antenova

DATASHEET

Pacifica

SREI038 • External antenna

Features

- Terminal antenna for 433MHz ISM applications
- High performance dipole design
- Available in three terminal options: swivel, fly lead and fixed 90° (IP67)

1. Description

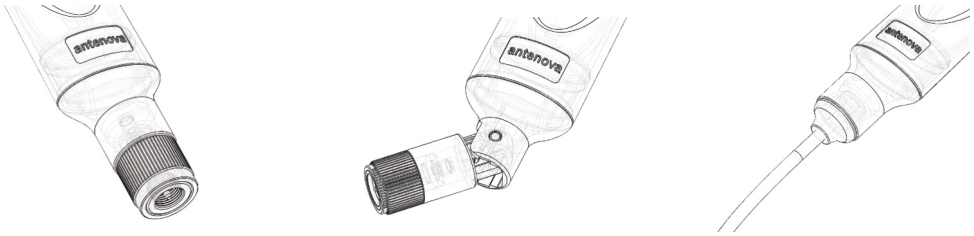
Pacifica is constructed with an ergonomic blade design to blend well with the exterior of the device. Three versions are available including an IP67 design for outdoor applications. To aid integration, the antenna is designed to work to various GND plane sizes or in free space.

2. Applications

- Remote monitoring
- Industrial devices
- Remote tech
- Smart meters
- Medical devices
- Home automation

3. Part number

SREI038 - xxx



Antenna type	XX
IP67 version	IP
Swivel version	S9

Connector	X
SMA Plug	P

Cable length(if fly lead)	XX
1.0 m	10
1.5 m	15
1.7 m	17
2.0 m	20

Non-standard connector types	X
SMA plug reverse	R
SMA jack	J
SMA jack reverse	K

Note. -xxx refers to options for antenna version, connector type and cable length.

*Please contact Antenova for details on non-standard connector types

4. General data

Frequency	432-434 MHz
Polarization	Linear
Operating temperature	-20°C to +70°C
Impedance with matching	50 Ω
Weight	<21g (Cable not included)
Antenna type	External Antenna
Dimensions (Antenna)	See dimensions from page 18>
Cable length (Fly lead only)	1.0m /2.0m *
Connection	SMA Plug (Standard)
Radome Material	PC

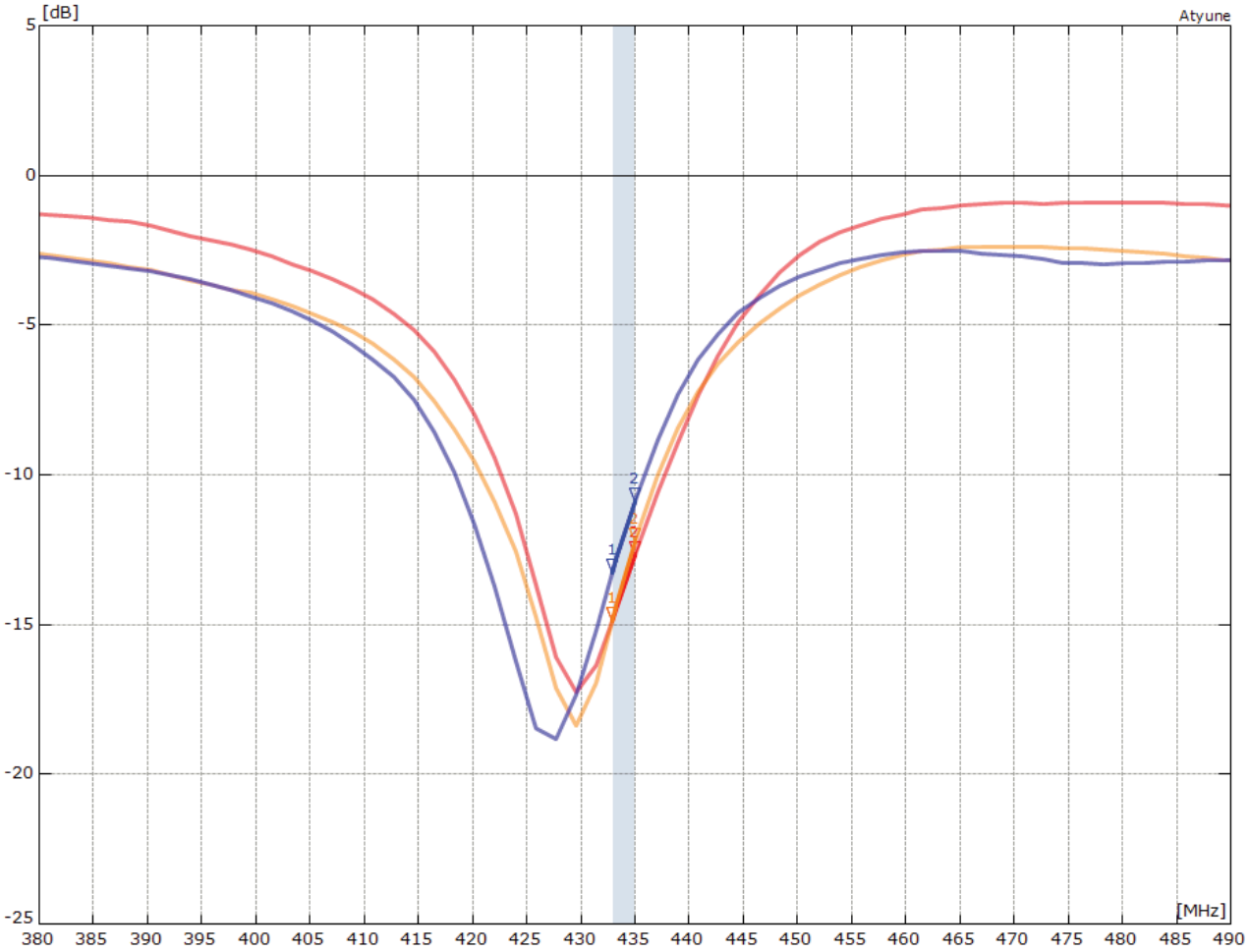
*Please contact Antenova for details on other cable lengths

