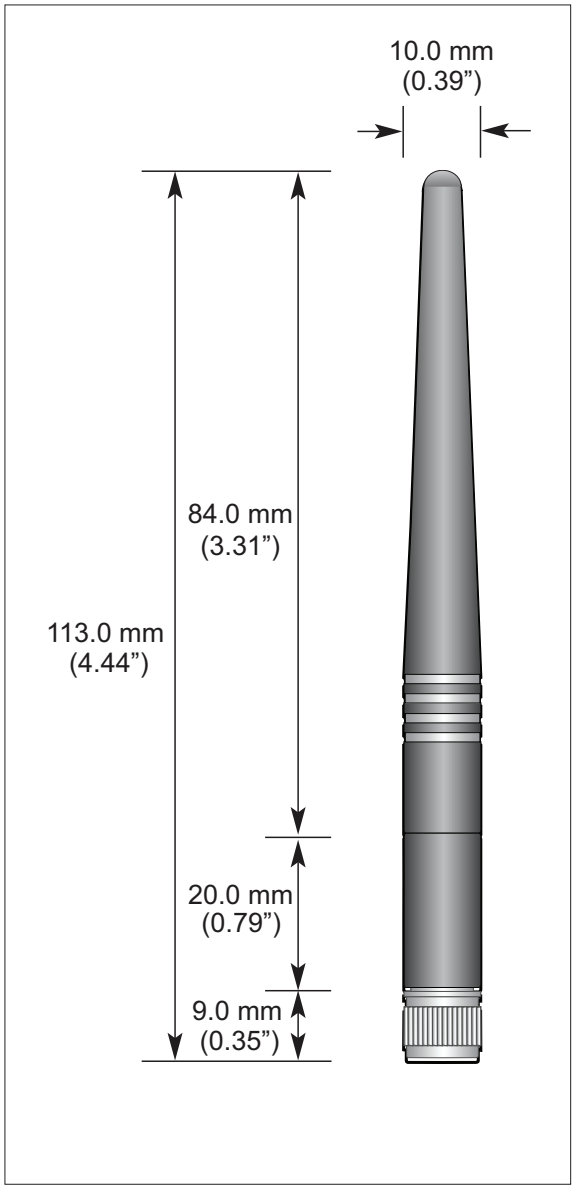
ANT-2.4-CW-CT-xxx

Data Sheet

AntennaFactor by Linx

Product Description

The CT Series ½-wave 2.4GHz antenna delivers outstanding performance in a rugged and cosmetically-attractive package. The antenna's internal counterpoise eliminates external ground plane dependence and maximizes performance. CT Series antennas attach using a standard SMA or Part 15 compliant RP-SMA connector, though alternate connectors and custom colors are available for volume OEM customers.



Features

- Internal counterpoise
- Excellent performance
- Omni-directional pattern
- Very low VSWR
- Fully weatherized
- Rugged and damage-resistant
- Standard SMA or Part 15 compliant RP-SMA connector

Electrical Specifications

Center freq.	2.45GHz
Bandwidth:	150MHz
Wavelength:	½-wave
Peak Gain:	2.8dBi
VSWR:	<1.9 typ. at center
Impedance:	50-ohms
Connector:	RP-SMA or SMA
Oper. Temp. Range:	–40°C to +90°C

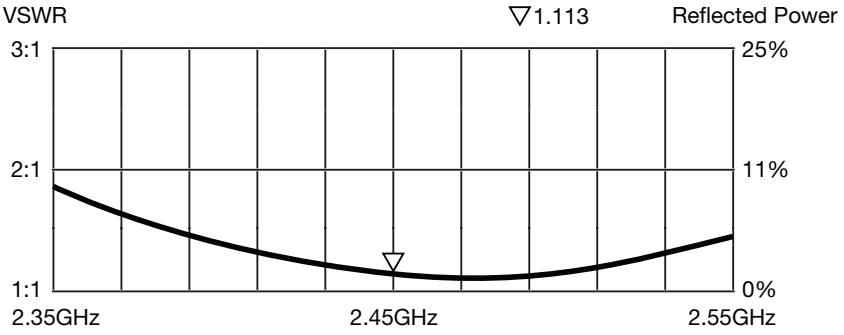
Electrical specifications and plots measured on 10.16 cm x 1016 cm (4.00" x 4.00") reference ground plane

Ordering Information

ANT-2.4-CW-CT-RPS (with RP-SMA connector)
ANT-2.4-CW-CT-SMA (with SMA connector)

Revised 11/22/13

VSWR Graph



What is VSWR?

The Voltage Standing Wave Ratio (VSWR) is a measurement of how well an antenna is matched to a source impedance, typically 50-ohms. It is calculated by measuring the voltage wave that is headed toward the load versus the voltage wave that is reflected back from the load. A perfect match will have a VSWR of 1:1. The higher the first number, the worse the match, and the more inefficient the system. Since a perfect match cannot ever be obtained, some benchmark for performance needs to be set. In the case of antenna VSWR, this is usually 2:1. At this point, 88.9% of the energy sent to the antenna by the transmitter is radiated into free space and 11.1% is either reflected back into the source or lost as heat on the structure of the antenna. In the other direction, 88.9% of the energy recovered by the antenna is transferred into the receiver. As a side note, since the ":1" is always implied, many data sheets will remove it and just display the first number.

How to Read a VSWR Graph

VSWR is usually displayed graphically versus frequency. The lowest point on the graph is the antenna's operational center frequency. In most cases, this will be different than the designed center frequency due to fabrication tolerances. The VSWR at that point denotes how close to 50-ohms the antenna gets. Linx specifies the recommended bandwidth as the range where the typical antenna VSWR is less than 2:1.

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