

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

AECP0401G4Z -

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		SMA (M)
L		FAKRA C (F)
M	LMR-100	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
AECP0401G4Z S-3000S	No / Black	3000 mm	RG-174 with SMA (M) (Standard)
AECP0401G4Z A-1000A	Yes / Black	1000 mm	RG-174 with FAKRA C (M)
AECP0401G4Z B-5000O	No / White	5000 mm	LMR-100 with N-Type (M)

Note :

- For the standard part number (AECP0401G4Z**S-3000S**), please refer to the packaging at the end of the document.
- For custom configurations (AECP0401G4Z-), 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	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)



5101 Hidden Creek Ln Spicewood TX 78669

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For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 09-29-25

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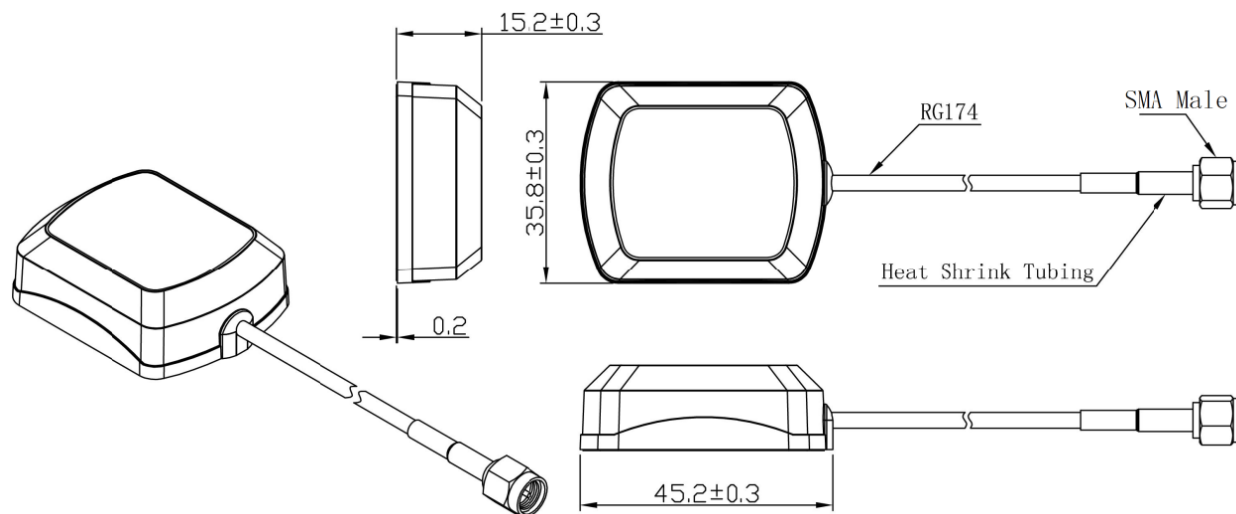


Check Inventory



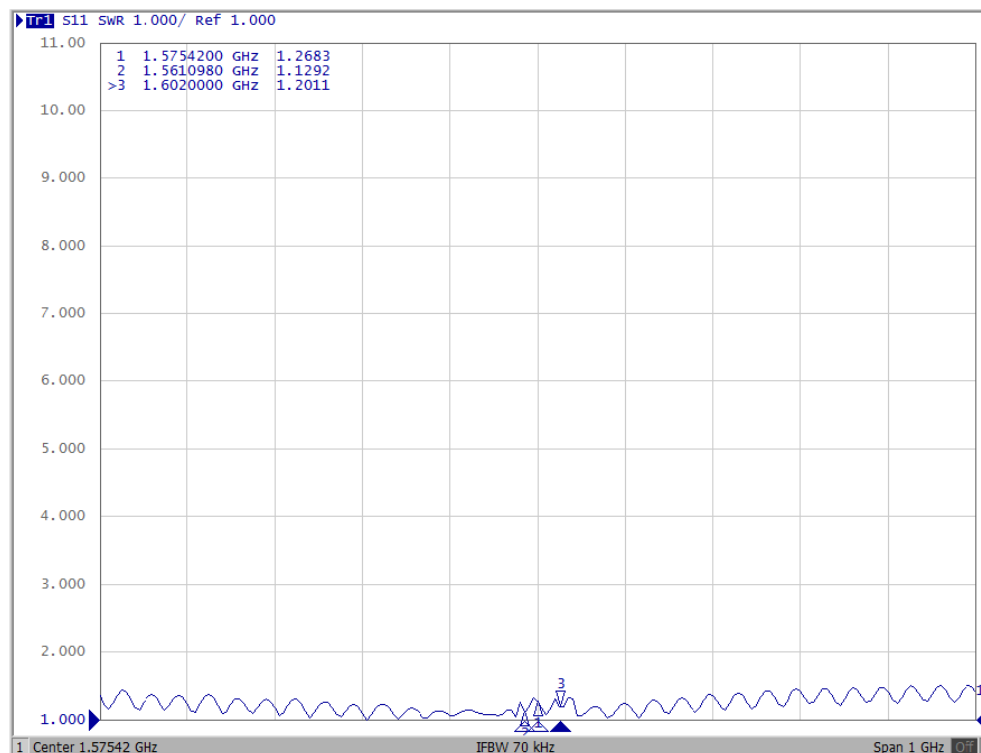
45.2 x 35.8 x 15.2 mm
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Product Dimension



