

Product Brief



ANT-LTE-MON-SMA-L

Enhanced Low-Band LTE Connectorized Monopole Whip Antenna

The MON-L antenna is a member of Linx's LTE-MON family of compact rotatable hinged-whip antennas which offer optimized support for a wide range of cellular LTE and IoT applications.

The MON-L antenna provides excellent multiband cellular and cellular IoT performance. It offers better VSWR at the lower LTE frequency bands, including LTE Band 71 (617 MHz to 698 MHz), on a smaller ground plane than competitive products. This equates to better range in a smaller product design.

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.



Features

- Enhanced low-band coverage (LTE B71)
 - Efficiency: 73%
 - VSWR: ≤ 3.3
 - Peak Gain: 3.4 dBi
- Covers all common LTE/4G/3G/2G bands
- Hinged for optimum positioning
- Small, unobtrusive profile, 78.7 mm long
- Extended temperature range to 130 °C
- SMA plug (male pin)

Applications

- Cellular IoT: LTE-M (Cat-M1) and NB-IoT
 - T-Mobile: band 71
 - AT&T: bands 12, 14, 17
 - Verizon: band 13
 - Europe: bands 8, 20
 - Latin America: bands 5, 28
 - Asia Pacific: bands 5, 8, 20, 28
- Worldwide LTE, UMTS and GSM
- Low-power, wide-area (LPWA) applications
 - LoRaWAN®
 - Sigfox®
- Citizens Broadband Radio Service (CBRS)
- ISM: Bluetooth® and ZigBee®
- FirstNet® Public Safety
- Internet of Things (IoT) devices
- Gateways

Ordering Information

Part Number	Description
ANT-LTE-MON-SMA-L	Antenna with SMA plug (male pin)

Available from Linx Technologies and select distributors and representatives.

Electrical Specifications

Select Bands	Frequency Range	VSWR (max.)	Peak Gain (dBi)	Avg. Gain (dBi)	Efficiency (%)
LTE 71	617 MHz to 698 MHz	3.3	3.4	-1.5	73
LTE 12, 13, 14, 17, 26, 28, 29	698 MHz to 803 MHz	2.2	4.8	-0.7	90
LTE 5, 8, 20	791 MHz to 960 MHz	2.6	5.0	-1.1	90
LTE 1, 2, 3, 4, 25, 66	1710 MHz to 2200 MHz	3.2	3.9	-1.6	72
LTE 30, 40	2300 MHz to 2400 MHz	2.3	3.4	-1.2	77
LTE 7, 41	2496 MHz to 2690 MHz	1.9	4.1	-1.1	79
LTE 22, 42, 52, 43, 48, 49	3300 MHz to 3800 MHz	2.2	4.6	-2.4	64
ISM	2400 MHz to 2485 MHz	2.1	3.2	-1.4	74

Polarization	Linear	Impedance	50 Ω
Radiation	Omnidirectional	Connection	SMA Plug (male pin)
Max Power	10 W	Weight	10.0 g (0.35 oz)
Wavelength	1/4-wave	Dimensions	78.7 mm (3.1 in)
Electrical Type	Monopole	Operating Temperature	-40 °C to +130 °C

Electrical specifications and plots measured with a 102 mm x 102 mm (4.0 in x 4.0 in) reference ground plane, edge straight orientation.

VSWR

Figure 1 provides the voltage standing wave ratio (VSWR) across the antenna bandwidth in an edge-straight antenna orientation. 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.

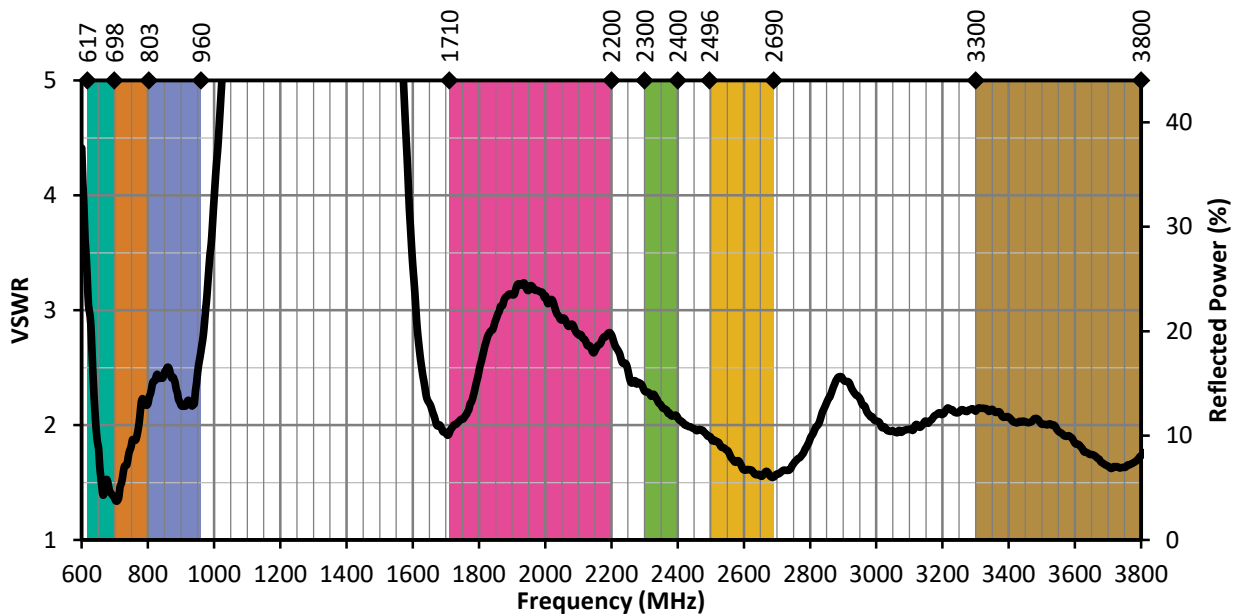


Figure 1. MON-L VSWR, Edge-Straight Orientation, with Frequency Band Highlights

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