

Part No. X9001376-4GDRMB

External EU 4G / LTE Antenna

790 – 960 MHz / 1710 – 2690 MHz

Supports: LTE Cat 1, LTE-M, SigFox, LoRa, NB-IoT, M2M applications, IoT Gateways, Routers, Access point, Cellular LPWAN



External EU 4G / LTE Antenna

Low Band: 790 - 960 MHz
High Band: 1710 - 2690 MHz

KEY BENEFITS

Quicker Time-to-Market

Standard part means fewer design changes with, simple implementation

Easy Assembly using RP-SMA or SMA

Best in Class Performance

External antennas are designed to maintain high efficiency in a variety of device configurations

Great Flexibility

Standard connector to makes easy set-up

RoHS Compliant

Products are the latest RoHS version compliant.

APPLICATIONS

- Gateways
- Telematics
- Smart metering
- Home automation
- Smart city
- Structural health monitoring
- Predictive maintenance

KYOCERA AVX series of External antennas deliver on the key needs of device designers for higher functionality and performance in access point, with wide range of frequency options.

X9001376 is an IP67 black antenna, which offers protection against dust tight and water. This antenna provides a high gain suited for 4G LTE applications. The antenna can be mounted easily to the device via an RP- SMA.

Electrical Specifications

Typical Characteristics in Free Space

| Frequency (MHz) | 790 – 960 | 1710 – 2690 |
|----------------------|------------|-------------|
| Return Loss | < -9.00 dB | <-7.33 dB |
| Peak Gain | 1.16 dBi | 2.50 dBi |
| Average Efficiency | 63 % | 62 % |
| Polarization | Linear | |
| Feed Point Impedance | 50 ohm | |

Mechanical Specifications & Ordering Part Number

| Ordering Part Number | X9001376-4GDRMB |
|----------------------------|---|
| Dimensions (mm) | 180.00 ± 2.00 height 12.98 ± 0.20 diameter |
| Connector Type | RP-SMA |
| Weight (grams) | 24 |
| Color | Black (White color available upon request with the PN X9001376-4GDRMW) |
| Operating Temperature (°C) | - 40 to +120 |
| Radome Material | TPEE |
| IP Rating | IP67 |

EU 4G / LTE External antenna specifications
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

LTE Bands covered by X9001376

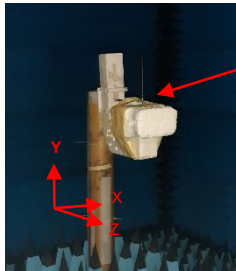
| LTE Band | Frequency Band (MHz) | Uplink (UL) (MHz) | Downlink (DL) (MHz) | Region | Covered |
|----------|----------------------|-------------------|---------------------|---------|---------|
| 1 | 2100 | 1920 - 1980 | 2110 - 2170 | Global | Yes |
| 2 | 1900 | 1850 - 1910 | 1930 - 1990 | NAM | |
| 3 | 1800 | 1710 - 1785 | 1805 - 1880 | Global | |
| 4 | 1700 | 1710 - 1755 | 2110 - 2155 | NAM | |
| 5 | 850 | 824 - 849 | 869 - 894 | NAM | |
| 6 | 850 | 830 - 840 | 875 - 885 | APAC | |
| 7 | 2600 | 2500 - 2570 | 2620 - 2690 | EMEA | |
| 8 | 900 | 880 - 915 | 925 - 960 | Global | |
| 9 | 1800 | 1749.9 - 1784.9 | 1844.9 - 1879.9 | APAC | |
| 10 | 1700 | 1710 - 1770 | 2110 - 2170 | NAM | |
| 11 | 1500 | 1427.9 - 1447.9 | 1475.9 - 1495.9 | Japan | No |
| 12 | 700 | 699 - 716 | 729 - 746 | NAM | |
| 13 | 700 | 777 - 787 | 746 - 756 | NAM | |
| 14 | 700 | 788 - 798 | 758 - 768 | NAM | |
| 17 | 700 | 704 - 716 | 734 - 746 | NAM | |
| 18 | 850 | 815 - 830 | 860 - 875 | Japan | Yes |
| 19 | 850 | 830 - 845 | 875 - 890 | Japan | |
| 20 | 800 | 832 - 862 | 791 - 821 | EMEA | |
| 21 | 1500 | 1447.9 - 1462.9 | 1495.9 - 1510.9 | Japan | No |
| 22 | 3500 | 3410 - 3490 | 3510 - 3590 | EMEA | Yes |
| 23 | 2000 | 2000 - 2020 | 2180 - 2200 | NAM | No |
| 24 | 1600 | 1626.5 - 1660.5 | 1525 - 1559 | NAM | Yes |
| 25 | 1900 | 1850 - 1915 | 1930 - 1995 | NAM | Yes |
| 26 | 850 | 814 - 849 | 859 - 894 | NAM | |
| 27 | 850 | 807 - 824 | 852 - 869 | NAM | No |
| 28 | 700 | 703 - 748 | 758 - 803 | APAC,EU | |
| 29 | 700 | N/A | 717 - 728 | NAM | Yes |
| 30 | 2300 | 2305 - 23151 | 2350 - 2360 | NAM | No |
| 31 | 450 | 452.5 - 457.5 | 462.5 - 467.5 | Global | No |
| 32 | 1500 | N/A | 1452 - 1496 | EMEA | |
| 33 | 1900 | | 1900 - 1920 | | Yes |
| 34 | 2000 | | 2010 - 2025 | | |
| 35 | 1850 | | 1850 - 1910 | | |
| 36 | 1900 | | 1930 - 1990 | | |
| 37 | 1900 | | 1910 - 1930 | | |
| 38 | 2600 | | 2570 - 2620 | | |
| 39 | 1900 | | 1880 - 1920 | | |
| 40 | 2300 | | 2300 - 2400 | | |
| 41 | 2500 | | 2496 - 2690 | | |
| 42 | 3500 | | 3400 - 3600 | | |
| 43 | 3700 | | 3600 - 3800 | | No |

