



# Part No. X1005248-GDA2SA10A2 GNSS (active) / DSRC 2-in-1 External Antenna

(1561 / 1575 / 1602) MHz + (5850-5920) MHz

Supports: Tracking, Smart Home, Agriculture, Automotive Aftermarket, Healthcare, Digital Signage, Logistics, Industrial Devices



# GNSS (active) & DSRC 2-in-1 External Antenna

(1561 / 1575 / 1602) MHz (5850-5920) MHz

#### **KEY BENEFITS**

# Reduced Costs and Time-to Market

Standard antennas eliminate design fees and cycle time associated with a custom solution. getting products to market faster.

#### **High Performance**

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met. Reliability

Products are the latest RoHS & REACH version compliant.

Retail

#### **APPLICATIONS**

Remote Monitoring
Point of Sale
IoT devices
Gateway
Telematics
Tracking
Healthcare M2M, Industrial devices
Smart Grid
Logistics
Energy

KYOCERA AVX's 2-in-1 GNSS (active) and DSRC external antenna delivers on the key needs of device designers for higher functionality and performance.

### **Electrical Specifications**

Typical characteristics in free-space

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Frequency (GNSS)	1561 MHz	1575 MHz	1602 MHz				
Gain at Zenith	2.0 dBi	3.0 dBi	3.5 dBi				
VSWR	2.0:1 max						
LNA Electrical Properties							
Frequency (GPS- GLONASS)	1561 MHz	1575 MHz	1602 MHz				
VSWR	2.0:1 max						
Impedance	50 Ω						
Antenna Gain (@3.3 V)	28 dB / 25 dB min.						
DC Power Input	3~5 V						
Noise Figure	2.5 dB Typ.						
Power Consumption (@ 3.3 v)	9 mA Typ.						
Frequency (DSRC)	5850~5920 MHz						
Peak Gain	3.8 dBi						
Average Efficiency	54 %						
VSWR	2.0:1 max						
Impedance	50 Ω						



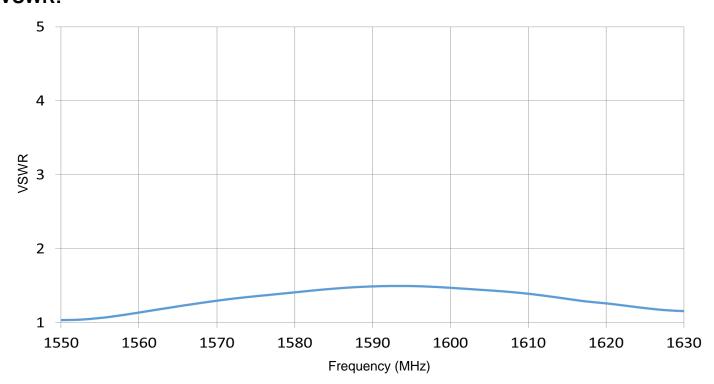
# **Mechanical Specifications**

Ordering Part #	X1005248-GDA2SA10A2	
Dimensions (mm)	55.0 x 55.0 x 20.0	
Mounting Type	Foam Adhesive	
Operating Temperature °C	-40 ~ +85	
Housing Material & Color	PC+ABS (Black)	
Cable	Length: 1M Type: RG-174 GNSS CFD-200 DSRC	
Connector	SMA(M) GNSS SMA(M) DSRC	
Waterproof	IPX5	

