4G/3G/2G External Patch Antenna



APAMS-102

Request Samples | Check Inventory

138 x 21 x 6 mm
RoHS Compliant
MSL Level = 1

Description

This weatherproof 4G/3G/2G external patch antenna delivers robust cellular connectivity across 820 - 960 MHz and 1710 - 2170 MHz bands. Housed in a low-profile 138 x 21 x 6 mm, it achieves a high peak gain of 3 dBi for extended range and reliable performance in harsh environments. Supporting LTE-M, NB-IoT, and LTE CAT 1 through CAT 20, this RoHS-compliant, MSL Level 1 antenna features customizable cable and connector options. It is ideal for smart home networking, telecommunications, and traffic monitoring applications requiring durable outdoor installation.



Features

- Frequency Range: 820 - 960 / 1710 - 2170 MHz
- Low Profile with Size 138 x 21 x 6 mm
- High Peak Gain up to 3 dBi
- Custom Cable Length Options Available
- RoHS Compliant | MSL Level 1

Applications

- LTE-M, Cat M, Cat M1, NB-IoT
- LTE CAT 1 up to CAT 20 Supported
- Smart Home Networking
- Networking & Telecommunication
- Traffic Control and Monitoring

Ordering Information

Part Number	Description	Connector Option
APAMS-102	4G/3G/2G External Patch Antenna with 3000 mm RG-174 cable length & SMA(M) connectors	SMA(M)

Note: Other options not listed may be available upon request via Abracon online support

ABRACON

12117 Bee Caves Rd, Bldg-3, Suite 200 Bee Cave, TX 78738
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

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Electrical Specification

Parameters	Typ.		Units
Frequency	820-960	1710-2170	MHz
Return Loss (Typ.)	< -9.6		dB
VSWR (Typ.)	≤ 2.0		:1
Peak Gain (1)	1	3	dBi
Polarization	Linear		-
Impedance	50		Ω
Input Power	5		W

Please note: All measurement data is based on the standard configuration (conducted in free space unless otherwise specified).

Mechanical Specification

Parameter	Specification
Antenna Dimension	138 x 21 x 6 mm
Housing Material	ABS (Black)
Mounting Type	Adhesive Mount
RF Cable Type	RG-174
RF Cable Length (1)	3000 mm
RF Connector	SMA (Male)

(1): Fully customizable RF Cable length

Environmental Specification

Parameter	Specification
Operating Temperature	-25ºC to +65ºC
Storage Temperature	-45ºC to +85ºC
RoHS Compliance	Yes
Relative Humidity	Up to 95%

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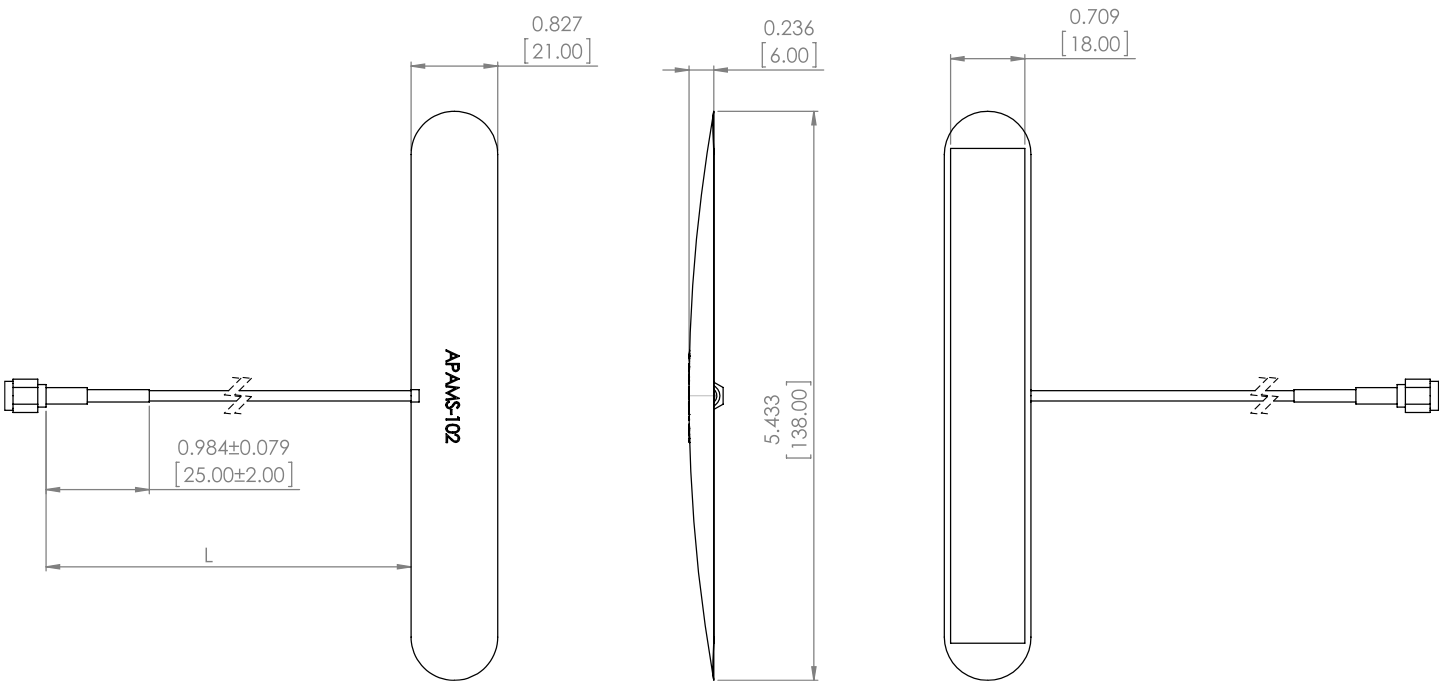


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Product Dimensions



Unit: inches [mm]

Parameters	Description
L (Cable Length)	300±50cm
Antenna	PCB
RF Connector	SMA-J3
RF Cable	RG174
Thickness	6 mm
Enclosures	Plastic
Mounting Type	Adhesive Tape

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Packaging

Each 475 x 215 x 215 mm size carton includes 100 pieces of antenna.





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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