

DATASHEET

Nitida

SRE3W084-S9R • TERMINAL
SRE3W084-S9P



Features

- Terminal antenna for Wi-Fi6E & WiFi7 bands: 2.4-2.5GHz, 4.9-5.9GHz & 5.925-7.125GHz
- 802.11a/b/g/j/n/ac/ax
- The 5.925-7.125GHz band for WiFi6E & WiFi7 provides 1200MHz additional bandwidth
- Terminal antenna is fitted on the outside of the product enclosure.

Contents

| | |
|--|----|
| 1. Description | 2 |
| 2. Applications | 2 |
| 3. General data | 2 |
| 4. Part number | 3 |
| 5. RF characteristics | 3 |
| 6. RF performance | 4 |
| 6.1. Return loss | 4 |
| 6.2. VSWR | 4 |
| 6.3. Efficiency | 5 |
| 6.4. Antenna Pattern Free Spac | 6 |
| 6.4.1 2400MHz ~ 2500MHz | 6 |
| 6.4.2 4900MHz ~ 5900MHz | 7 |
| 6.4.3 5925MHz ~ 7125MHz | 8 |
| 7. Antenna dimensions | 9 |
| 8. Hazardous Material Regulation Conformance | 10 |
| 9. Packaging | 11 |
| 10. Optimal Storage conditions | 13 |
| 11. Label Information | 14 |

1. Description

Nitida is a Terminal Mount antenna for the Wi-Fi6E/WiFi7 bands. The Nitida antenna is fitted on the outside of the product enclosure with a SMA connector. The antenna covers the Wi-Fi6E & WiFi7 bands: 2.4-2.5 GHz, 4.9-5.9GHz and 5.925-7.125GHz.

2. Applications

- WiFi6E/7 Routers
- WiFi6E/7 Portable Devices
- WiFi6E/7 surveillance cameras
- WiFi6E/7 dongles
- Game Consoles/Set-Top Boxes
- Network Devices

3. General data

| | |
|------------------------------|--|
| FREQUENCY | 2400-2500MHz 4900-5900MHz 5925-7125MHz |
| POLARIZATION | Linear |
| OPERATING TEMPERATURE | -20°C to +65°C |
| ENVIRONMENTAL CONDITION TEST | ISO16750-4 5.1.1./5.1.2 |
| IMPEDANCE WITH MATCHING | 50 Ω |
| WEIGHT | 15g |
| ANTENNA TYPE | SMA Plug Reverse (Standard) |
| DIMENSIONS | 123.7 x 12.7 x 12.1 (mm3) |
| RADOME MATERIAL | PC+PBT |

4. Part number

NITIDA
SRE3W084-S9R
SRE3W084-S9P

| | Connector |
|---|-----------------------------|
| R | SMA Plug Reverse (Standard) |
| P | SMA Plug |



