



# 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.

#### APPLICATIONS

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

Ethertronics' 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

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		



GNSS (active) / DSRC 2-in-1 External Antenna Specifications.  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

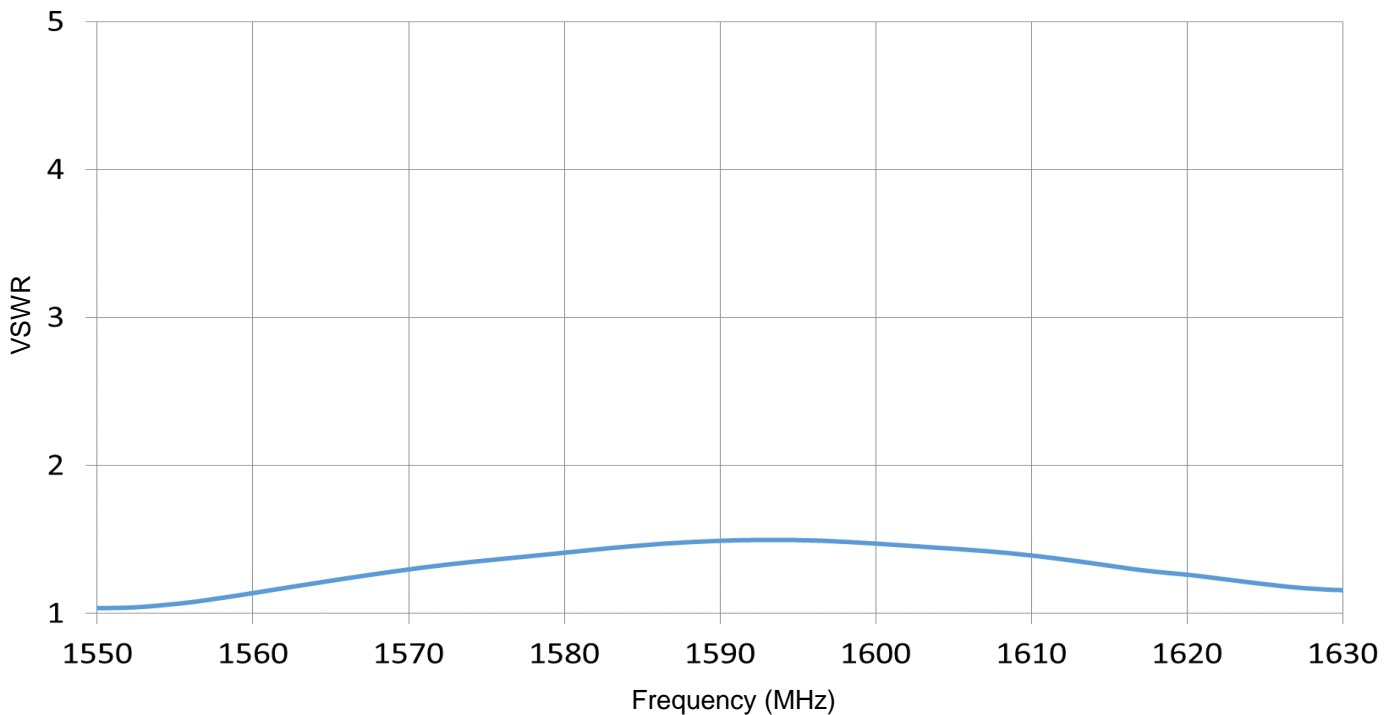
## Mechanical Specifications

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:



