

Pacifica ISM Terminal Antenna

Part No. SREI038

External Antenna

Product Specification

1. Features

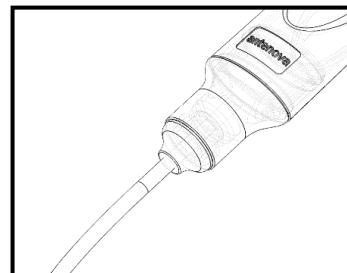
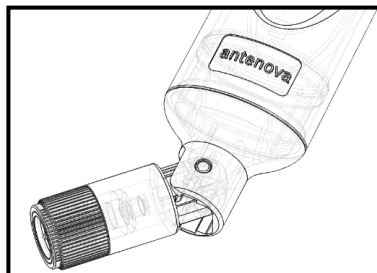
- Terminal antenna for 433MHz ISM applications
- High performance dipole design
- Available in three terminal options: swivel, fly lead and fixed 90° (IPC68)

2. Description

Pacifica is constructed with an ergonomic blade design to blend well with the exterior of the device. Three versions are available including an IPC68 design for outdoor applications. To aid integration, the antenna is designed to work to various GND plane sizes or in free space.

3. Applications

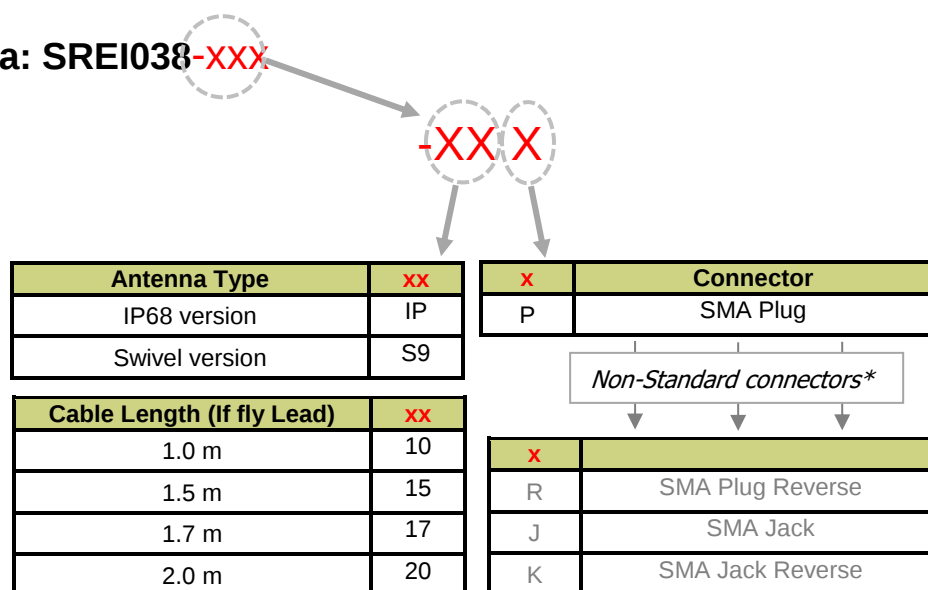
- Remote monitoring
- Industrial devices
- Remote tech
- Smart meters
- Medical devices
- Home automation



4. Part Number

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

Pacifica: SREI038-~~xxx~~



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

5. General Data

Product name	Pacifica
Part Number	SREI038-xxx
Frequency	432-434MHz
Polarization	Linear
Operating temperature	-20°C to +70°C
Impedance with matching	50 Ω
Weight	< 21g (Cable not included)
Dimensions (Antenna)	See dimensions on page 8>
Cable length (Fly lead only)	1.0m /2.0m *
Connection	SMA Plug (Standard)
Radome Material	PC