5. RF characteristics

432 – 435 MHz	Fixed (IP67) 	Hinged 	Fly lead (1.0m) 
Peak gain	-0.90dBi	-1.10dBi	-1.19dBi
Average gain (Linear)	-2.60dBi	-2.90dBi	-3.00dBi
Average efficiency	>50%	>50%	>50%
Maximum return loss	<-12.0dB	<-12.0dB	<-10.70dB
Maximum VSWR	1.60:1	1.65 :1	1.80:1

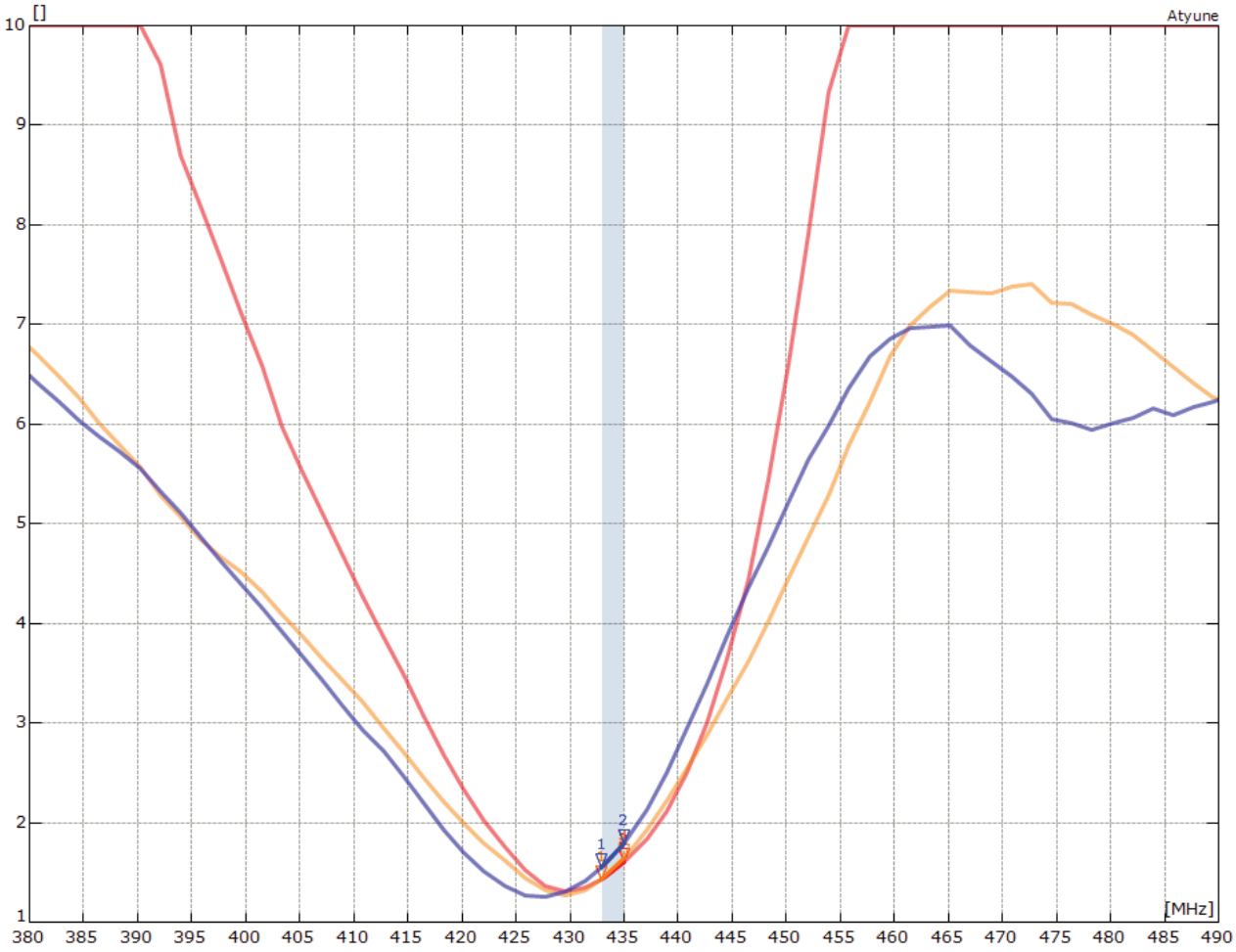
6. RF performance

6.1. Return loss



MARKERS: MHz dB
SREI038-Fixed.s1p - S11 1: 433 -14.86 2: 435 -12.65
SREI038 - Hinged.s1p - S11 1: 433 -14.86 2: 435 -12.21
SREI038 - Fly lead.S1P - S11 1: 433 -13.23 2: 435 -10.88

6.2. VSWR



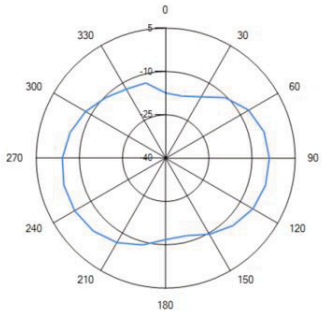
MARKERS: MHz	
SREI038-Fixed.s1p - S11	
1: 433	1.44
2: 435	1.61
SREI038 - Hinged.s1p - S11	
1: 433	1.44
2: 435	1.65
SREI038 - Fly lead.S1P - S11	
1: 433	1.56
2: 435	1.80

6.3. Antenna pattern free space

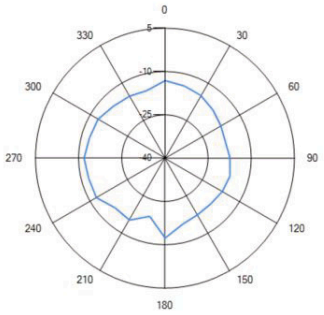
6.3.1. 432 - 434 MHz

Fixed (IP67)

