



## Lightweight Plastic Base 5GNR MIMO Screw Mount Antenna

### Description

The Next Generation Heavy Duty Low-Cost 2-in-1 Solution for Intelligent Machine Control 2J Antennas is excited to introduce “The Medusa Series” 2-in-1 5GNR MIMO Screw Mount Antenna (2J7B83Ba). This next-generation antenna integrates durability, high performance, efficiency and ultra-reliable low-latency communication (URLLC) into a low-cost and permanent solution for medical emergency, construction, agriculture and transportation industries. The 2J7B83Ba offers 2 high-performance antennas that support 5GNR, 4G LTE, FirstNet, CBRS, LPWA, CAT-X, CAT-Mx, CAT-NBx, NB-IoT, 3G, 2G standards making it the most reliable antenna on the market.

#### Cable 1 and 2: 5GNR MIMO

Cables 1 and 2 are designed for 5GNR devices that operate within all 5G/4GLTE/3G/2G frequencies (617 – 5925 MHz). The 5GNR technology introduces millimeter-wave (mmWave) frequency for new generation LTE bands and is the ideal solution for MIMO technology. New generation LTE 4G applications demand high data speeds, therefore high efficiency and high gain MIMO antennas are required for necessary signal to noise ratio and throughput.

All our products have been tested by our expert engineers and measured in our certified CTIA 3D Anechoic Chamber. Please contact our experienced team for assistance with antenna selection and recommendations.

#### Installation / Environmental

The 2J7B83Ba is protected with a robust and heavy-duty housing made with high-quality acrylonitrile styrene acrylate (ASA) UV stable material, known for its thermal resistant properties, and ASA plastic antenna base as an alternative low-cost solution to the metal base options. This antenna is impact resistant, dust resistant and waterproof with full IP67, IP69 and IK09 certification making it ideal for external applications in harsh environmental conditions. Ground plane independence and reliable screw mount installation offer easy, permanent installations on a wide range of surfaces. We offer a wide range of alternative connectors and cables for any customization needs and our highly skilled team is available to guide our customers through any special requirements. 2J Antennas supports the health of our environment and manufactures all our products without hazardous materials making us fully REACH and RoHS compliant.

Technologies 5G, 4G, 3G and 2G

Standards 5GNR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G

Frequency 617-960, 1427-2690, 3300-5000, 5150-5925

Return Loss (dB) ~-6.8, ~-16.5, ~-10.4, ~-14.3

VSWR ~3.1:1, ~1.5:1, ~2.1:1, ~1.5:1

Efficiency (%) ~41.5, ~56.8, ~45.2, ~41.1

Peak Gain (dBi) ~-0.2, ~3.7, ~3.9, ~4.3

Impedance (Ohm) 50

Polarisation Linear

Radiation Pattern Omni-Directional

Max. Input Power (W) 35

Technologies 5G, 4G, 3G and 2G

Standards 5GNR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G

Frequency 617-960, 1427-2690, 3300-5000, 5150-5925

Return Loss (dB) ~-7.0, ~-16.2, ~-11.4, ~-14.8

VSWR ~3.0:1, ~1.5:1, ~2.0:1, ~1.5:1

Efficiency (%) ~42.1, ~59.9, ~44.8, ~44.5

Peak Gain (dBi) ~0.2, ~3.9, ~4.0, ~4.9

Impedance (Ohm) 50

Polarisation Linear

Radiation Pattern Omni-Directional

Max. Input Power (W) 35

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**Author**

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