*Please contact Antenova for details of other cable lengths

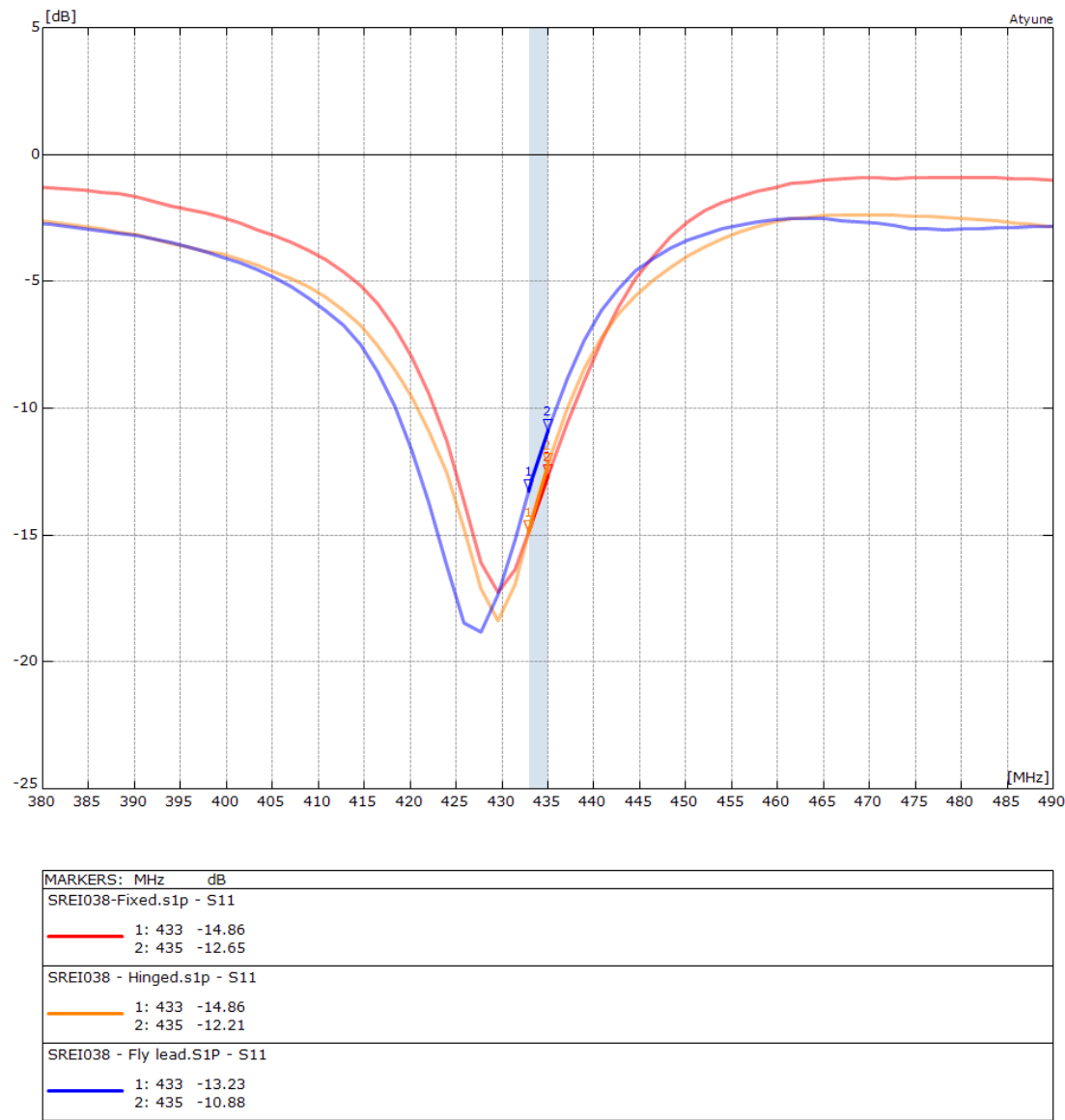
6. RF Characteristics

The RF characteristics are shown for each type.

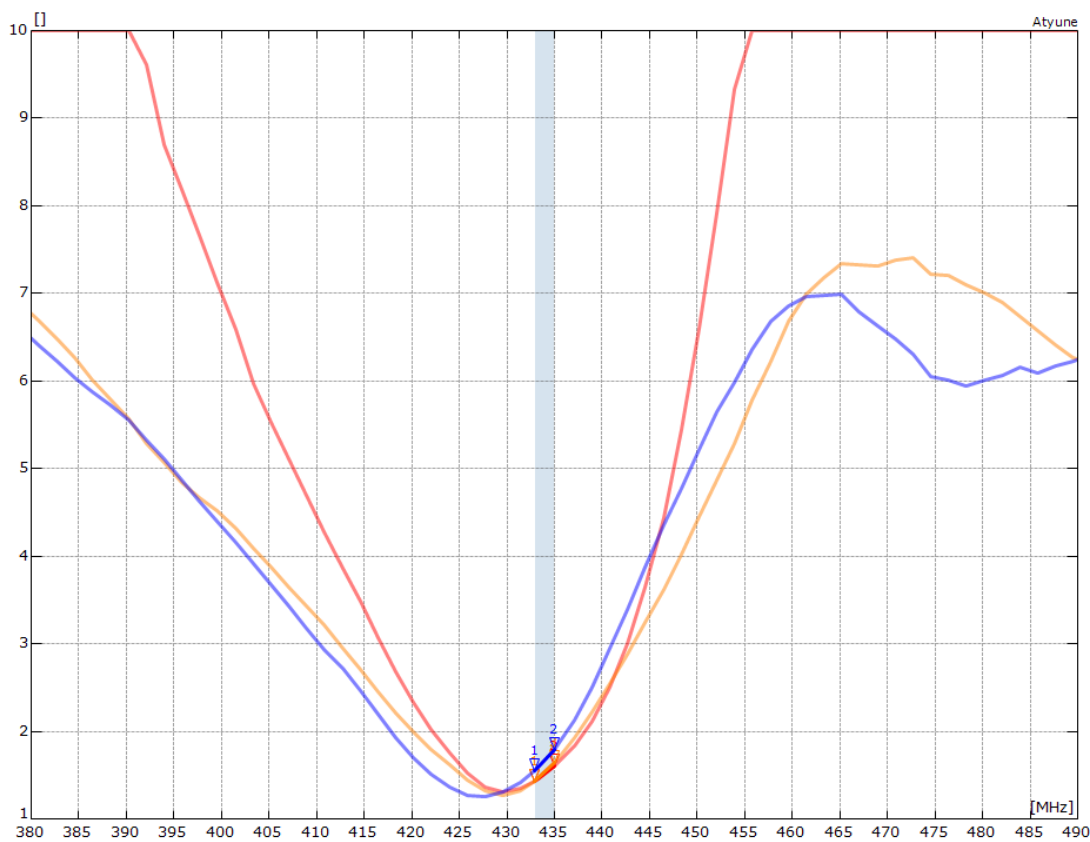
	432 – 435 MHz		
	Fixed (IPC68)	Hinged	Fly Lead (1.0m)
			