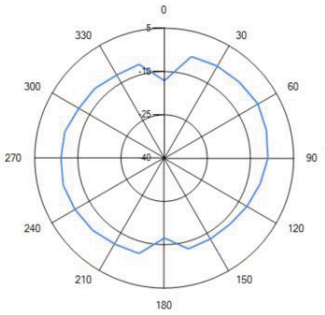
XY



XZ

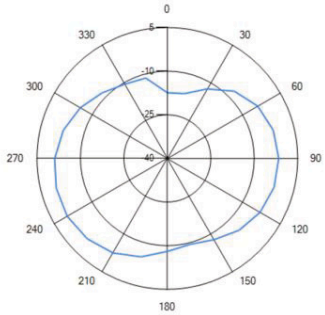


YZ

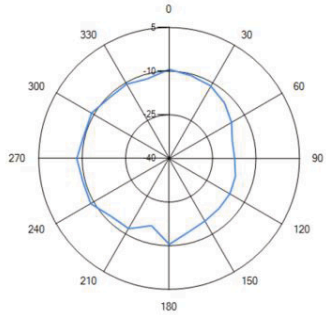


Hinged

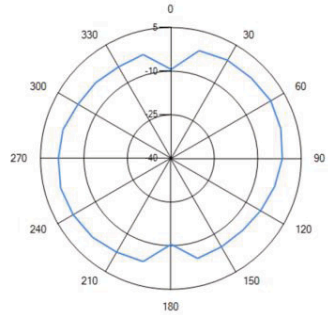
XY



XZ

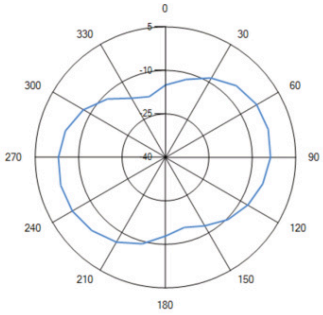


YZ

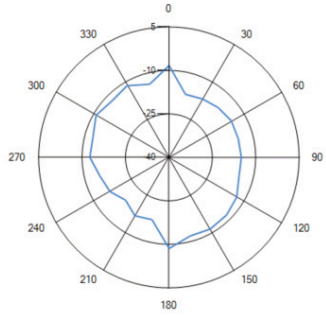


Fly lead (1.0m)

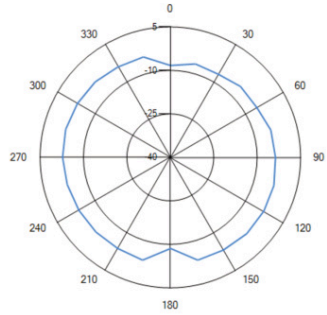
XY



XZ



YZ

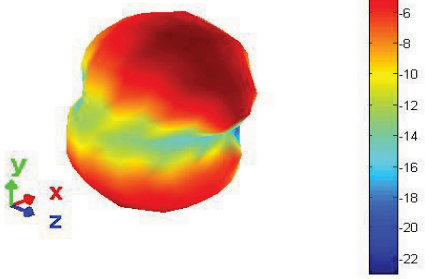


6.4. Antenna pattern free space (3D)

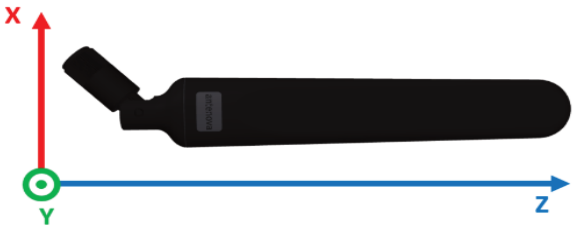
6.4.1. 432- 434 MHz

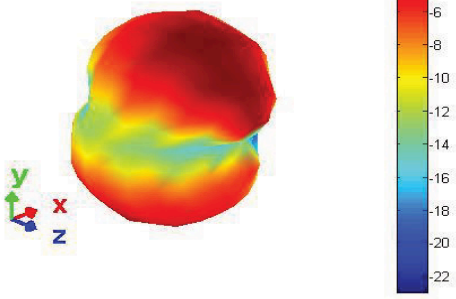
3D patterns at 433MHz

Fixed (IP67)