NAM: North America, EMEA: Europe, Middle East, and Africa, APAC: Asia-Pacific, EU: Europe

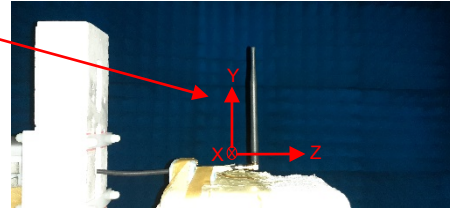
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Return Loss, Efficiency and Peak Gain Plots

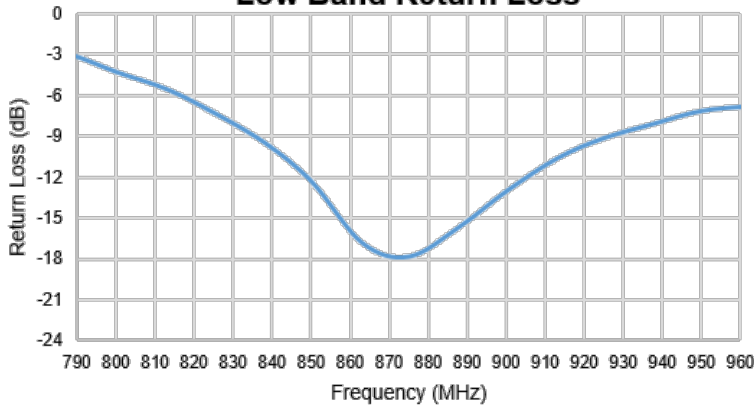
Typical performance measured in Free Space