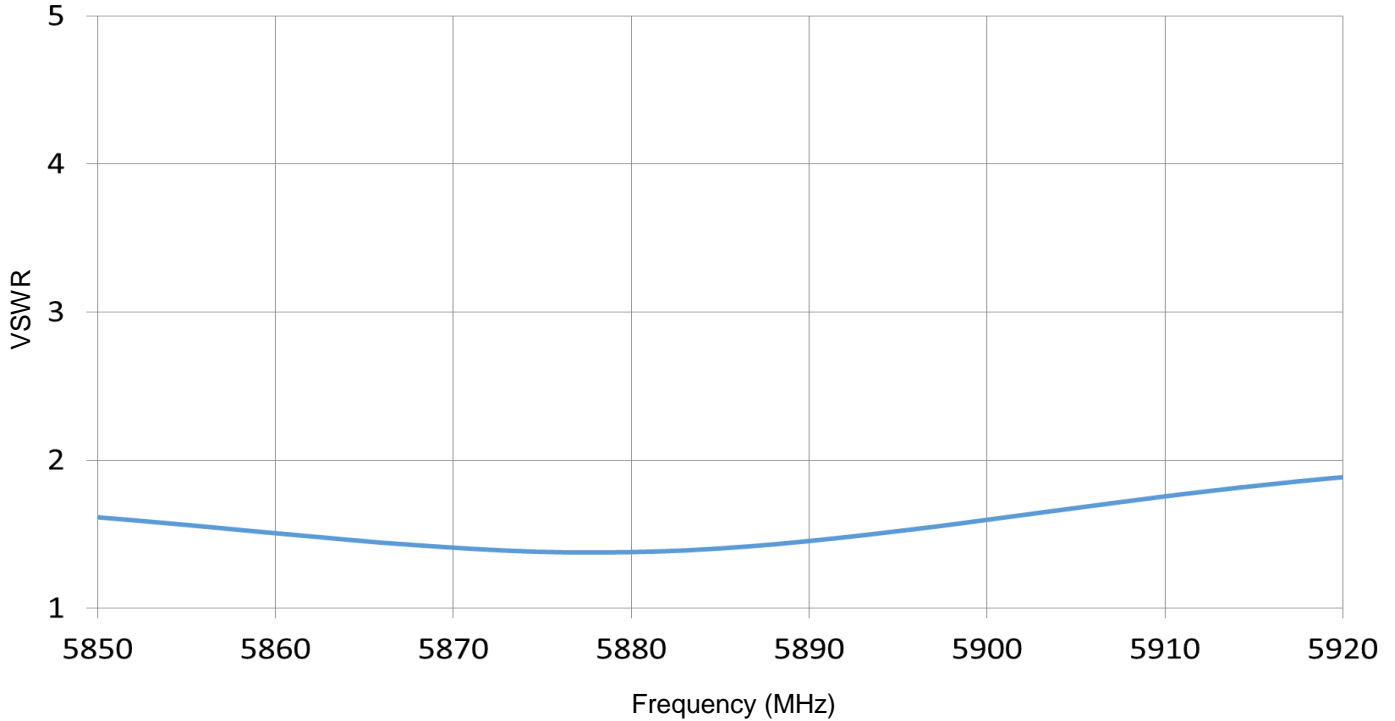


GNSS (active) / DSRC 2-in-1 External Antenna Specifications.  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