Peak gain	-0.90dBi	-1.10dBi	-1.19dBi
Average gain	-2.60dBi	-2.90dBi	-3.00dBi
Average efficiency	>50%	>50%	>50%
Maximum return loss	<-12.0dB	<-12.0dB	<-10.70dB
Maximum VSWR	1.60:1	1.65 :1	1.80:1

7. RF Performance

7.1 Return Loss



7.2 VSWR

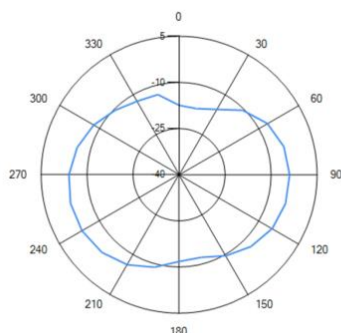


MARKERS: MHz		
SREI038-Fixed.s1p - S11		
1:	433	1.44
2:	435	1.61
SREI038 - Hinged.s1p - S11		
1:	433	1.44
2:	435	1.65
SREI038 - Fly lead.S1P - S11		
1:	433	1.56
2:	435	1.80

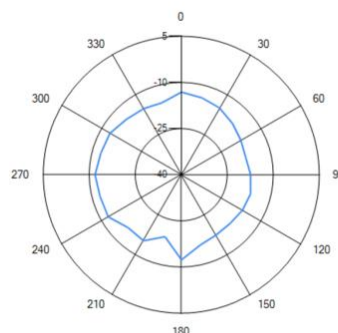
7.3 Antenna Pattern Free Space

7.3.1 432 MHz – 434 MHz *Fixed (IPC68)*