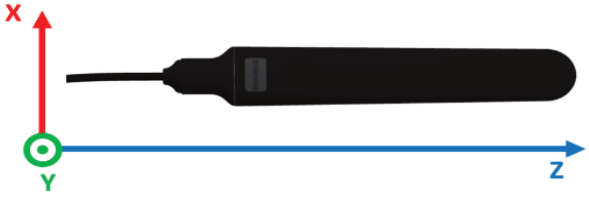


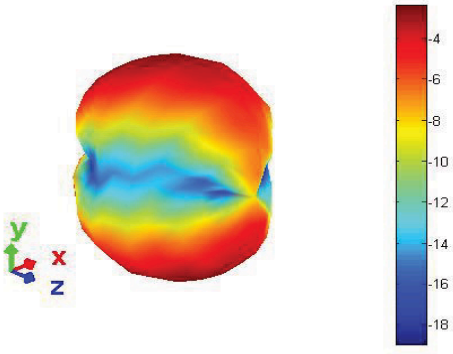
Hinged





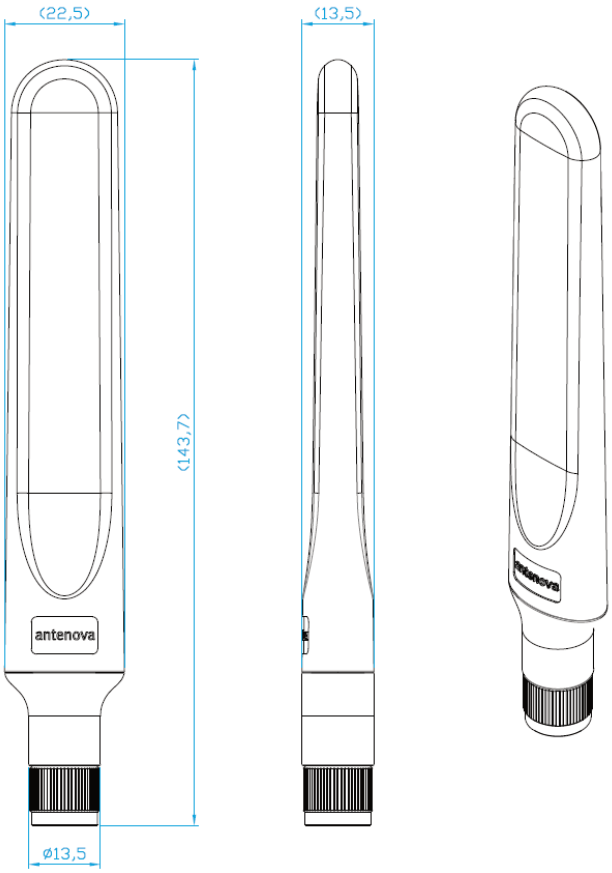
Fly Lead (1.0m)





