



# Part No. X9001091-W3DSMW External Hinged Wi-Fi Dual Band Antenna

2.4 GHz, 5 GHz

Supports: Wi-Fi applications, Agriculture, Automotive, Bluetooth, ZigBee, WLAN, Smart Home, Healthcare, Digital Signage



KYOCERA AVX series of External antennas deliver on the key needs of device designers for higher functionality and performance in access points. The antenna offers a high gain on both the 2.4 & 5 GHz bands, and can be mounted easily straight or at right angle to the device via an SMA.

#### **Extensive RF Experience**

Our external antennas are supported by documentation and, when needed, by the expertise of RF engineers who have integrated hundreds of antenna designs into wireless devices.

# **Global Operations & Design Support**

KYOCERA AVX' global operations encompass an integrated network of design centers that provide local customer support.

## **Electrical Specifications**

Typical Characteristics measured in Free Space tested and 90° bent position

Frequency (GHz)	2.400 – 2.485	5.150 – 5.850			
Return Loss	<-14 dB	<-11 dB			
Peak Gain	1.8 dBi	4.0 dBi			
Average Efficiency	75%	80%			
Polarization	Vertical				
Feed Point Impedance	50 ohm				

## **Mechanical Specifications & Ordering Part Number**

Ordering Part Number	X9001091-W3DSMW		
Dimensions (mm)	84.00 ± 2.00 height 9.35 <b>±</b> 0.10 diameter		
Connector Type	SMA Male ( RP-SMA is available. Refer to appendix on last page )		
Weight (grams)	12		
Hinge	Foldable 90° at the hinge level		
Color	White (Black color is available. Refer to appendix on the last page)		
Operating Temperature (°C)	-40 to +120		
Radome Material	TPEE		

# **External Hinged Wi-Fi Dual Band Antenna**

2.4 GHz, 5 GHz

#### **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**

- Embedded
  - **Telematics**
- design Cellular,
- Tracking Healthcare
- Headsets, M2M, Tablets
  - Industrial
- Gateway, Access
- devices Smart Grid
- Point Handheld •
- · OBD-II IoT



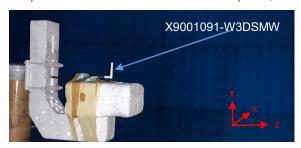


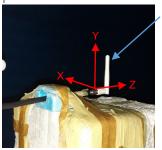
2.4 / 5 GHz External Wi-Fi antenna specifications

KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

# Return Loss, Efficiency, and Peak Gain Plots

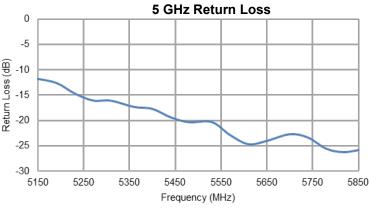
Typical performance measured in free space, and in 90° bent position



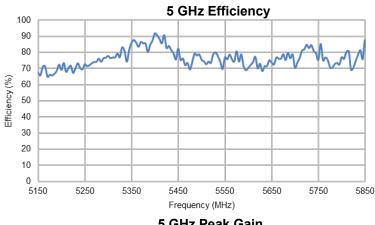


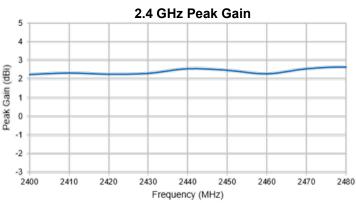
X9001091-W3DSMW in 90° bent position

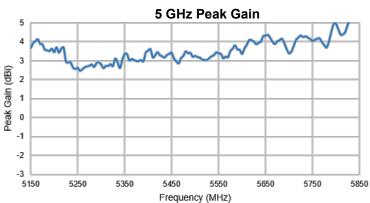












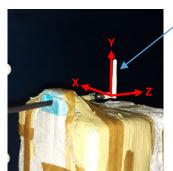


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#### **Radiation Patterns Plots**

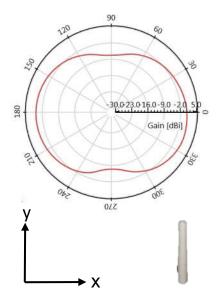
Typical performance measured in free space, and in 90° bent position

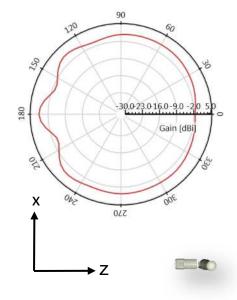
Measured at 2.44 GHz, 5.55 GHz

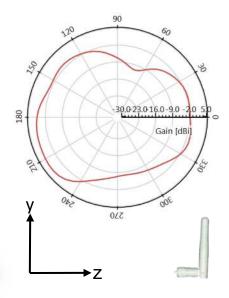


X9001091-W3DSMW

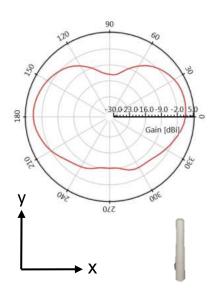


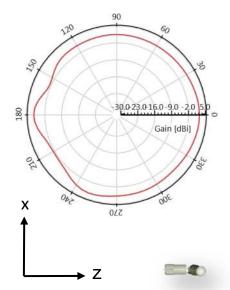


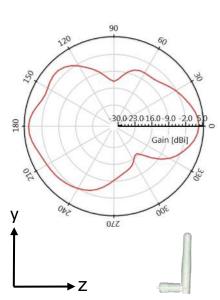














2.4 / 5 GHz External Wi-Fi antenna specifications KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

# **Mechanical Specifications**

Typical antenna dimensions in mm

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	Color	Connector
X9001091-W3DSMW	84.00 ± 2.00	58.00 ± 2.00	25.80 ± 2.00	9.35 ± 0.10	White	SMA Male
X9001091-W3DRMW	84.00 ± 2.00	58.00 ± 2.00	25.80 ± 2.00	9.35 ± 0.10	White	RP-SMA Male
X9001091-W3DSMB	84.00 ± 2.00	58.00 ± 2.00	25.80 ± 2.00	9.35 ± 0.10	Black	SMA Male
X9001091-W3DRMB	84.00 ± 2.00	58.00 ± 2.00	25.80 ± 2.00	9.35 ± 0.10	Black	RP-SMA Male