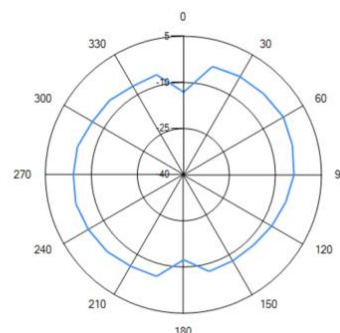
XY



XZ



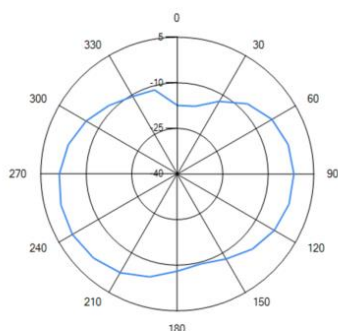
YZ



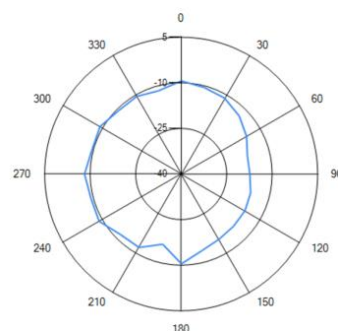
— 433MHz

Hinged

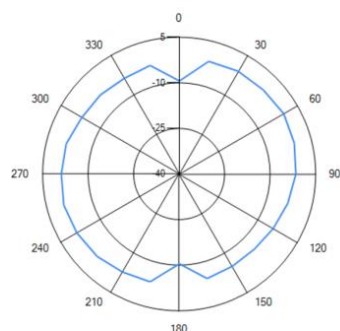
XY



XZ



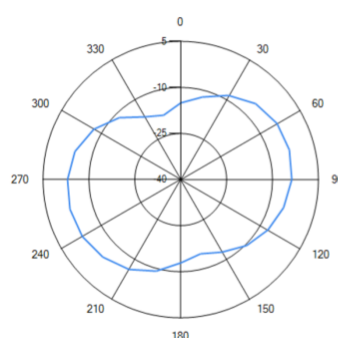
YZ



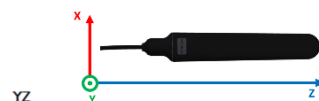
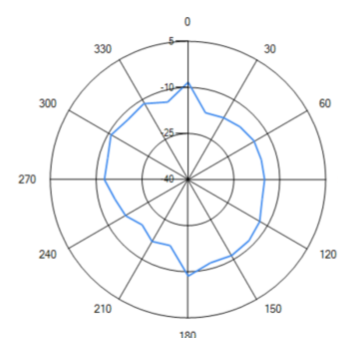
— 433MHz

Fly Lead (1.0m)

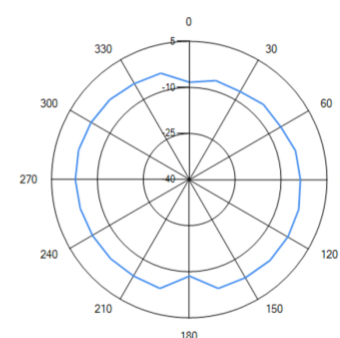
XY



XZ



YZ



— 433MHz

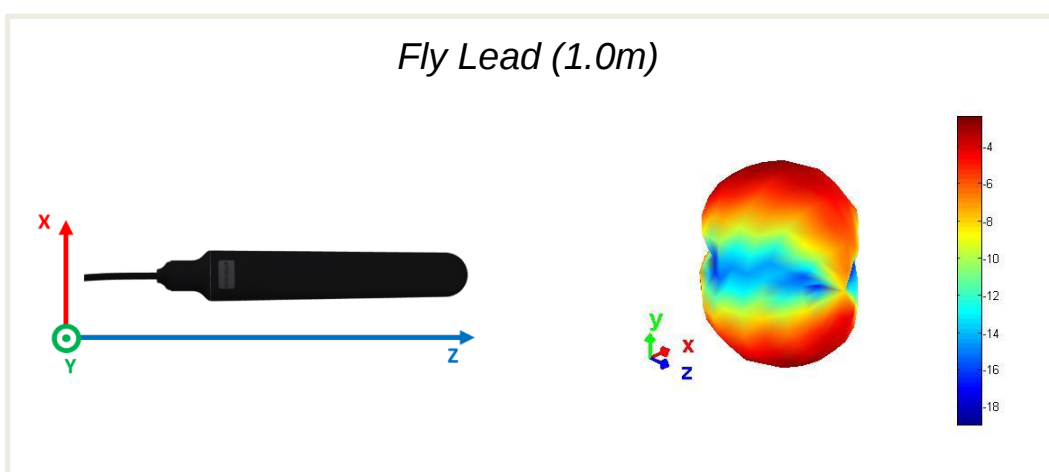
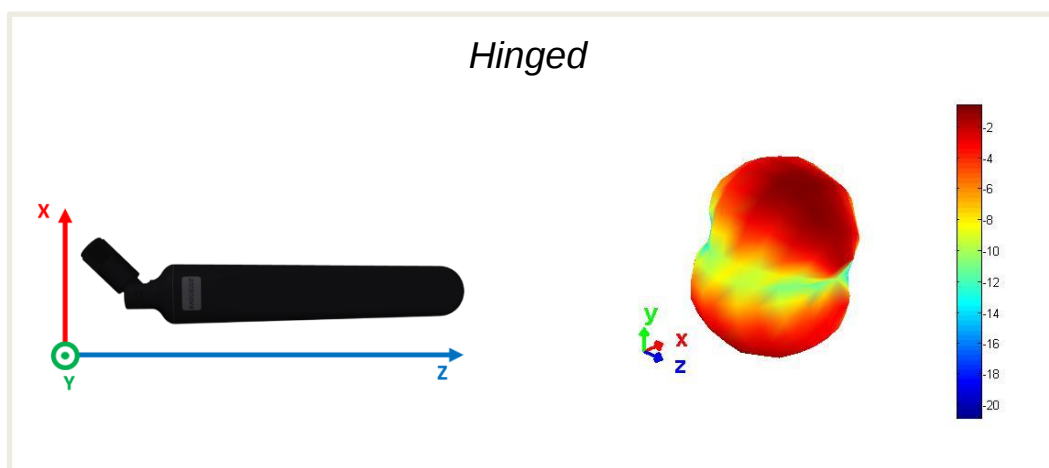
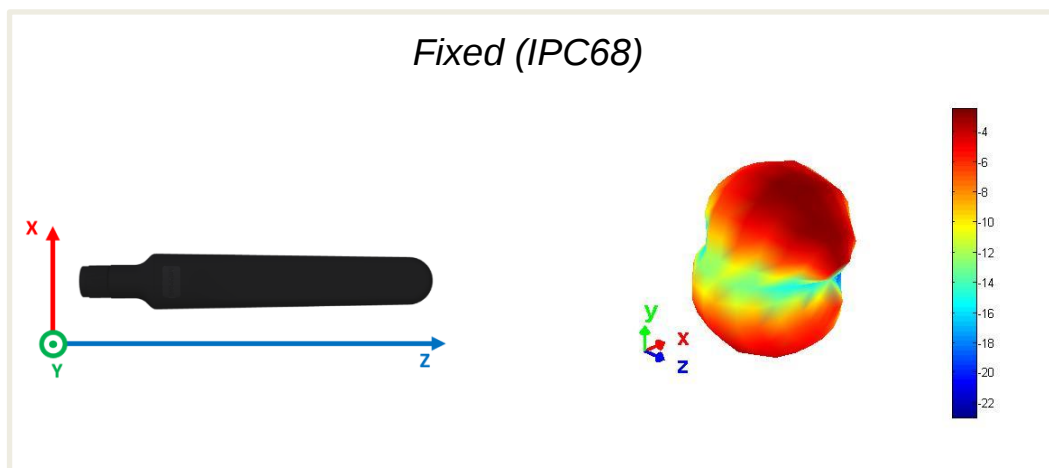
Antennas for Wireless M2M Applications