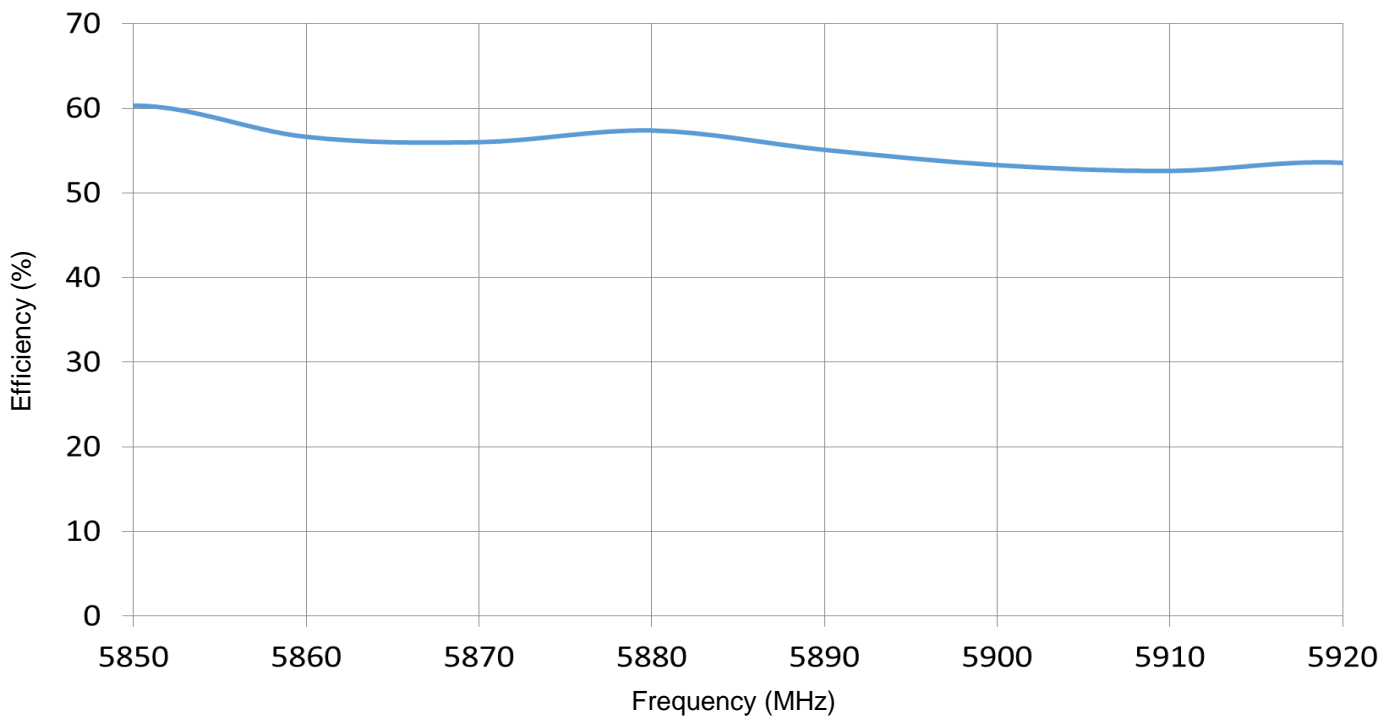
## VSWR, Efficiency Plots (DSRC 5850~5920 MHz)