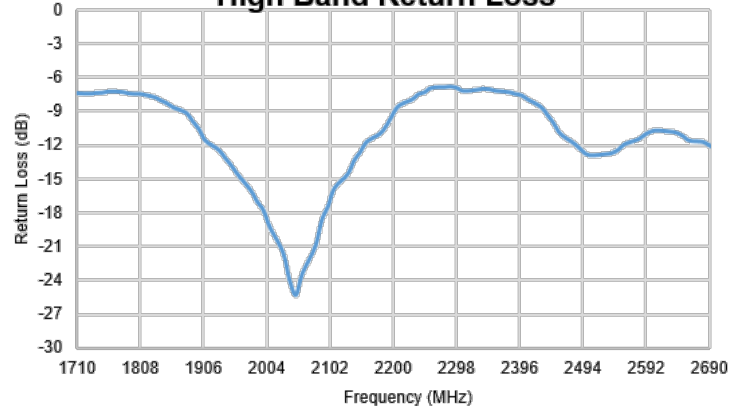
X9001376-4GDRMB



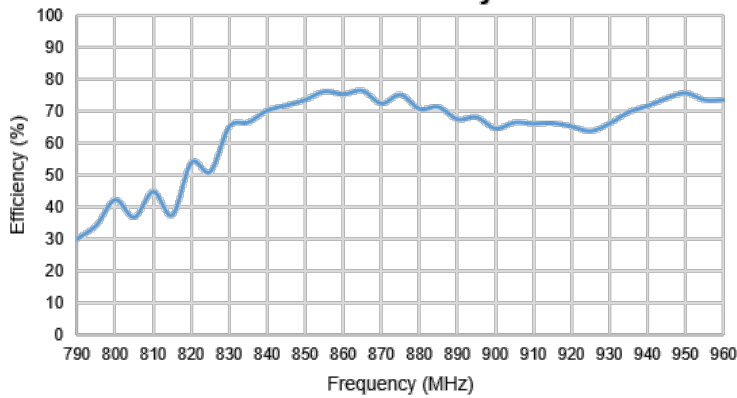
Low Band Return Loss



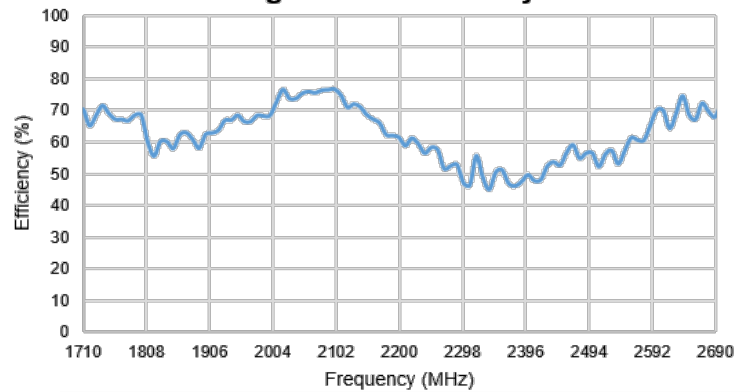
High Band Return Loss



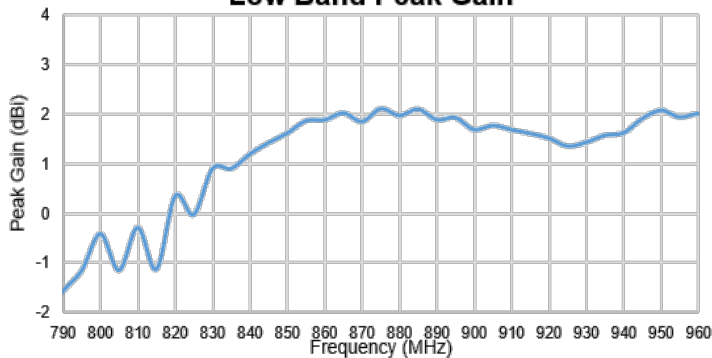
Low Band Efficiency



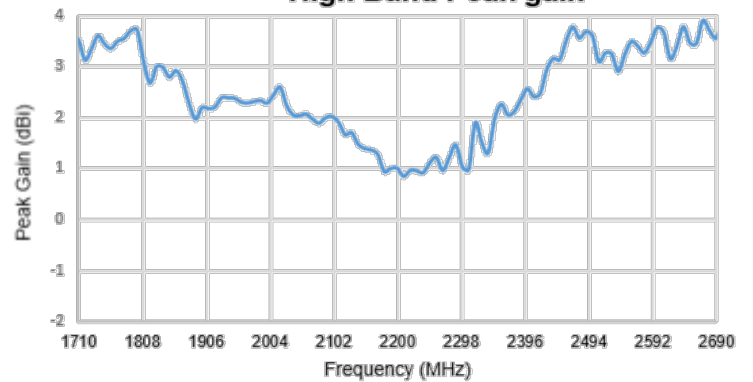
High Band Efficiency



Low Band Peak Gain



High Band Peak gain

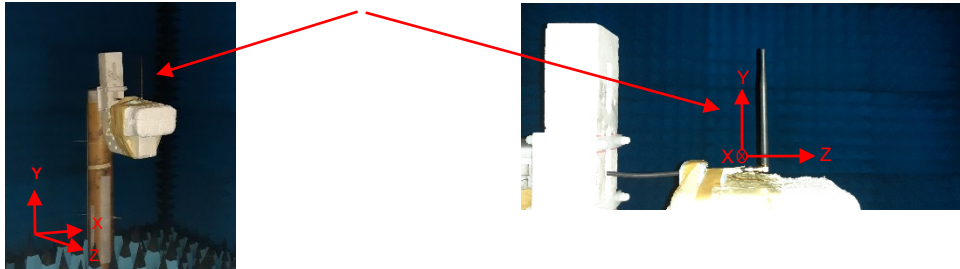


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Radiation Patterns Plots

Typical performance measured in Free Space

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— 850 MHz
 — 900 MHz