7.4 Antenna Pattern Free Space (3D)

7.4.1 432 MHz – 434 MHz

3D patterns at 433MHz

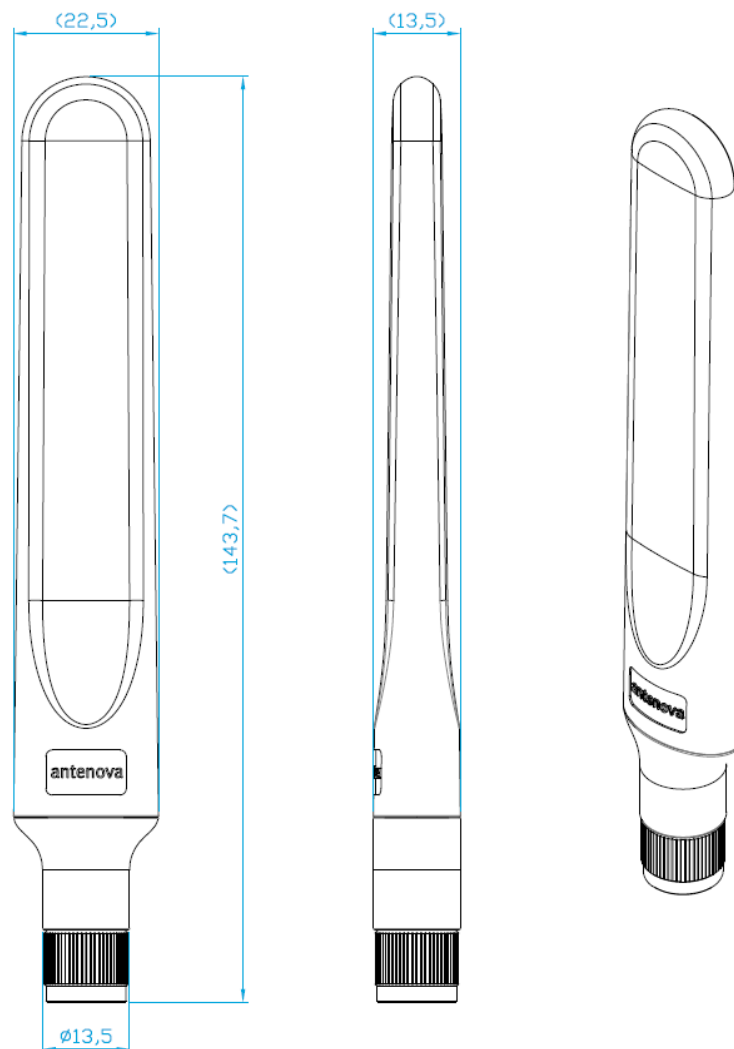
*Drag to rotate pattern and PCB by using Adobe Reader
(Click to Activate)*