Typical characteristics in free-space

### VSWR:



### Efficiency:



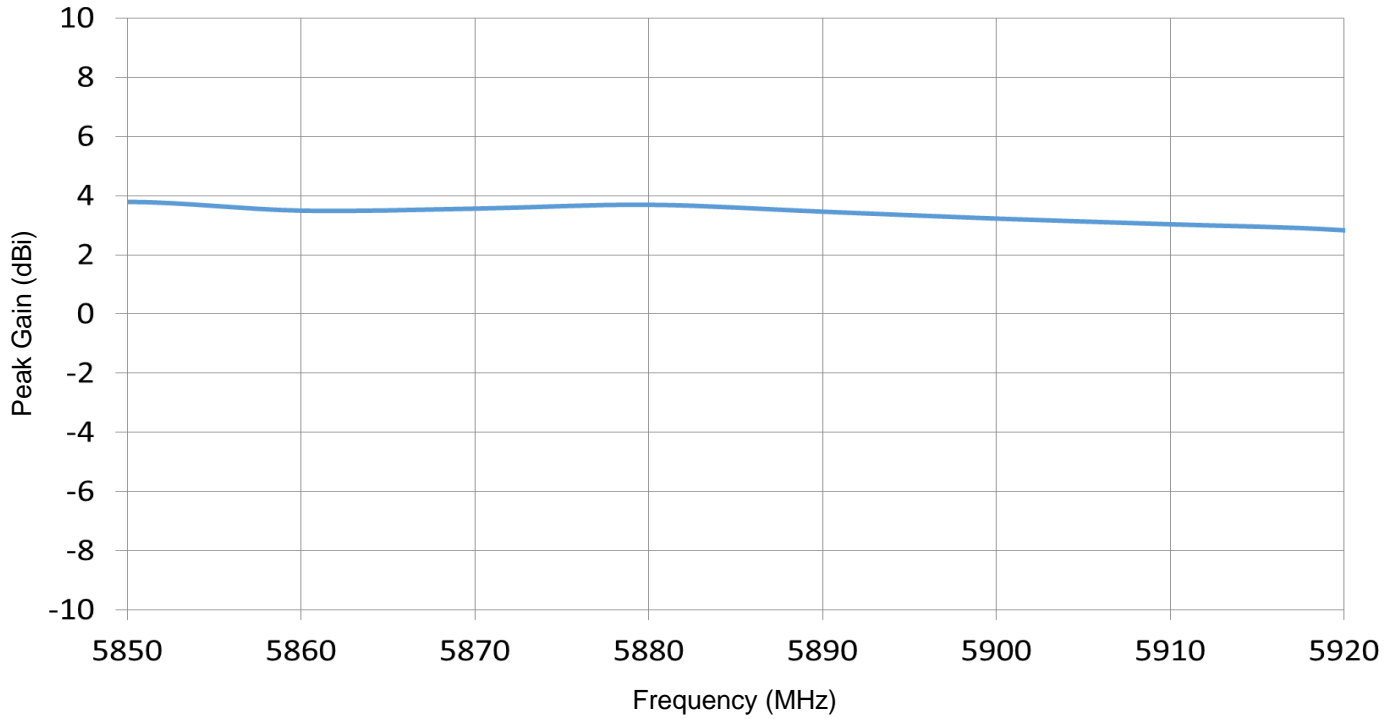


GNSS (active) / DSRC 2-in-1 External Antenna Specifications.  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