Unit : mm

Test Measurement - VSWR



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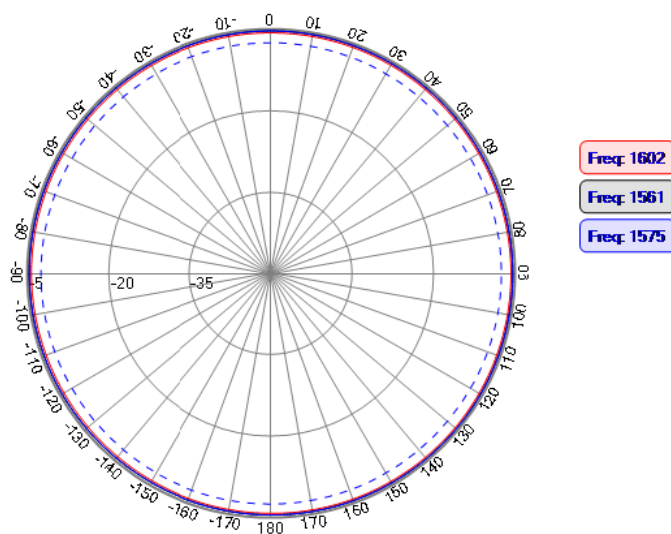


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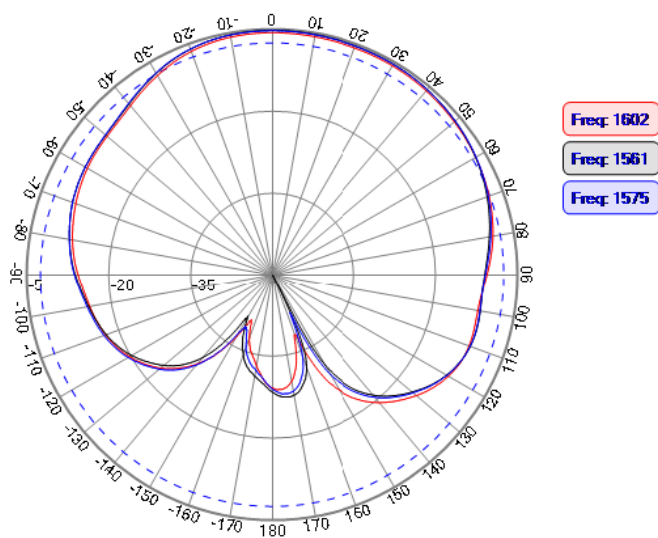
Radiation Characteristics

2D Pattern

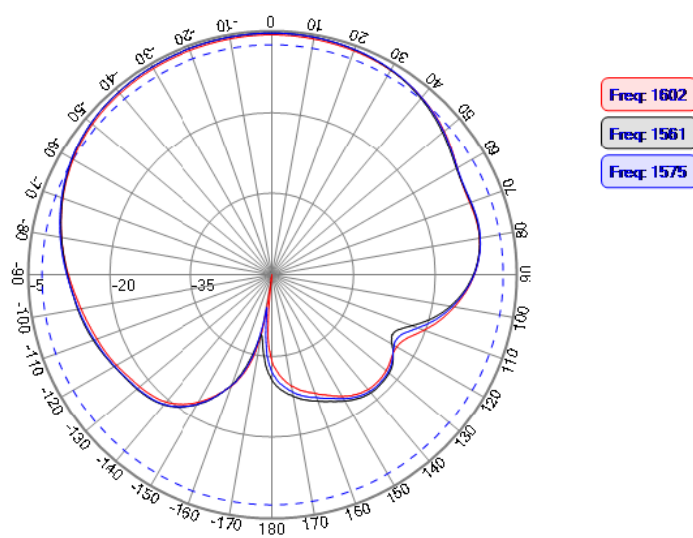
XY - Plane



XZ - Plane



YZ - Plane



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Packaging Information

Number of Antenna/ Carton: 100 pcs

Dimension of the Carton: 490 x 230 x 270 mm

Weight of the Carton: 7.5 kg

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf ('COTS'), which are designed, intended, and validated for use in commercial, industrial, and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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