Antennas for Wireless M2M Applications

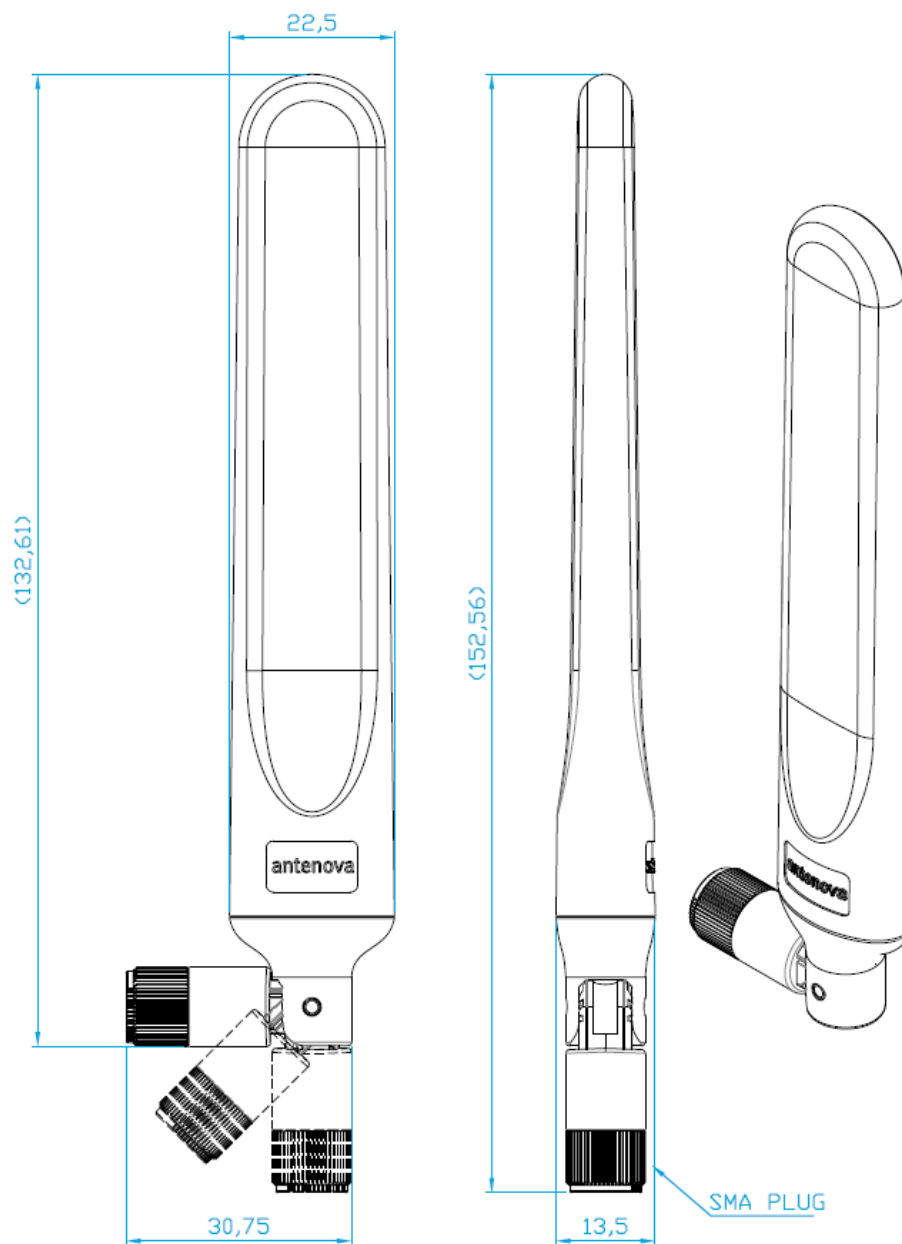
8. Antenna Dimensions

8.1 Dimensions Fixed (SREI038-IPP)



All dimensions in mm

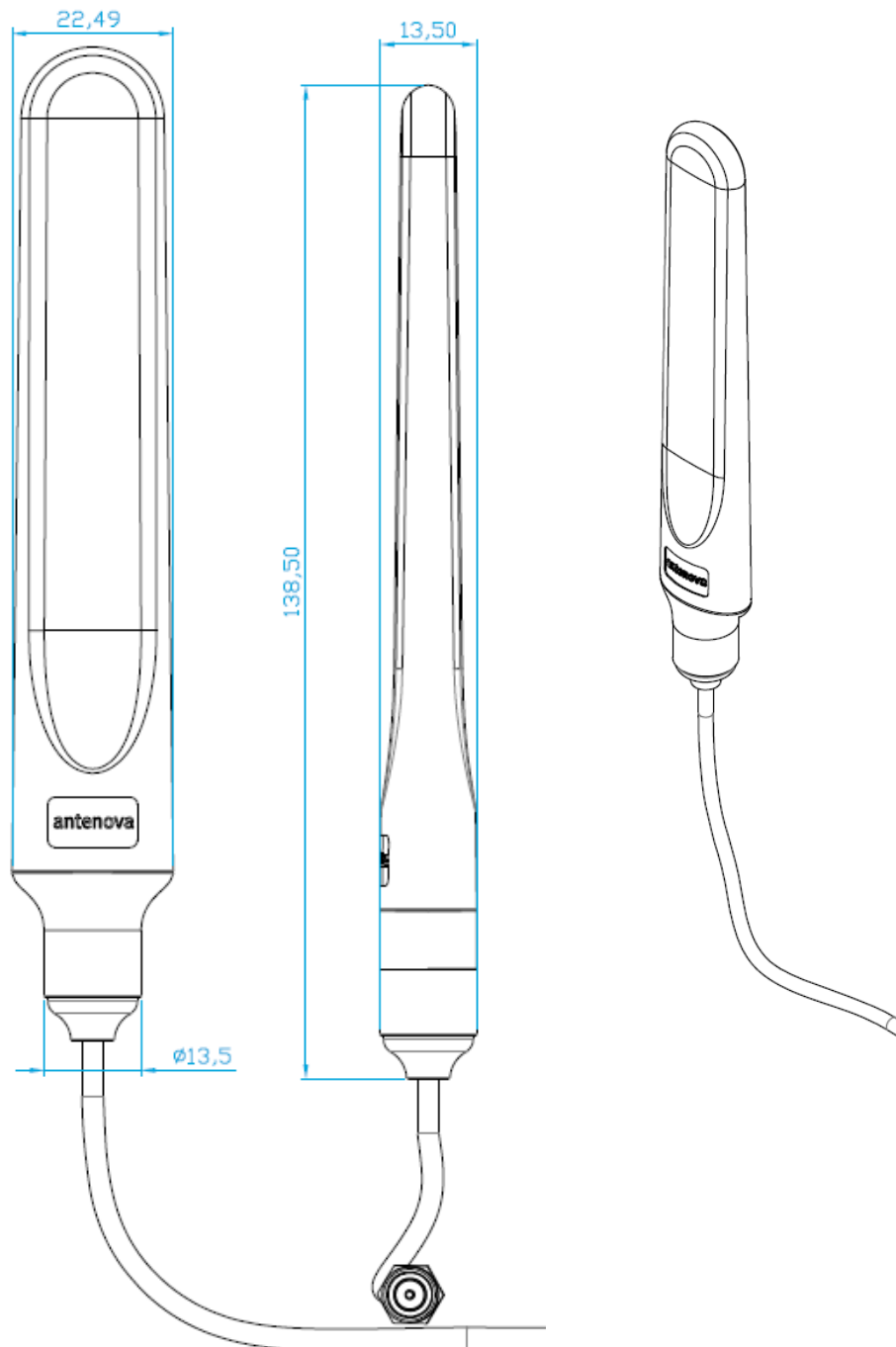
8.2 Dimensions Hinged (SREI038-S9P)



All dimensions in mm

Antennas for Wireless M2M Applications

8.3 Dimensions Fly lead (SREI038-10P)



All dimensions in mm

9. Electrical Interface

9.1 Transmission Line

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

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

Once the material for the PCB has been chosen (PCB thickness and dielectric constant), a coplanar transmission line can easily be designed using any of the commercial software packages for transmission line design. For the chosen PCB thickness, copper thickness and substrate dielectric constant, the program will calculate the appropriate transmission line width and gaps on either side of the feed.

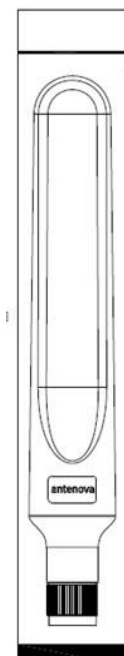
A DC blocking capacitor should be placed in line to protect the RF front end.

10. Hazardous Material Regulation Conformance

The antenna has been tested to conform to RoHS requirements. A certificate of conformance is available from Antenova M2M's website.

