

# GNSS - Automotive Grade Active External Puck Antenna



**AECP0401G4Z**

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 lines
  - IATF 16949 certified
- PPAP available upon request
- GNSS/GPS/GLONASS/BeiDou/QZSS
- High Gain of 5 dBi
- High LNA gain of 28±2dB
- RHCP
- IP67 rated
- Easy installation using built-in magnet
- 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

**AEC P0401G4Z** -                     

Color / UV Coating	
Code	Description
<b>S</b> (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
<b>3000</b> (Standard)	3000 mm
Other Examples :	
0200	200 mm
2000	2000 mm

Cable Type & Connector Type		
Code	Cable Type	Connector Type
<b>S</b> (Standard)	RG-174	<b>SMA (M)</b>
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		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
AEC P0401G4Z <b>S</b> - <u>3000</u> <b>S</b>	No / Black	3000 mm	RG-174 with SMA (M) (Standard)
AEC P0401G4Z <b>A</b> - <u>1000</u> <b>A</b>	Yes / Black	1000 mm	RG-174 with FAKRA C (M)
AEC P0401G4Z <b>B</b> - <u>5000</u> <b>O</b>	No / White	5000 mm	LMR-100 with N-Type (M)

### Note :

- For the standard part number (AEC P0401G4Z**S**-3000**S**), please refer to the packaging at the end of the document.
- For custom configurations (AEC P0401G4Z -                 ), 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		$\Omega$
Axial Ratio			3	dB
<b>LNA</b>				
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
<b>FILTER</b>				
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	Magnet
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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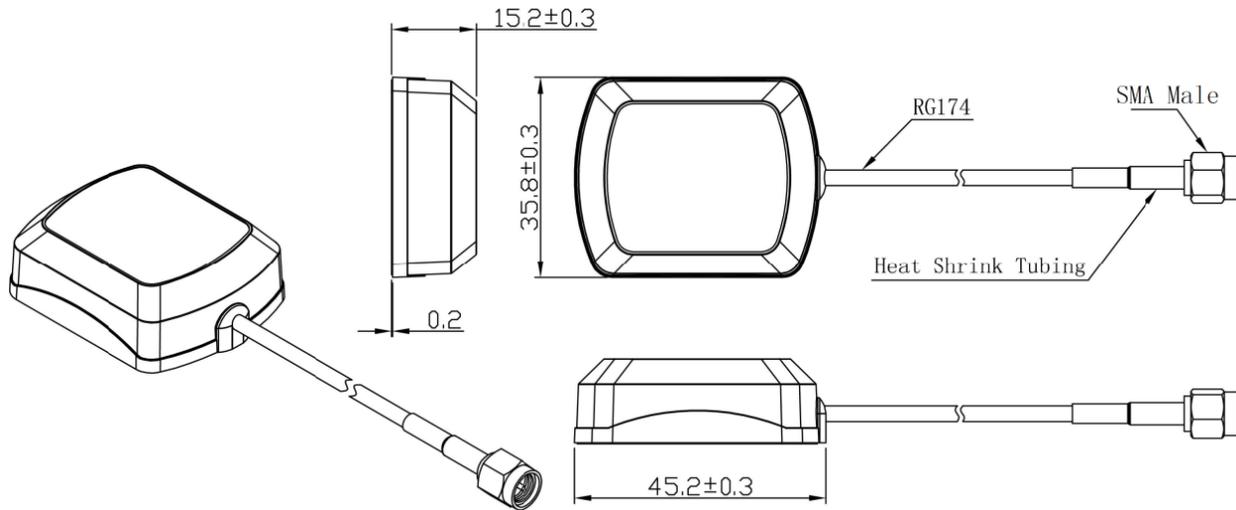


