



Falcon 5GNR/4G/3G/2G/CDMA MIMO and GPS/GLONASS Adhesive Mount Antenna

Description

The # 1 Choice Antenna Solution for Enhanced Global Coverage

2J Antennas is excited to introduce our new “Falcon Series” 5GNR MIMO and GNSS Adhesive Mount Antenna (2J6084PGFa) designed for MIMO devices operating within 617-5925 MHz frequencies serving 5GNR, 4G LTE, FirstNet, CBRS, LPWA, CAT-x, CAT-Mx, CAT-NBx, NB-IoT, 3G, 2G,CDMA as well as GPS/QZSS/Galileo GNSS standards. The low-profile compact design and high-quality adhesive mount make this antenna an ideal solution for outdoor applications with quick and easy installation on a wide range of surfaces.

Cable 1 and 2: 5GNR (617-960, 1427-2690, 3300-5000 and 5150-5925 MHz)

Cable 1 and 2 are designed with 5G New Radio (5GNR) technology that enhances coverage through high gain adaptive beamforming to meet the growing demands of Massive MIMO devices. This results in low latency, high efficiency, higher capacity and higher coverage with low power consumption and low interference while supporting additional bandwidths. The omni-directional radiation pattern allows for 360-degree clear signal strength and maximizes throughput.

Cable 3: GPS/GLONASS (1575-1610 MHz)

Cable 3 caters to precision navigational applications that operate within GPS, QZSS, Galileo and GLONASS standards. Designed with hemispherical radiation pattern and right-hand circular polarization allows cable 3 to radiate on all planes and maximize connectivity by avoiding conflict with propagating signals and boost resistance to signal degradation caused by inclement weather conditions. To block inadequate frequencies (within 1575-1610 MHz) from passing to the receiver, cable 3 includes an electrostatic discharge (ESD) protection for up to 2KV and a SAW pre-filter.

Suggested Applications:

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 2J6084PGFa housing is manufactured from black or white ABS / UV stable material offering exceptional durability at a low cost for maximum protection from extreme outdoor applications. Cable 1

and 2 come with standard SMA-Male connector and 300 cm long DACAR302 Coaxial cable, a popular choice for automotive applications due to its environmental properties, best coupling resistance and stable impedance. Cable 3 comes with standard SMA-Male connector and 300 cm long LL100 Low Loss Coaxial cable offering an economical solution with excellent performance for short antenna runs. 2J Antennas offers a wide range of alternative connectors and cables for any customization needs. With a compact design (80 x 76 x 16 mm), ground plane independence and high-grade adhesive mounting allow for easy installation on any non-metal surfaces. 2J Antennas supports the health of our environment and manufactures all our products without hazardous materials making us fully RoHS compliant.

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

Standards 5G NR/4G LTE/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) ~-6.9, ~-13.5, ~-9.1, ~-7.2

VSWR ~3.4:1, ~1.7:1, ~2.3:1, ~2.6:1

Efficiency (%) ~42.6, ~58.8, ~37.5, ~31.8

Peak Gain (dBi) ~2.4, ~4.4, ~2.0, ~1.1

Impedance (Ohm) 50

Polarisation Linear

Radiation Pattern Omni-Directional

Max. Input Power (W) 25

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

Standards 5G NR/4G LTE/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) ~-6.1, ~-15.5, ~-9.2, ~-8.0

VSWR ~3.5:1, ~1.6:1, ~2.3:1, ~2.3:1

Efficiency (%) ~43.9, ~63.9, ~36.8, ~31.1

Peak Gain (dBi) ~1.9, ~4.7, ~1.9, ~1.4

Impedance (Ohm) 50

Polarisation Linear

Radiation Pattern Omni-Directional

Max. Input Power (W) 25

Standards GPS/QZSS/Galileo/GLONASS

Frequency 1575.42, 1598-1606

VSWR <=1.4:1 50 Polarisation RHCP Active Gain (dB) 28 @ 2.7 V Saw Filter Type Pre-Filter Voltage

(V) 1.5 - 3.6 Noise Figure (dB) 1.5 Typ Current Consumption (mA) 9 Typ Power Consumption (mW)

24.3 Typ ESD Protection (kV) 2

Date Created

June 10, 2022

Author

nick