

# 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	Yes
27	850	807 - 824	852 - 869	NAM	No
28	700	703 - 748	758 - 803	APAC,EU	No
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	Yes
33	1900	1900 - 1920			
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			No
43	3700	3600 - 3800			

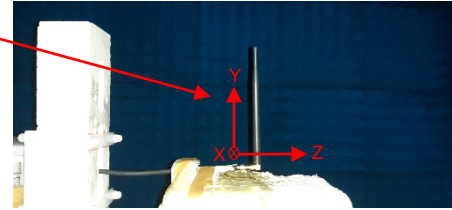
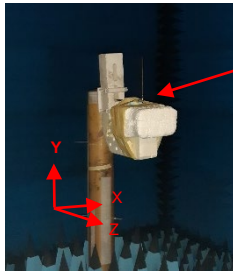
NAM: North America, EMEA: Europe, Middle East, and Africa, APAC: Asia-Pacific, EU: Europe

EU 4G / LTE External antenna specifications  
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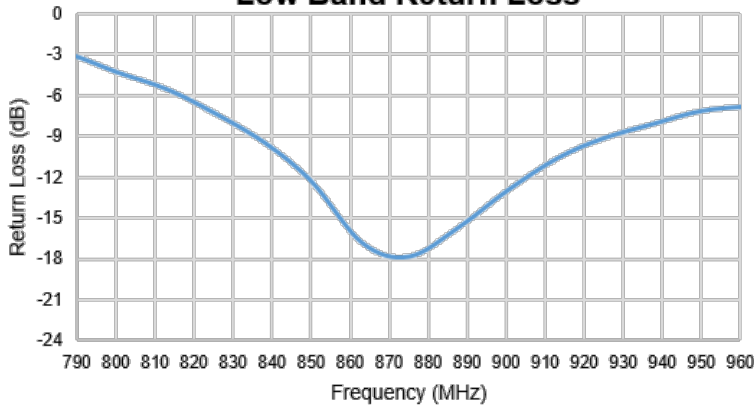
**Return Loss, Efficiency and Peak Gain Plots**

