

GNSS - Automotive Grade Active External Puck Antenna



AECA0401G4Z

Request Samples



Check Inventory



45.2 x 35.8 x 15.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Automotive Grade Antenna
- Manufactured in Automotive Certified line
 - IATF 16949 certified
- PPAP available upon request
- GNSS/GPS/GLONASS/BeiDou/QZSS
- High Gain of 5 dBi
- High LNA gain of 28±2 dB
- RHCP
- IP67
- Easy installation using built-in adhesive tape
- Fully customizable cable and connector options for RF connection

Applications

- IoT
- M2M
- Automotive Applications
- Geolocation Tracking
- Vehicle Tracking
- Fleet Management
- Smart City
- Transportation
- Smart Agriculture

Product Image



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Part Number Builder

AECA0401G4Z - **□□□□□**

Color / UV Coating	
Code	Description
S (Standard)	Black without UV coating
A	Black with UV Coating
B	White without UV Coating
C	White with UV Coating

Cable length in 'mm'	
Code	Description
3000 (Standard)	3000 mm
Other Examples :	
0200	200 mm
2000	2000 mm

Cable Type & Connector Type		
Code	Cable Type	Connector Type
S (Standard)	RG-174	SMA (M)
A		FAKRA C (F)
B		RP-SMA (M)
C		SMB (M)
D		N-Type (M)
E		TNC (M)
F		BNC (M)
G		MCX (M)
H		MMCX (M)
I		FME (M)
J		FME (F)
K	LMR-100	SMA (M)
L		FAKRA C (F)
M		RP-SMA (M)
N		SMB (M)
O		N-Type (M)
P		TNC (M)
Q		BNC (M)
R		MCX (M)
T		MMCX (M)
U		FME (M)
V		FME (F)

Example Configurations :

Part Number	UV Protection Coating / Color	Cable length	Cable Type / Connector Type
AECA0401G4Z S-3000S	No / Black	3000 mm	RG-174 with SMA (M) (Standard)
AECA0401G4Z A-1000A	Yes / Black	1000 mm	RG-174 with FAKRA C (M)
AECA0401G4Z B-5000O	No / White	5000 mm	LMR-100 with N-Type (M)

Note :

- For the standard part number (AECA0401G4Z**S-3000S**), please refer to the packaging at the end of the document.
- For custom configurations (AECA0401G4Z**□-□□□□□**), MOQs, pricing and packaging changes may be applicable.



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Electrical Specification

Parameter		Min	Typ	Max	Unit
Center Frequency		1561		1602	MHz
VSWR				1.5	
Gain (Zenith)				5	dBiC
Polarization			RHCP		
Impedance			50		Ω
Axial Ratio				3	dB
LNA					
Noise Figure				1.5	dB
Gain		26	28	30	dB
VSWR				2.0	
Ex-band Attenuation	CF + 50 MHz		12		dB
	CF - 50 MHz		16		
DC Supply Voltage		2.2		5.0	V
Current Consumption		5		15	mA
FILTER					
Insertion Loss				3.0	dB

Mechanical Specification

Parameter	Specification
Antenna Dimension	45.2 x 35.8 x 15.2 mm
Radome Material	ABS
Mounting Type	Adhesive
RF Connector	SMA (M)
RF Cable	RG-174
Cable Length	3 m

Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
RoHS Compliance	Yes
PB Free	Yes
MSL	1
ESD Sensitive	Yes
Vibration	10 ~ 55 Hz with 1.5 mm amplitude 2 hrs
UL Rating	UL-94 HB
Ingress Protection	IP67 (excluding cable outlet)