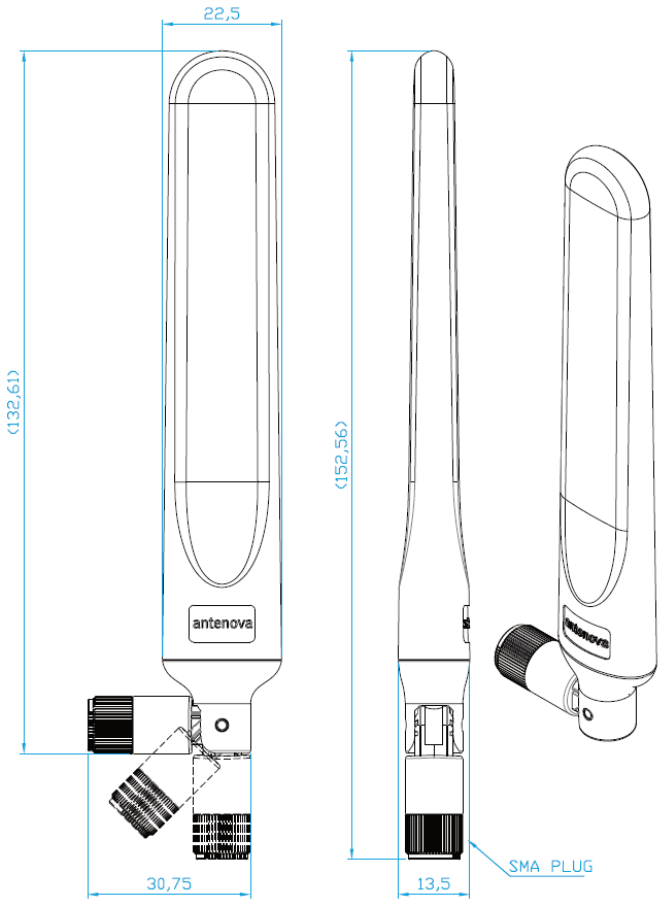
7. Antenna dimensions

7.1 Dimensions straight fixed (SREL038-IPP)



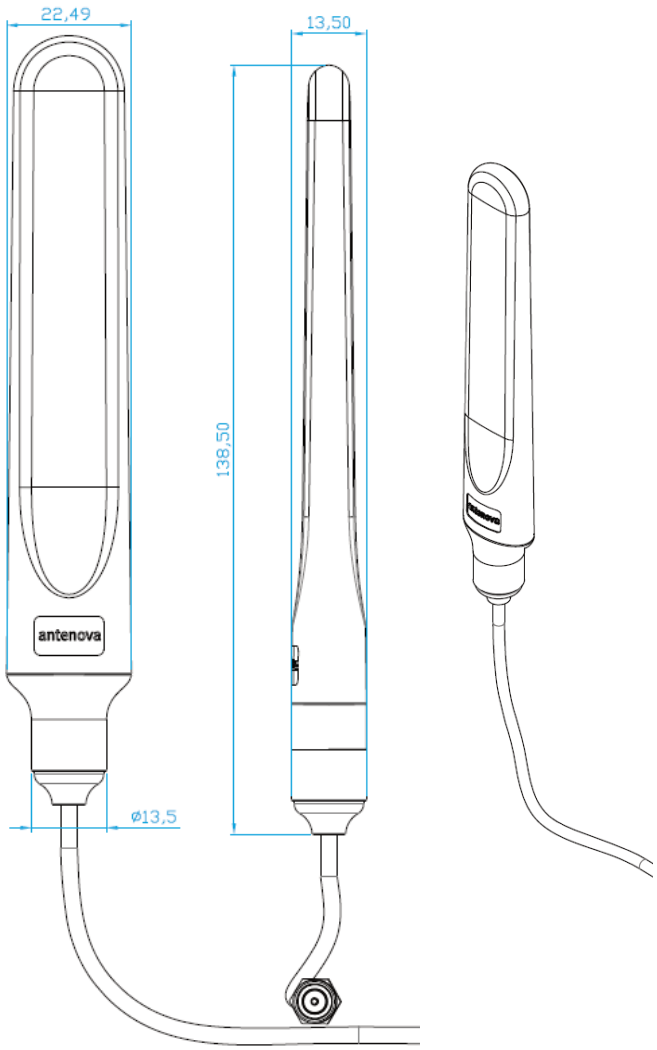
All dimensions in (mm)