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

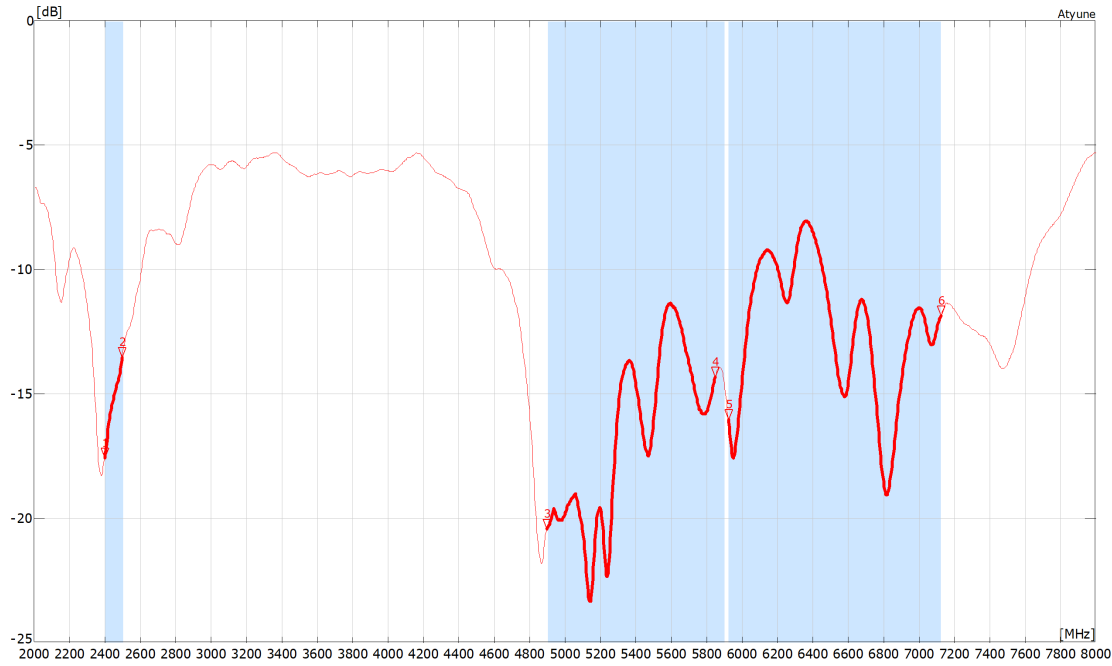
5. RF characteristics

All data measured on SRE3W084 in free space

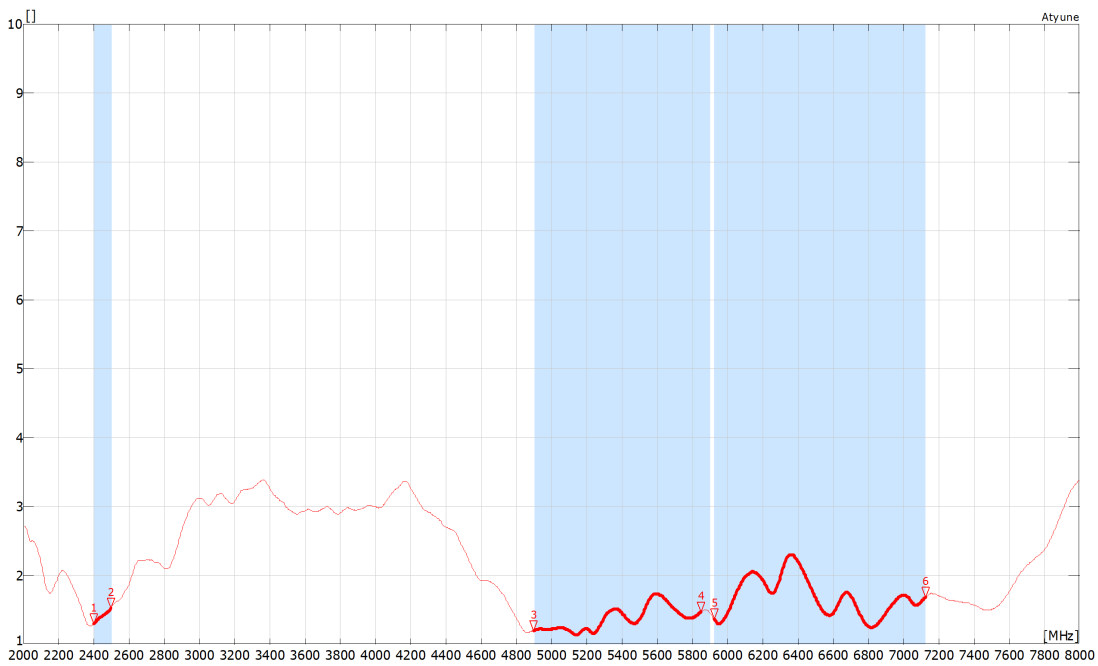
| FREQUENCY | 2400 - 2500 MHZ | 4900 - 5900 MHZ | 5925 - 7125 MHZ |
|-----------------------|-----------------|-----------------|-----------------|
| PEAK GAIN | 3.1dBi | 5.2dBi | 5.0dBi |
| AVERAGE GAIN (LINEAR) | -1.5dB | -1.9dB | -1.7dB |
| AVERAGE EFFICIENCY | 70% | 60% | 55% |
| MAXIMUM RETURN LOSS | -13dB | -14dB | -8dB |
| MAXIMUM VSWR | 1.6:1 | 1.8:1 | 2.3:1 |