## **VSWR Plot (GNSS 1561 & 1575 & 1602 MHz)**

Typical characteristics in free-space

### **VSWR:**

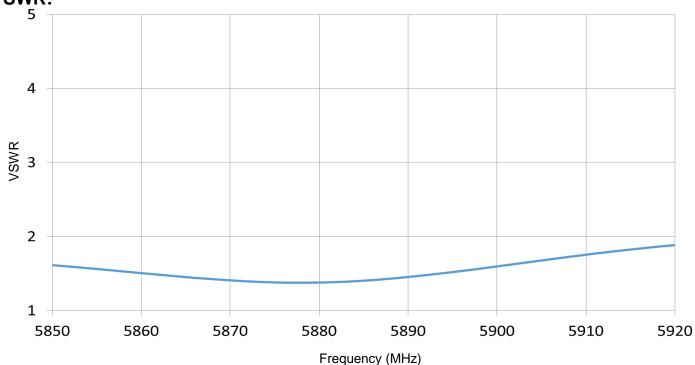




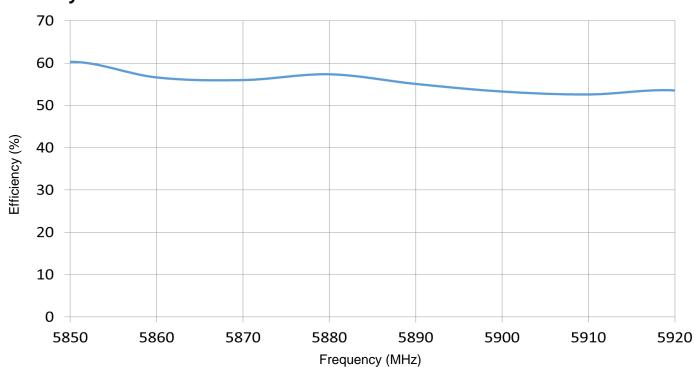
# VSWR, Efficiency Plots (DSRC 5850~5920 MHz)

Typical characteristics in free-space

### **VSWR:**



### **Efficiency:**

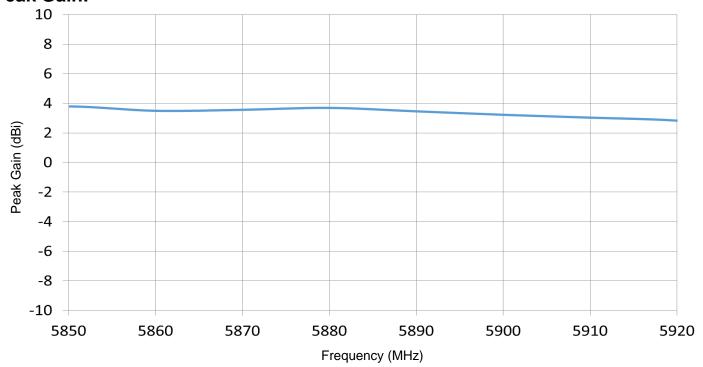




# Peak Gain Plot (DSRC 5850~5920 MHz)

Typical characteristics in free-space

### **Peak Gain:**

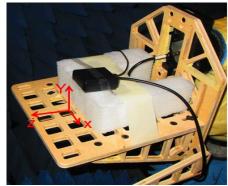


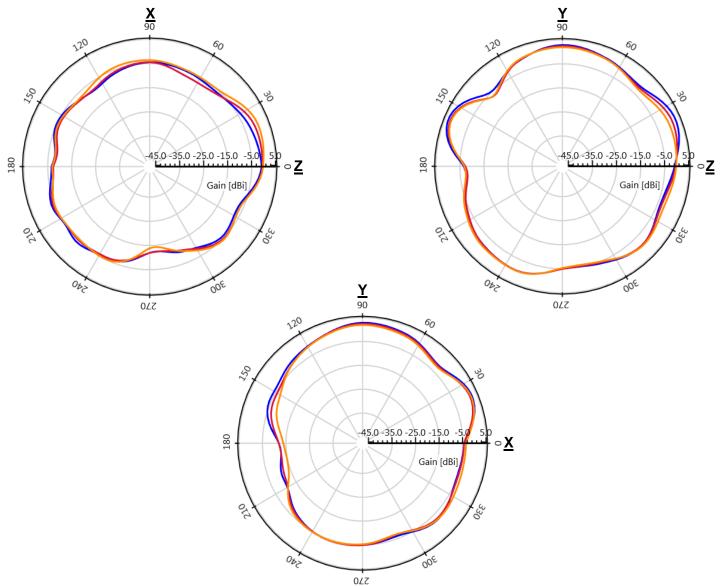


## 2D Radiation Patterns (DSRC 5850~5920 MHz)

Typical characteristics in free-space





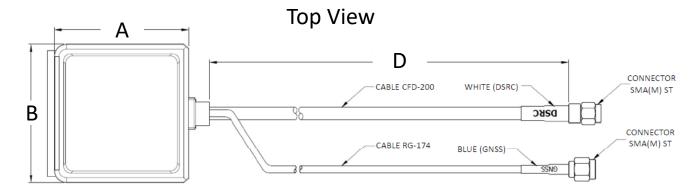




#### **Mechanical Dimensions**

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)
X1005248-GDA2SA10A2	55.0 ± 1.0	55.0 ± 1.0	$20.0 \pm 0.5$	1000 ± 40.0



# Side View



## **Bottom View**