7.2 Dimensions Swivel Hinged (SREL038-S9P)



All dimensions in (mm)

7.3 Dimensions Fly lead (SREL038-10P)



All dimensions in (mm)

8. Electrical interface

8.1. Transmission line

All transmission lines should be designed to have a characteristic impedance of 50Ω.

- The length of each transmission lines should be kept to a minimum
- All other parts of the RF system like transceivers, power amplifiers, etc, should also be designed to have a 50 Ω impedance

A co-planar transmission line can be designed using an online transmission line calculator tool, See TOOL at https://www.antenova.com/

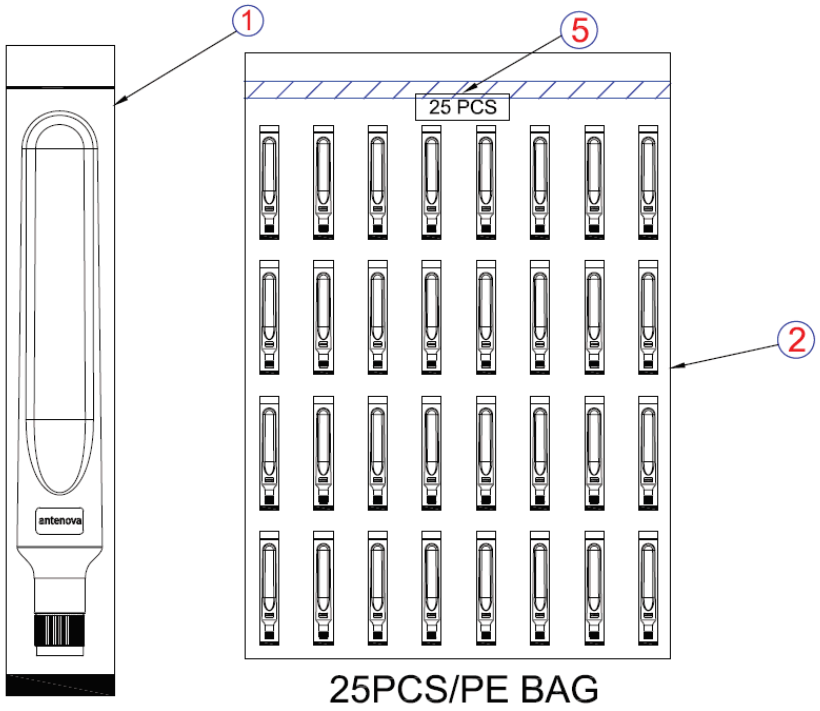
The PCB thickness, copper thickness and substrate dielectric constant are entered, then the tool calculates the transmission line width and gaps on either side of the track to give a 50 Ω impedance.

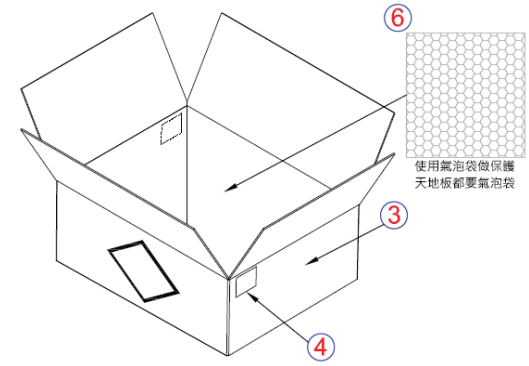
9. Hazardous material regulation conformance

The antenna has been tested to conform to RoHS and REACH requirements. A certificate of conformance is available from Antenova's website.