Typical performance measured in Free Space

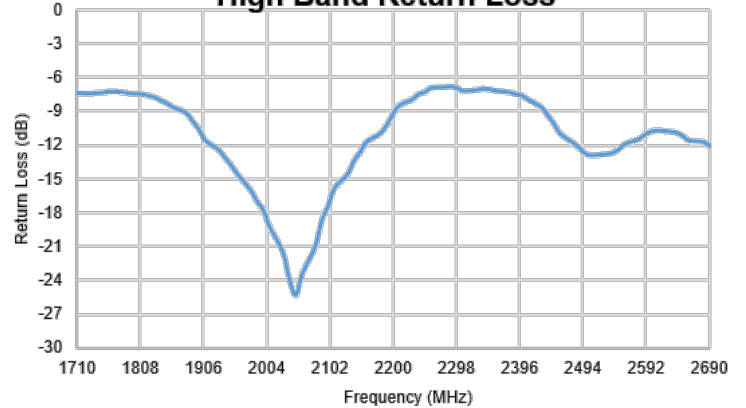
X9001376-4GDRMB



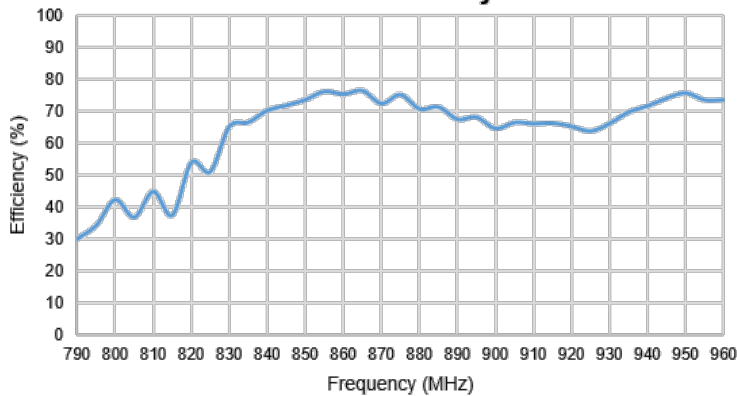
**Low Band Return Loss**



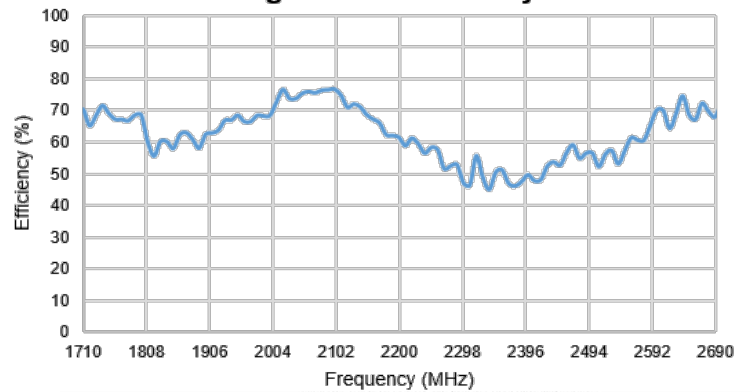
**High Band Return Loss**



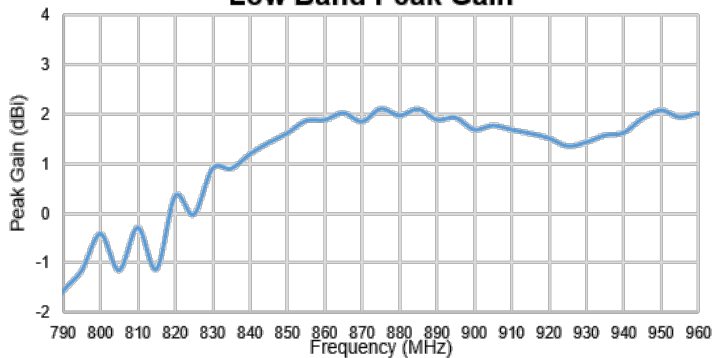
**Low Band Efficiency**



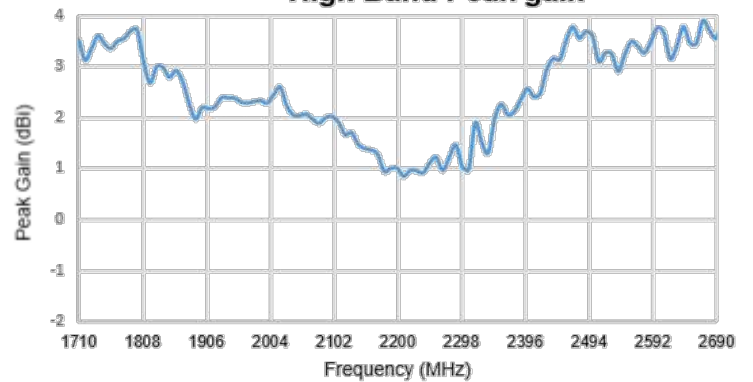
**High Band Efficiency**



**Low Band Peak Gain**



**High Band Peak gain**

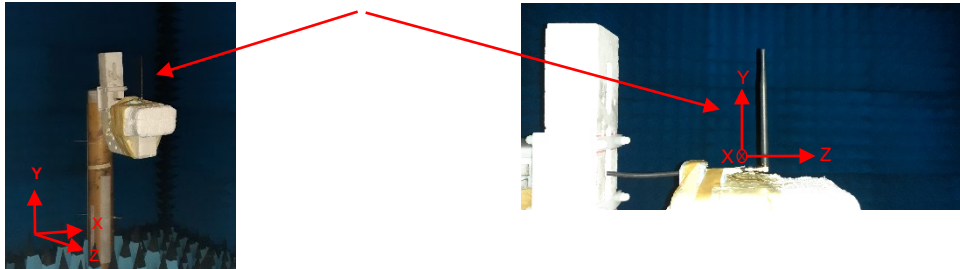


**EU 4G / LTE External antenna specifications**  
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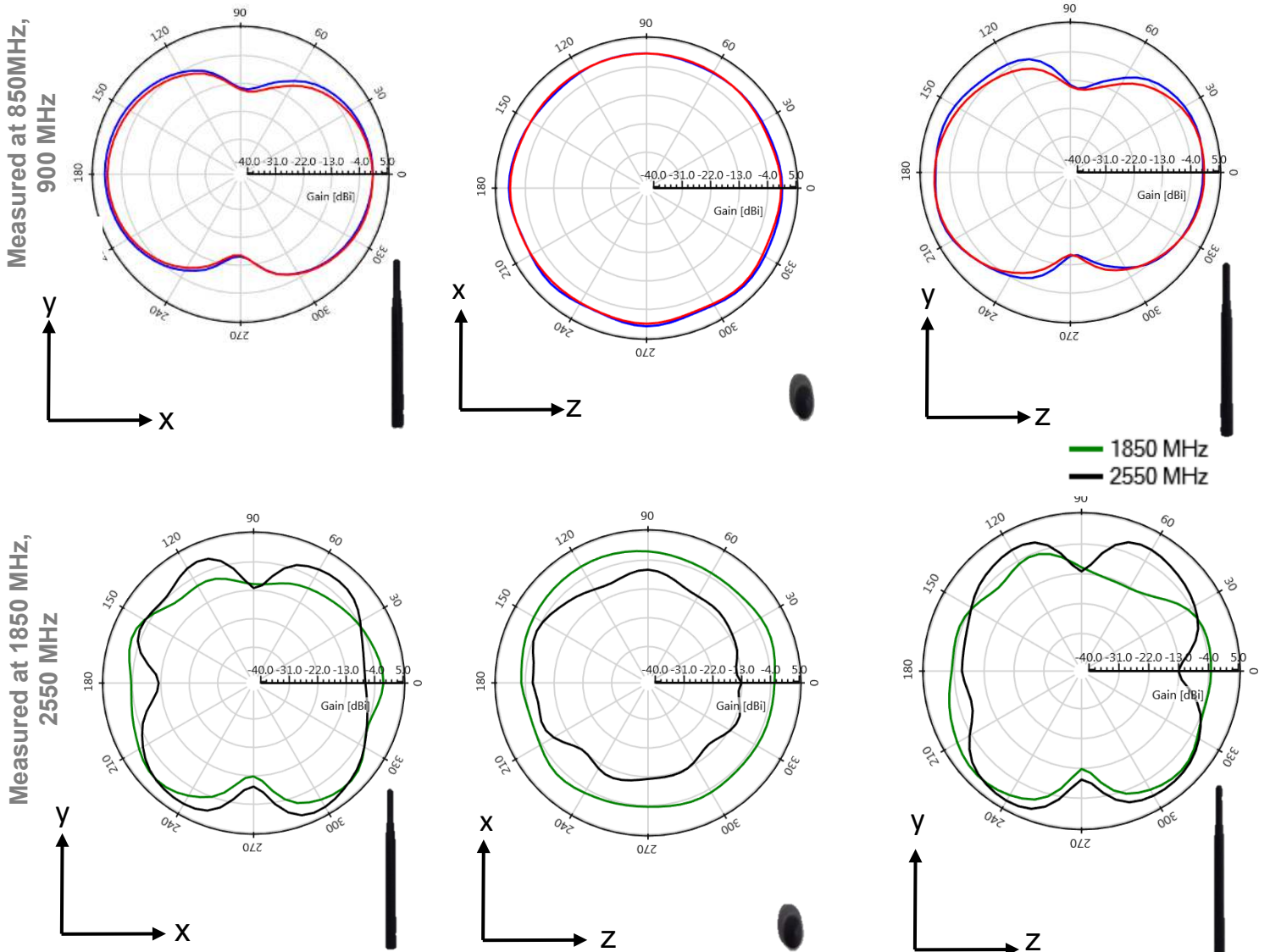
**Radiation Patterns Plots**

Typical performance measured in Free Space

X9001376-4GDRMB



— 850 MHz  
 — 900 MHz



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**Mechanical Specifications**

Typical antenna dimensions in mm

Part Number	A (mm)	B (mm)	Connector	Color
X9001376-4GDRMB	180.00 ± 2.00	12.98 ± 0.20	RP-SMA	Black
X9001376-4GDRMW	180.00 ± 2.00	12.98 ± 0.20	RP-SMA	White
X9001376-4GDSMW	180.00 ± 2.00	12.98 ± 0.20	SMA	White
X9001376-4GDSMB	180.00 ± 2.00	12.98 ± 0.20	SMA	Black