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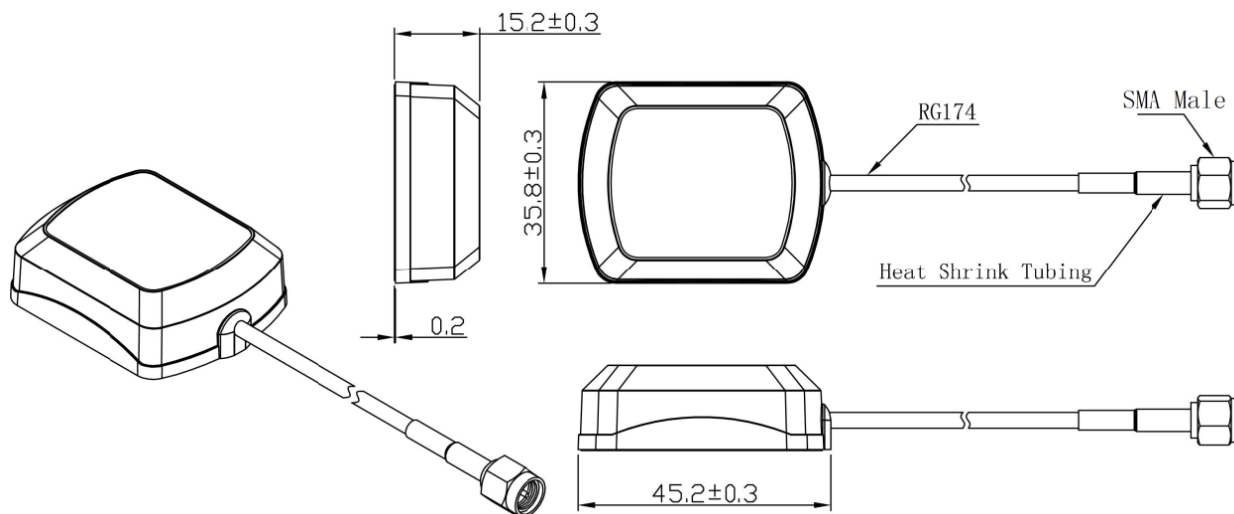


Check Inventory



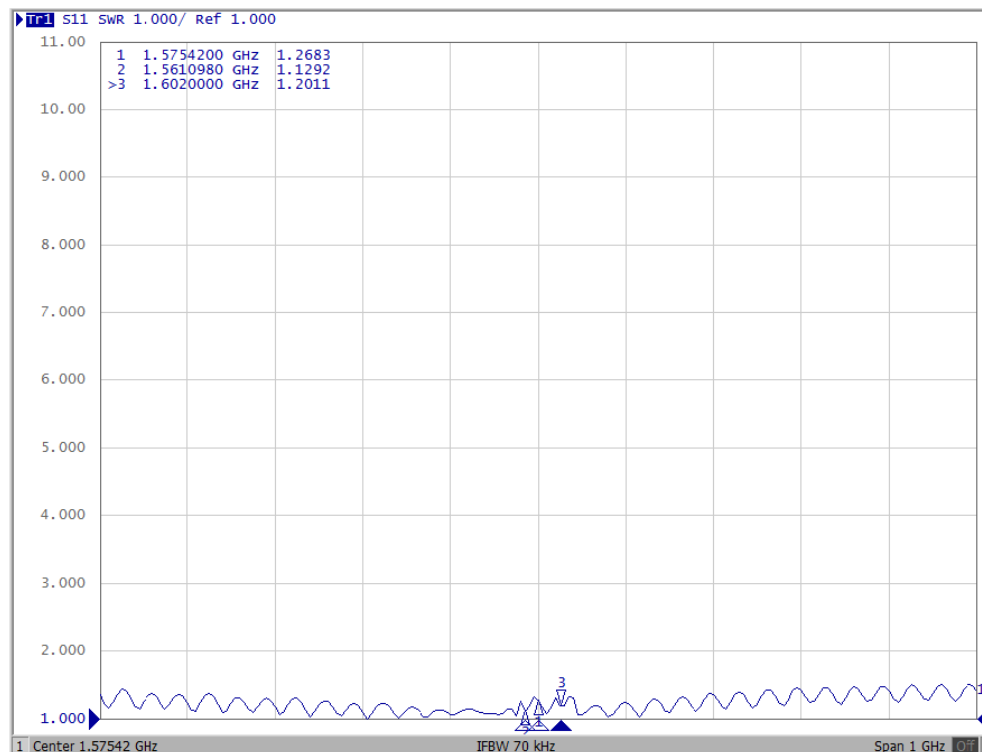
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Product Dimension