Check Inventory



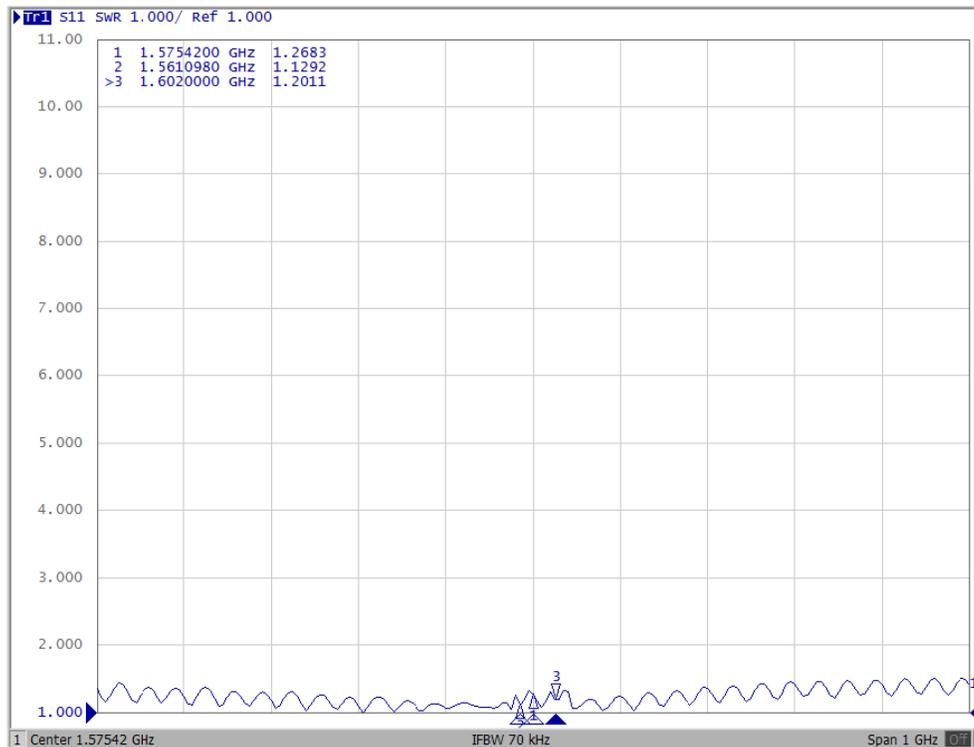
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## Product Dimension



Unit : mm

## Test Measurement - VSWR



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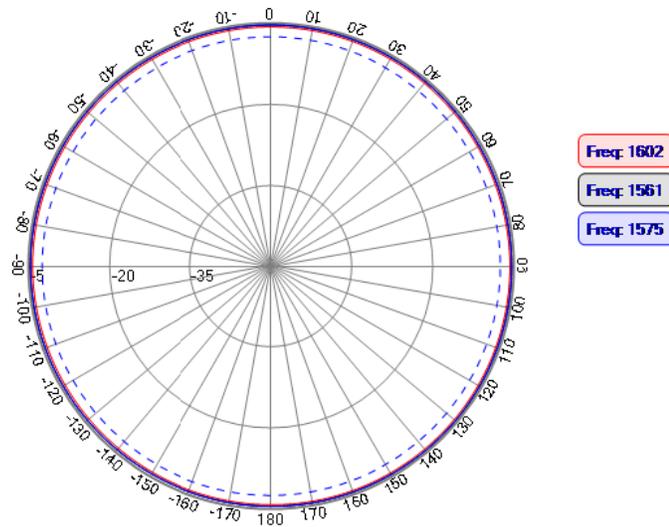


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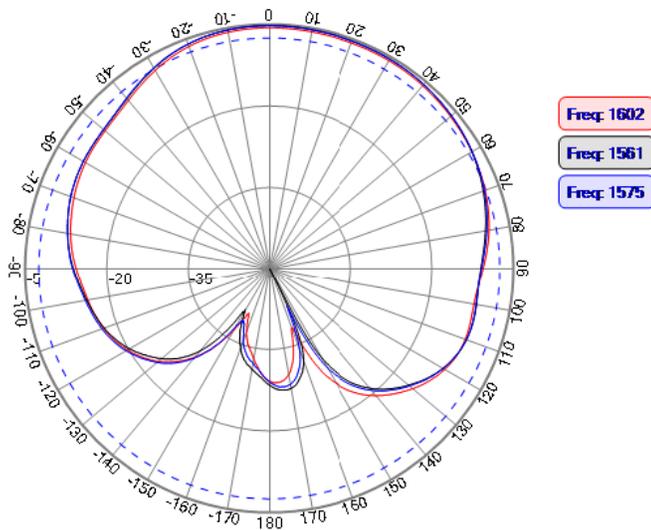
## Radiation Characteristics

### 2D Pattern

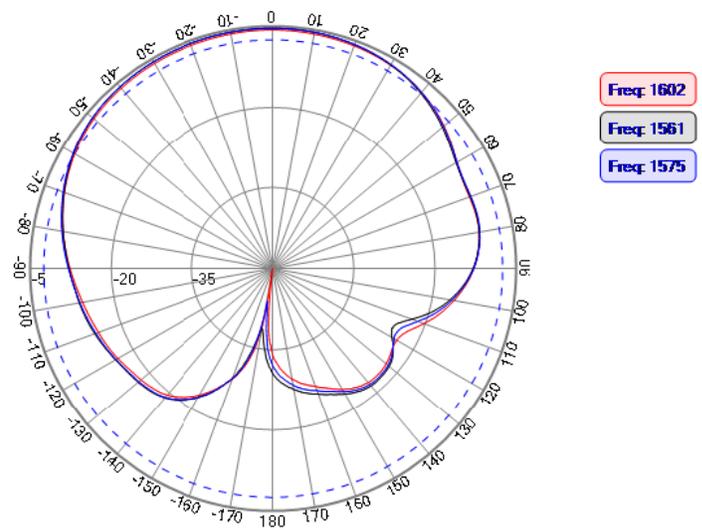
XY - Plane



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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