10. Packaging

10.1. Fixed (SREL038-IPP)

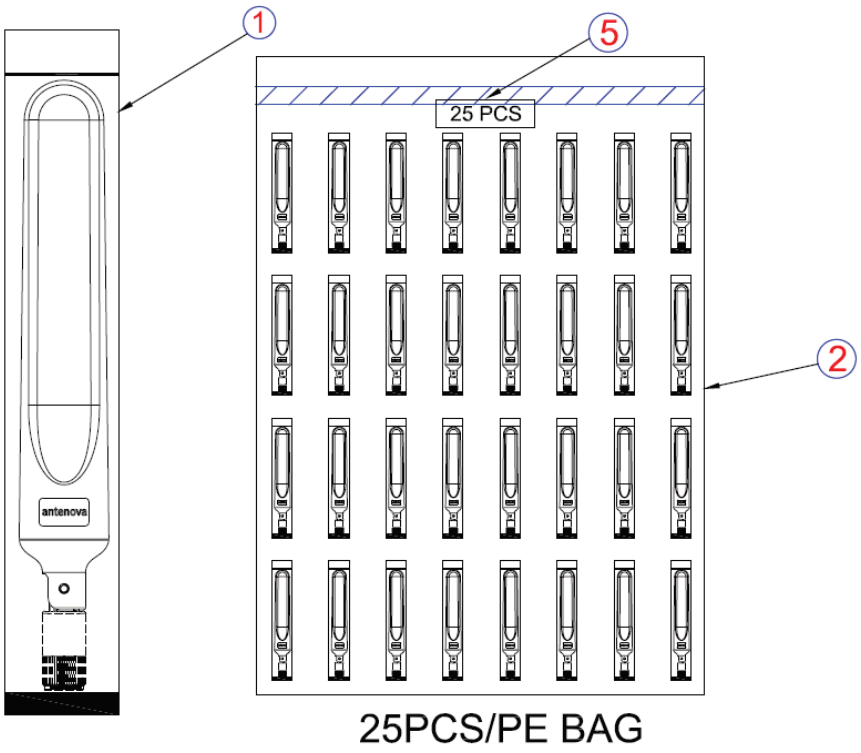


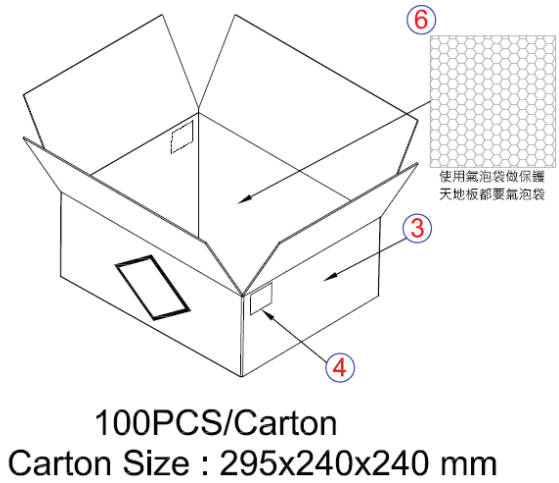


100PCS/Carton
Carton Size : 295x240x240 mm

Item	Qty	Description
1	1	PE bag, 230x40x0.07 (mm)
2	1	PE bag 33x46 (cm)
3	1	Box
4	2	Labeld
5	1	Label 40x30 (mm) for bag
6	2	Protective packaging