6. RF performance

6.1. Return loss

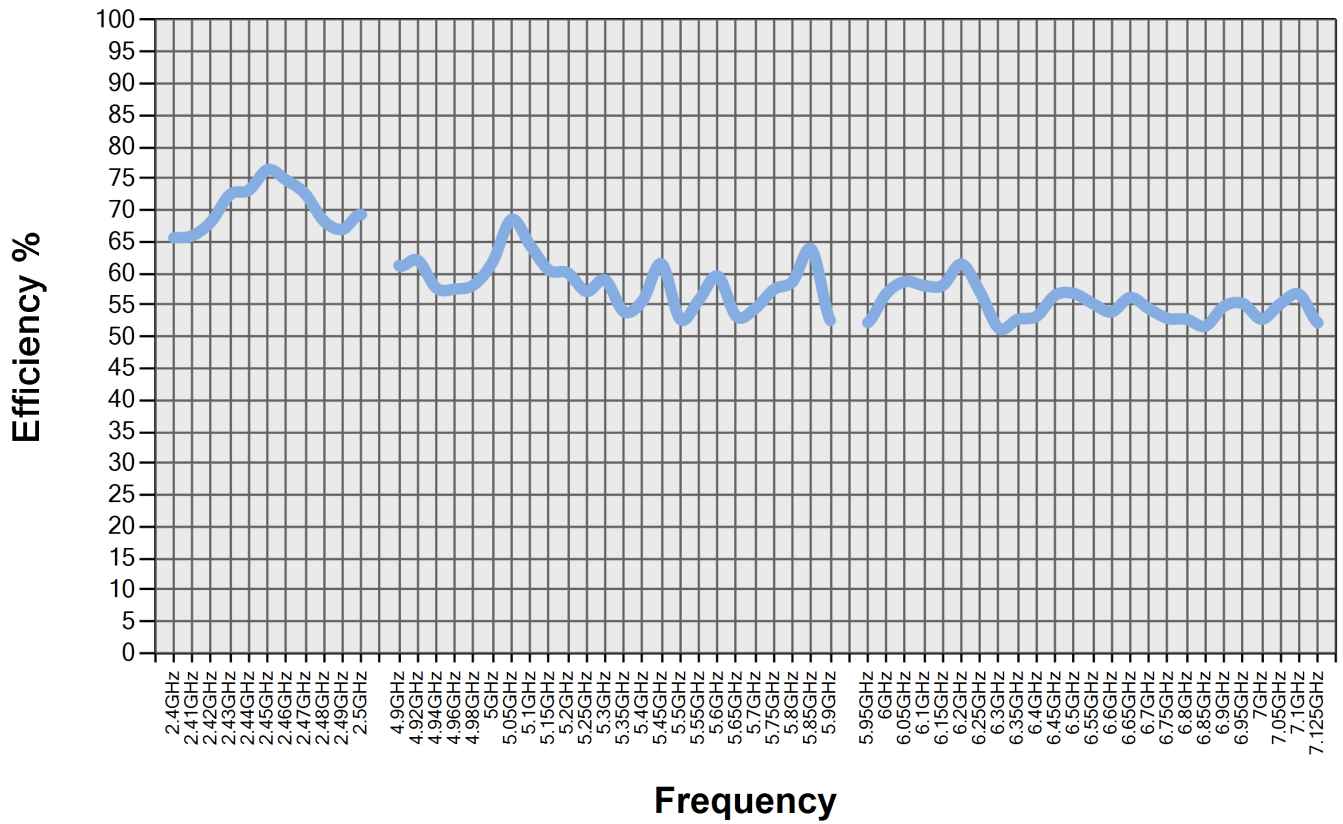


6.2. VSWR



All data measured on SRE3W084 in free space

6.3. Efficiency

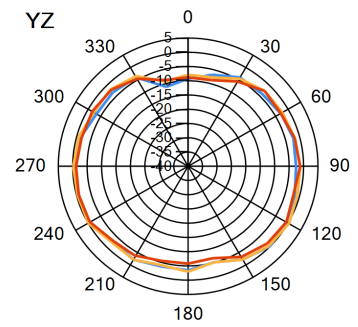
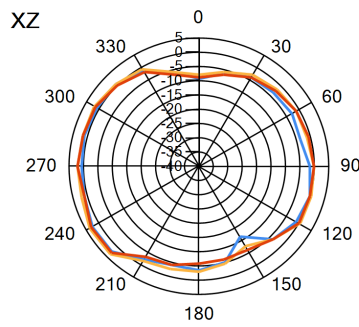
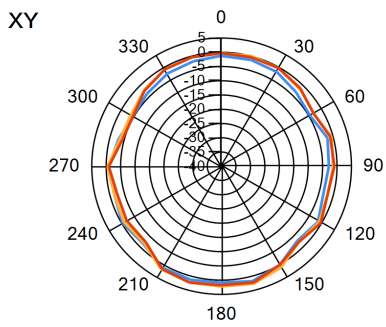