## Peak Gain Plot (DSRC 5850~5920 MHz)

Typical characteristics in free-space

### Peak Gain:

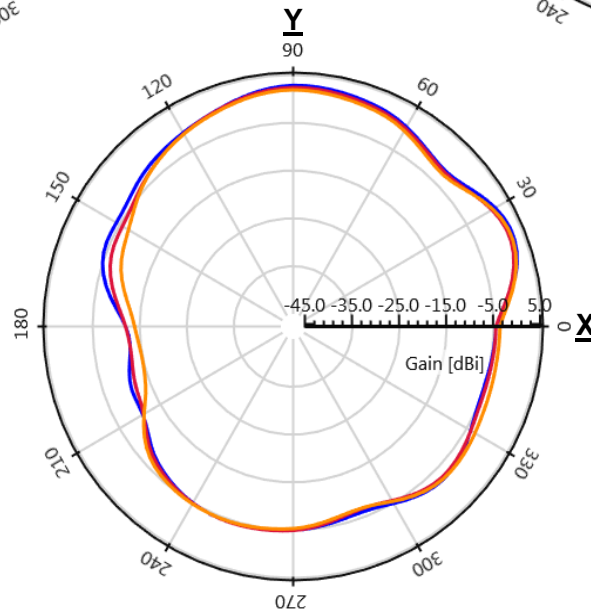
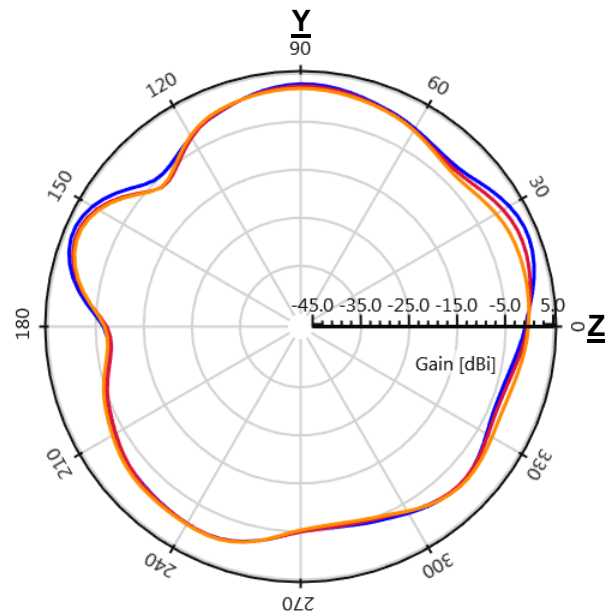
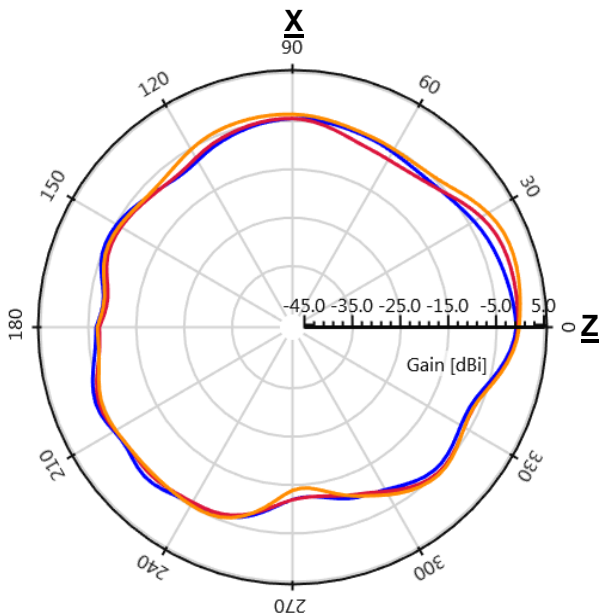
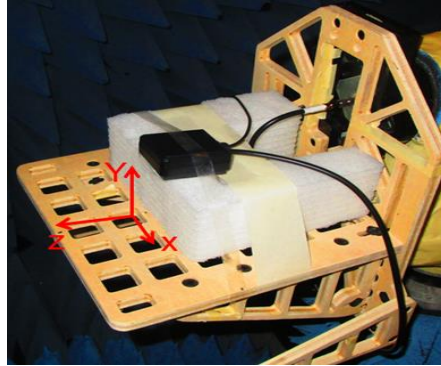
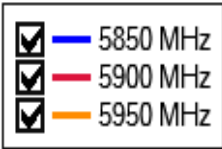




GNSS (active) / DSRC 2-in-1 External Antenna Specifications.  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

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

Typical characteristics in free-space





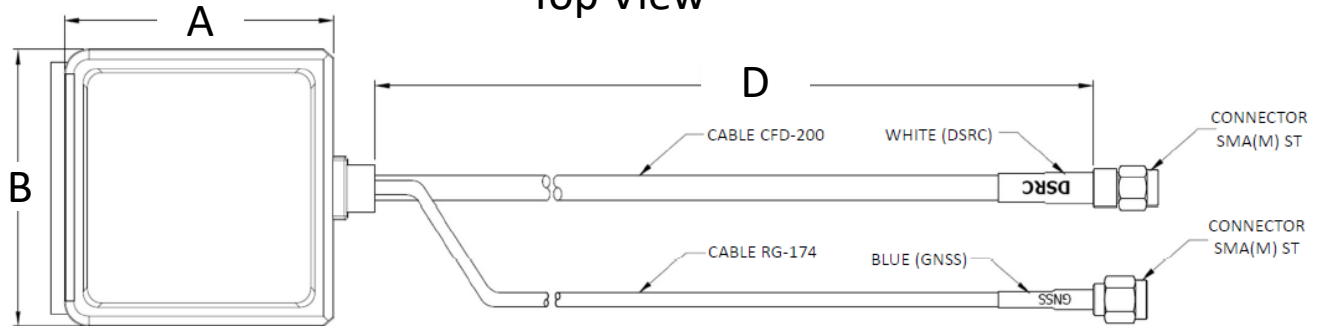
GNSS (active) / DSRC 2-in-1 External Antenna Specifications.  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

**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 ± 0.5	1000 ± 40.0

Top View



Side View



Bottom View