Unit : mm

Test Measurement - VSWR



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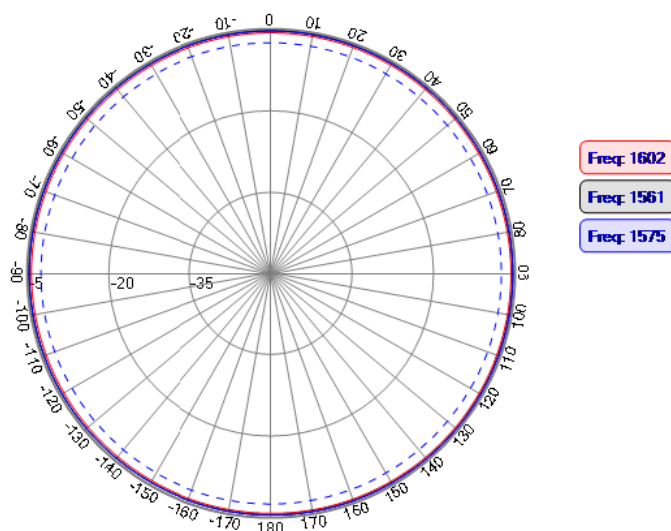


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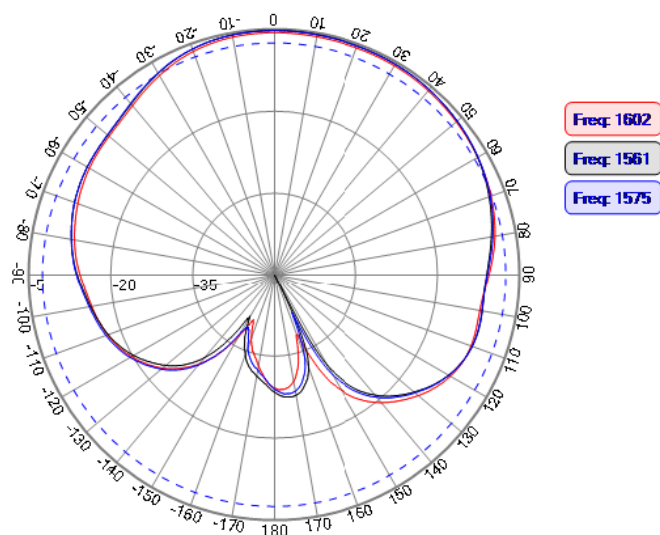
Radiation Characteristics

2D Pattern

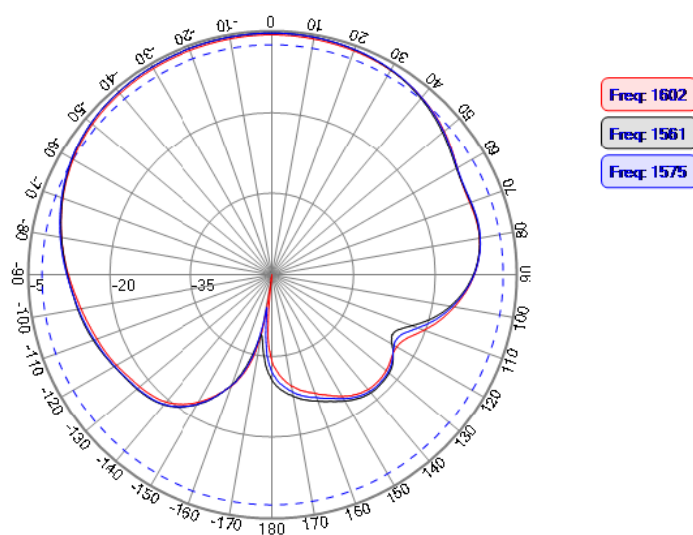
XY - Plane



XZ - Plane



YZ - Plane



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Packaging Information

Number of Antenna/ Carton : 200 pcs
Weight of 1 pc of the antenna : 65 g
Dimension of the Carton : 490 x 230 x 270 mm
Weight of the Carton : 14 kg

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