11. Packaging

11.1 Fixed (SREI038-IPP)



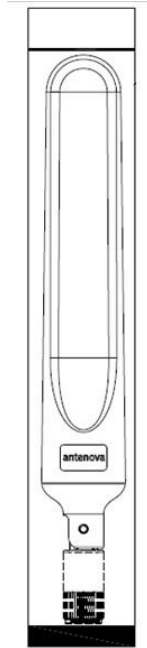
The antennas are supplied in individual polythene bags. Twenty five small bags are packed in one larger bag. The outer box contains fifty antennas.

Box label



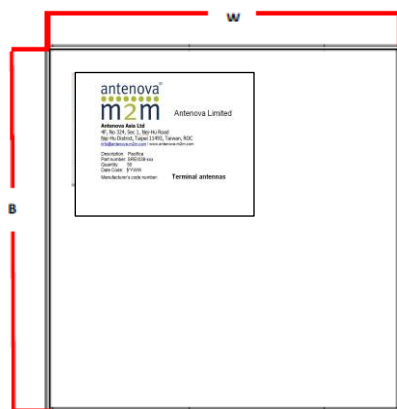
Width W	Breadth B	Thickness H
355 mm	340 mm	58 mm

11.2 Hinged (SREI038-S9P)



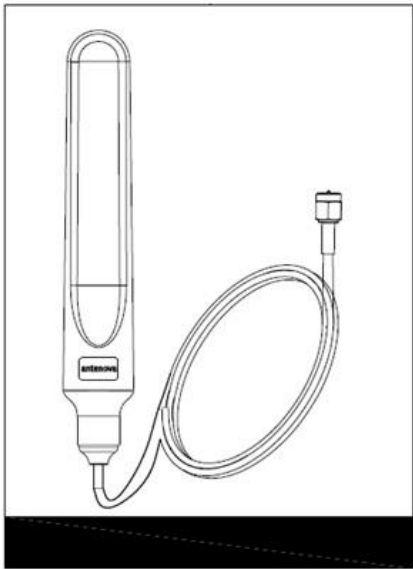
The antennas are supplied in individual polythene bags. Twenty five small bags are packed in one larger bag. The outer box contains fifty antennas.

Box label



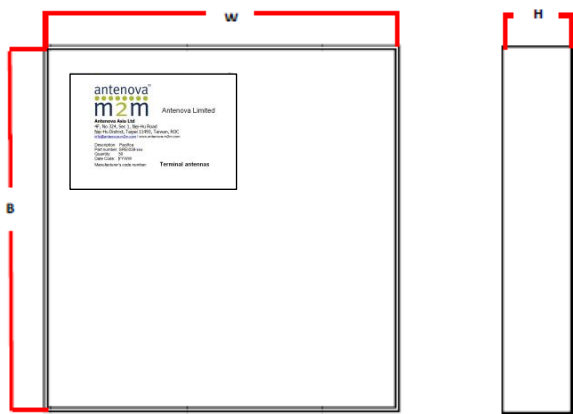
Width W	Breadth B	Thickness H
355 mm	340 mm	58 mm

11.3 Fly lead (SREI038-10P)



The antennas are supplied in individual polythene bags. Twenty five small bags are packed in one larger bag. The outer box contains fifty antennas.

Box label



Width W	Breadth B	Thickness H
355 mm	340 mm	58 mm

12. 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.

13. Label Information





www.antenova-m2m.com

Corporate Headquarters

Antenova Limited
2nd Floor Titan Court
3 Bishop Square
Hatfield
AL10 9NA
UK

Tel: +44 1223 810600

Email: sales@antenova-m2m.com

North America Headquarters

Antenova Limited
100 Brush Creek Road
Suite 103, Santa Rosa
California 95404
USA

Tel: +1 707 890 5202

Email: sales@antenova-m2m.com

Asia Headquarters

Antenova Asia Limited
4F, No. 324, Sec. 1, Nei-Hu Road
Nei-Hu District
Taipei 11493
Taiwan, ROC

Tel: +886 (0) 2 8797 8630

Fax: +886 (0) 2 8797 6890

Email: sales@antenova-m2m.com

Copyright® Antenova Ltd. All Rights Reserved. Antenova®, Antenova M2M®, gigaNOVA®, the Antenova family names, and the Antenova and Antenova M2M logos are trademarks and/or registered trademarks of Antenova Ltd. Any other names and/or trademarks belong to their respective companies.

The materials provided herein are believed to be reliable and correct at the time of printing. Antenova does not warrant the accuracy or completeness of the information, text, graphics or other items contained within this information. Antenova further assumes no responsibility for the use of this information, and all such information shall be entirely at the user's risk.



Antennas for Wireless M2M Applications

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Antenova:](#)

[SREI038-17P](#) [SREI038-15P](#) [SREI038-10P](#) [SREI038-20P](#) [SREI038-IPP](#) [SREI038-S9P](#)