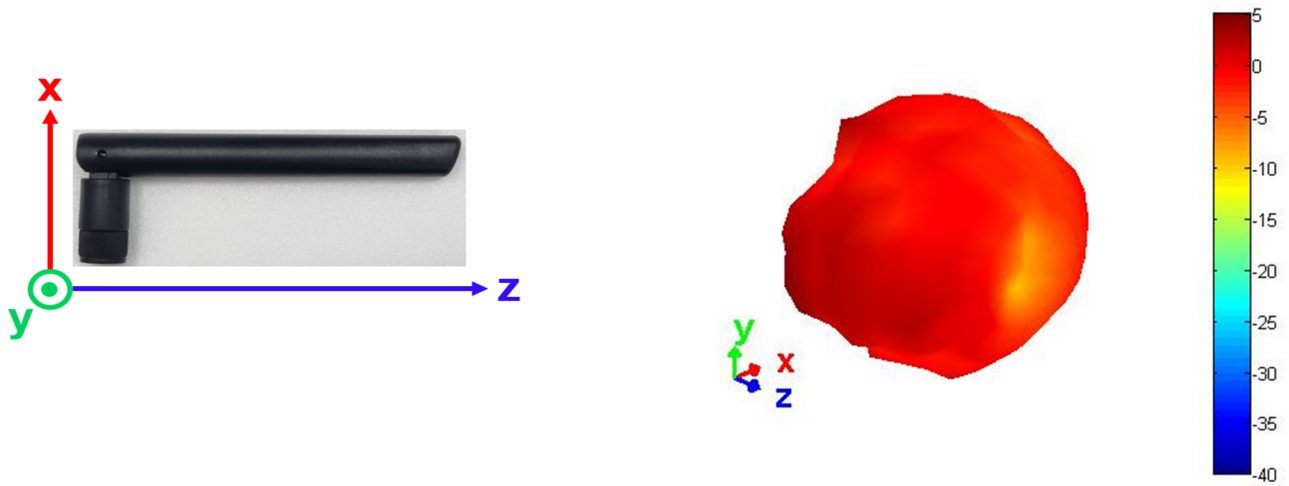


All data measured on SRE3W084 in free space

6.4. Antenna Pattern Free Space

6.4.1. 2400MHz ~ 2500MHz

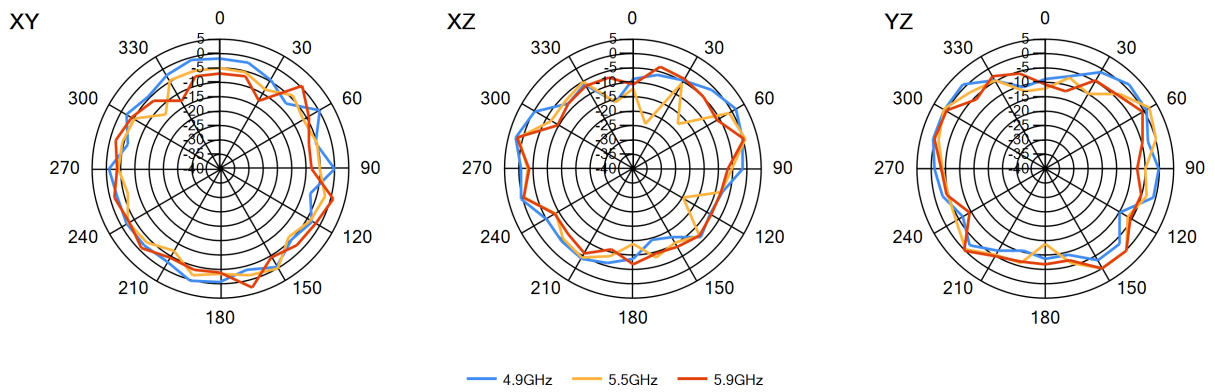
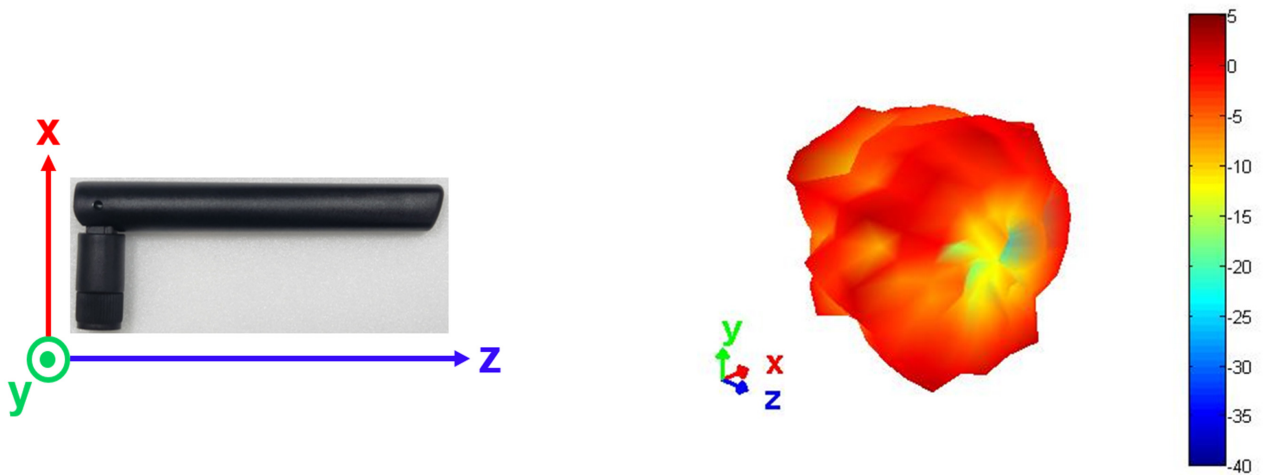
3D pattern at 2450MHz



