

Product Brief



ANT-5GWWS2-SMA Cellular Sub-6 5G Antenna

The 5GWWS2 is a dipole, blade-style antenna for 5G New Radio, LTE, and cellular IoT (LTE-M, NB-IoT) applications. As a 5G NR antenna, the 5GWWS2 performs in the 617 MHz to 960 MHz low band, and excels in the 2496 MHz to 2690 MHz and 3300 MHz to 5000 MHz ranges for CBRS private networking, 4.9 GHz public safety and emerging 2.5 GHz and C-band applications.

The hinged design allows for the antenna to be positioned for optimum performance and reduces the potential for damage from impact compared to a fixed whip design. The antenna attaches with an SMA plug (male pin) connector.



Features

- Performance at 3.55 GHz to 3.7 GHz (CBRS)
 - VSWR: ≤ 2.1
 - Peak Gain: 5.6 dBi
 - Efficiency: 65%
- Performance at 4.94 GHz to 4.99 GHz
 - VSWR: ≤ 1.9
 - Peak Gain: 3.6 dBi
 - Efficiency: 69%
- Hinged design with detents for straight, 45 degree and 90 degree positioning
- SMA plug (male pin)

Applications

- Worldwide 5G/4G/3G/2G
- Cellular IoT: LTE-M (Cat-M1) and NB-IoT
- Private cellular networks
 - Citizens Broadband Radio Service (CBRS)
- 4.9 GHz Public Safety
- Emerging 5G C-Band applications
- Emerging 5G 2.5 GHz EBS applications
- 2.4 GHz ISM applications
 - Bluetooth®
 - ZigBee®
- Internet of Things (IoT) devices

Ordering Information

| Part Number | Description |
|----------------|--|
| ANT-5GWWS2-SMA | Cellular 5G blade-style antenna with SMA plug (male pin) |

Available from Linx Technologies and select distributors and representatives.

Electrical Specifications

| ANT-5GWWS2 | Frequency Range | VSWR (max.) | Peak Gain (dBi) | Avg. Gain (dBi) | Efficiency (%) |
|--------------------------------|---|-----------------------|-----------------|---------------------|----------------|
| LTE 71 | 617 MHz to 698 MHz | 4.0 | 0.6 | -3.1 | 53 |
| LTE 12, 13, 14, 17, 26, 28, 29 | 698 MHz to 803 MHz | 3.3 | -0.1 | -4.1 | 43 |
| LTE 5, 8, 20 | 791 MHz to 960 MHz | 3.5 | 0.5 | -5.6 | 43 |
| LTE 1, 2, 3, 4, 25, 66 | 1710 MHz to 2200 MHz | 2.5 | 3.3 | -2.3 | 62 |
| LTE 30, 40 | 2300 MHz to 2400 MHz | 2.4 | 2.7 | -1.8 | 68 |
| ISM | 2400 MHz to 2485 MHz | 1.7 | 2.7 | -1.9 | 69 |
| LTE 7, 41 | 2496 MHz to 2690 MHz | 2.0 | 1.6 | -1.4 | 77 |
| LTE 22, 42, 43, 48, 49, 52 | 3300 MHz to 3800 MHz | 2.2 | 4.0 | -2.2 | 63 |
| GPS/GNSS | 1553 MHz to 1609 MHz | 1.5 | 2.4 | -2.2 | 63 |
| CBRS | 3550 MHz to 3700 MHz | 2.1 | 5.6 | -2.1 | 65 |
| C-Band | 3700 MHz to 4200 MHz | 2.4 | 3.7 | -2.8 | 57 |
| Public Safety | 4940 MHz to 4990 MHz | 1.9 | 3.6 | -1.7 | 69 |
| Polarization | Linear | Impedance | | 50 Ω | |
| Radiation | Omnidirectional | Connection | | SMA plug (male pin) | |
| Max Power | 5 W | Electrical Type | | Dipole | |
| Wavelength | 1/2-wave | Operating Temp. Range | | -20 °C to +65 °C | |
| Weight | 38.0 g (1.34 oz) | | | | |
| Dimensions | 186.0 mm x 37.0 mm x 13.0 (7.32 in x 1.46 in x 0.51 in) | | | | |

Electrical specifications and plots measured with the antenna in a straight orientation.

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.

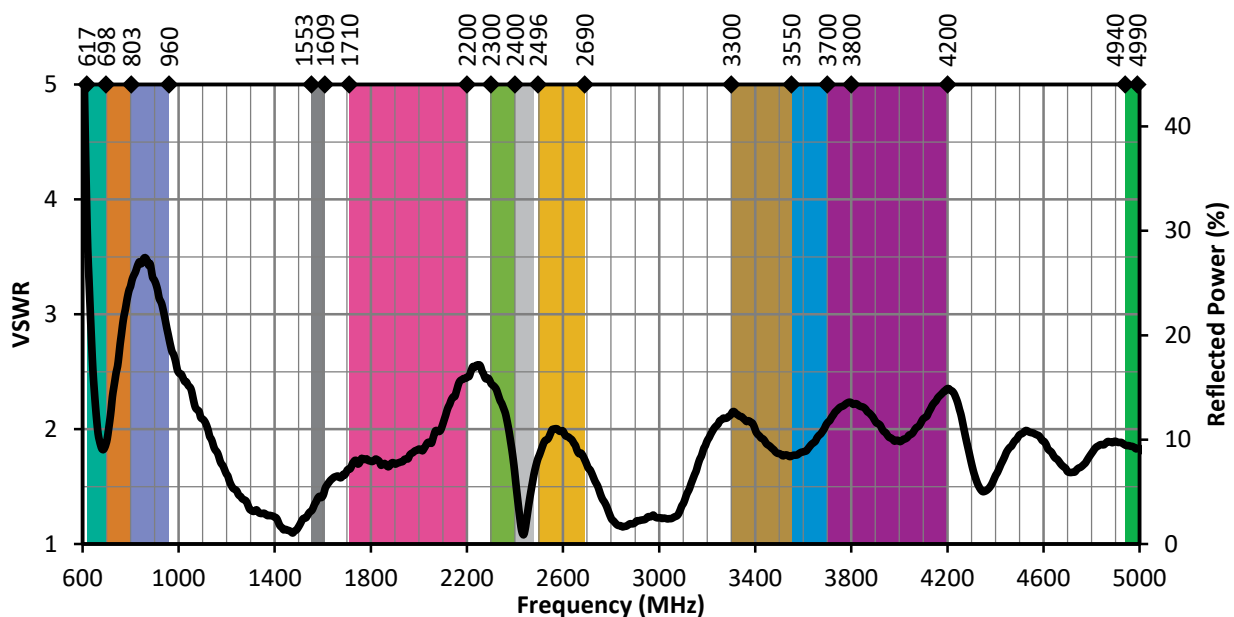


Figure 1. ANT-5GWWS2-SMA VSWR, Straight

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