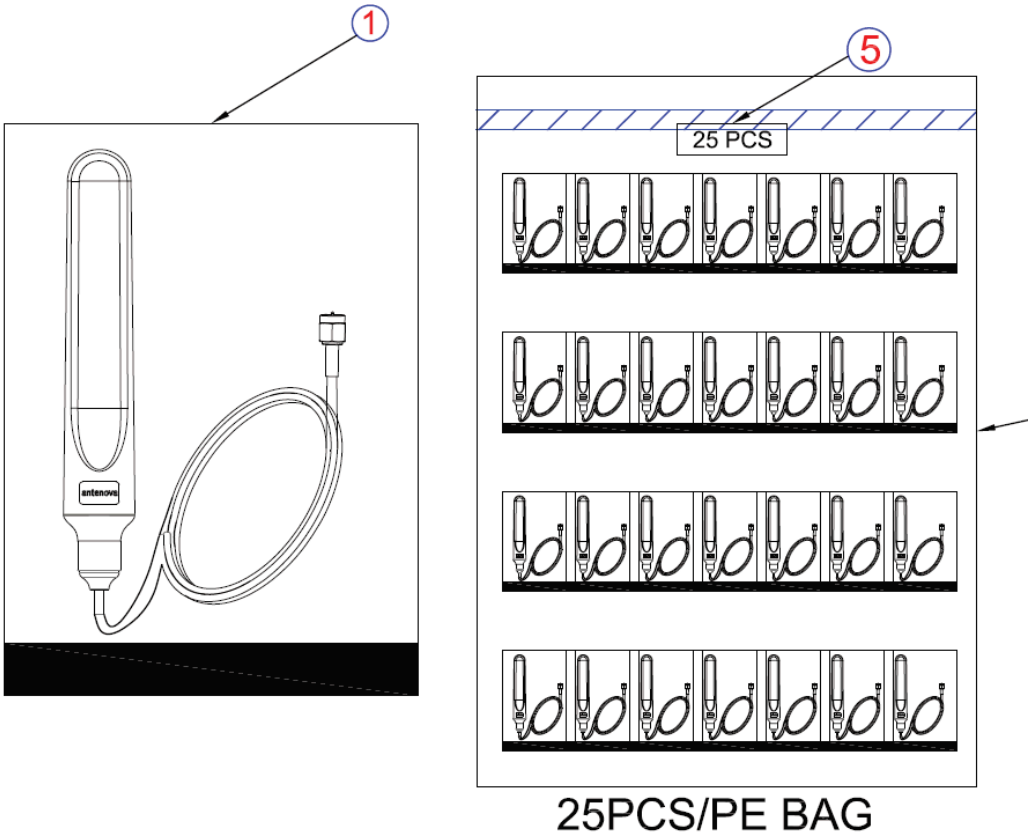
10.2. Hinged (SREL038-S9P)



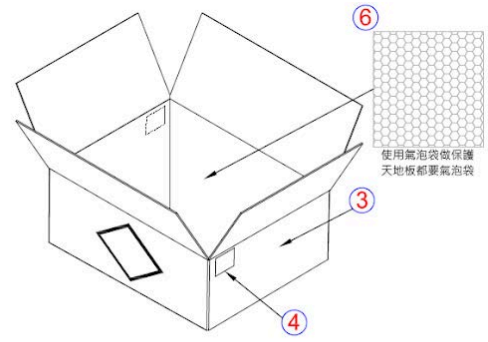


Item	Qty	Description
1	1	PE bag, 230x40x0.07 (mm)
2	1	PE bag 33x46 (cm)
3	1	Box
4	2	Label
5	1	Label 40x30 (mm) for bag
6	2	Protective packaging

10.3. Fly lead (SREI038-10P)



25PCS/PE BAG



100PCS/Carton
Carton Size : 295x240x240 mm

Item	Qty	Description
1	1	PE bag 13x18 (cm)
2	1	PE bag 33x46 (cm)
3	1	Box
4	2	Label
5	1	Label 40x30 (mm) for bag
6	2	Protective packaging

11. Optimal storage conditions

Temperature	-10°C to 40°C
Humidity	Less than 75% RH
Shelf life	18 Months
Storage place	Away from corrosive gas and direct sunlight
Packaging	Antennas should be stored in unopened sealed manufacturer's plastic packaging.

12. Reel label information

Quality statements

Antenova's products conform to REACH and RoHS legislation. For our statements regarding these and other quality standards, please see **antenova.com**.

RoHS compliant

REACH COMPLIANT

ISOQAR REGISTERED UKAS MANAGEMENT SYSTEMS 0026
Certificate No. 11070
ISO 9001

Prop 65

Data sheet

2.01 release 23rd June 2026

Antenna design, integration and test resources

Product designers – the details contained in this datasheet will help you to complete your embedded antenna design. Please follow our technical advice carefully to obtain optimum antenna performance.

We aim to support our customers to create high performance wireless products. You will find a wealth of design resources, calculators and case studies to aid your design on our website.

Antenova's design laboratories are equipped with the latest antenna design tools and test chambers. We provide antenna design, test and technical integration services to help you complete your design and obtain the required certifications.

If you cannot find the antenna you require in our product range, please contact us to discuss creating a custom antenna to meet your exact requirements.

Share knowledge with RF Experts around the world

ask.antenova is a global forum for designers and engineers working with wireless technology

Visit Ask.Antenova

Visit antenova.com

Order antenna samples and evaluation boards, and read our antenna resources

Visit antenova.com

Request a volume quotation for antennas:

sales@antenova.com

+ 44 (0) 23 9400 1023

Global headquarters

Antenova Ltd, 7 The Briars, Waterberry Drive, Waterlooville, Hampshire, PO7 7YH