— 2.4GHz — 2.45GHz — 2.5GHz

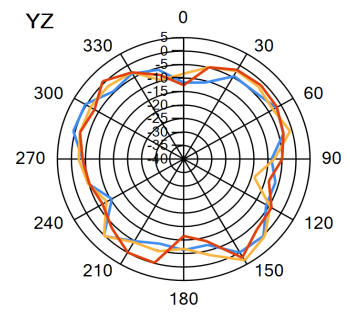
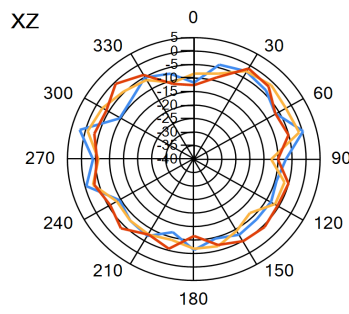
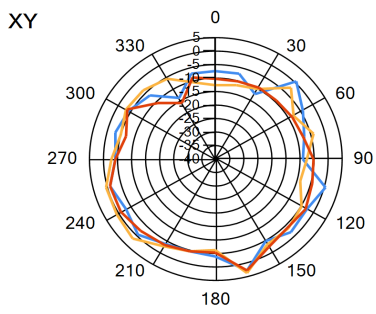
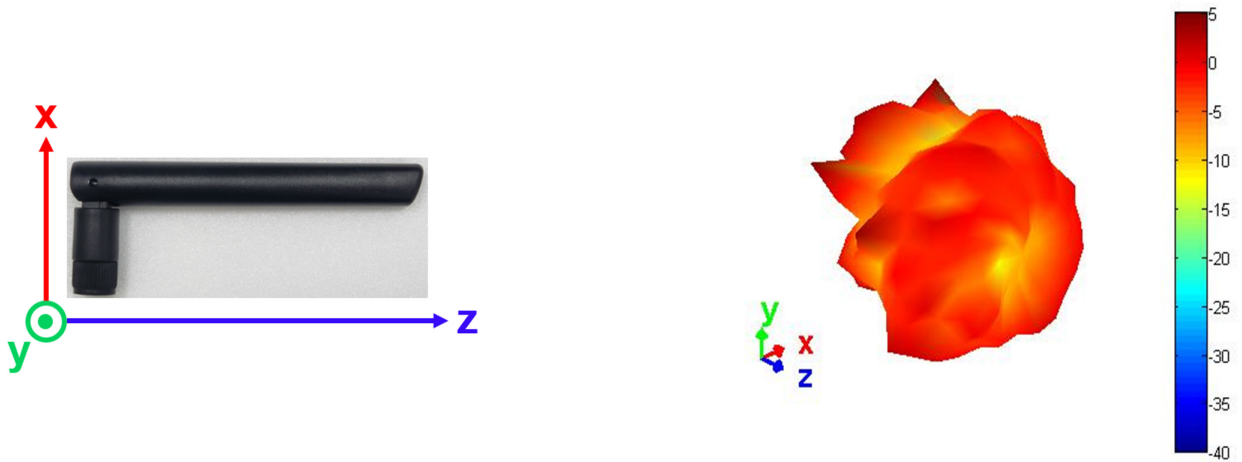
6.4.2. 4900MHz ~ 5900MHz

3D pattern at 5500MHz



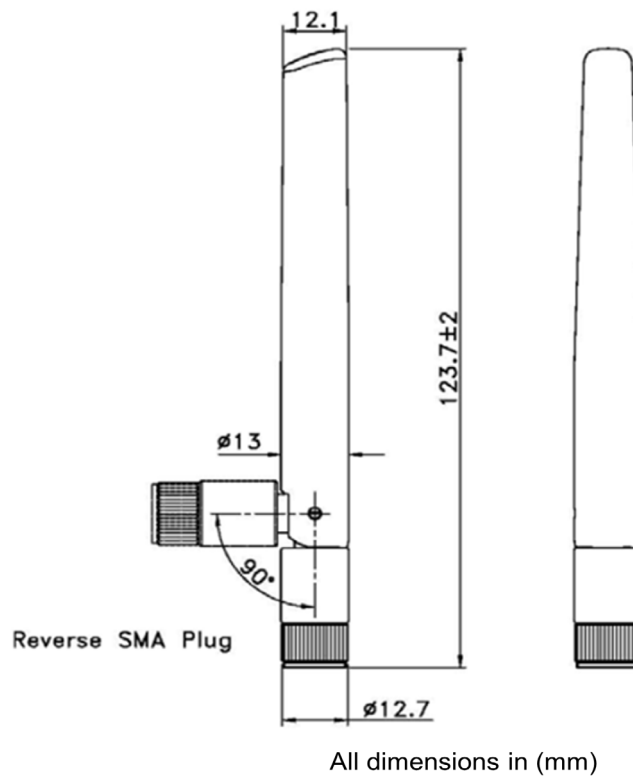
6.4.3. 5925MHz ~ 7125MHz

3D pattern at 6500MHz



— 5.95GHz — 6.5GHz — 7.125GHz

7. Antenna dimensions



8. Hazardous Material Regulation Conformance

The antenna has been tested to conform to RoHS requirements.

A certificate of conformance is available from Antenova's website.

9. Packaging

The antennas are stored within a plastic bag

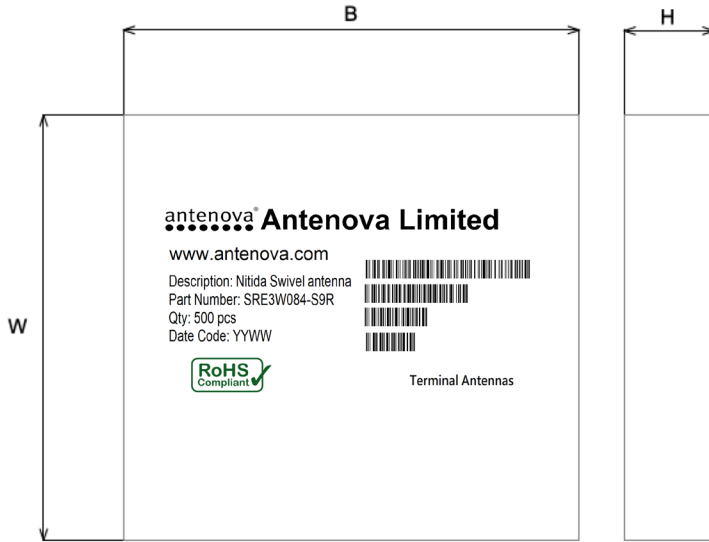
One piece in small bag

50pcs in one larger plastic bag with label



Box Dimension and label

The outer box contains 500 antennas with label



| WIDTH (W) | BREADTH (B) | HEIGHT (H) |
|-----------|-------------|------------|
| 320mm | 250mm | 230mm |

10. 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. |

Note: The shelf life of the antenna is 18 months, provided the bag of 50 pieces remains factory- sealed.

11. Label Information

antenna® **Antenova Limited**

www.antenova.com

Description: Nitida Swivel antenna
 Part Number: SRE3W084-S9R
 Qty: 50 pcs
 Date Code: YYWW



Terminal Antennas

antenna® **Antenova Limited**

www.antenova.com

Description: Nitida Swivel antenna
 Part Number: SRE3W084-S9R
 Qty: 500 pcs
 Date Code: YYWW



Terminal Antennas

Quality statements

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



Antenova reserves all rights to the contents of this document. Antenova gives no warranties based solely on the accuracy or completeness of the contents of this document and reserves the right to make changes to the specifications of the products described herein at any time and without notice.

Datasheet version

1.01 released Nov 11 2022

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](https://www.ask.antenova.com)

Visit [antenova.com](https://www.antenova.com)

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

[VISIT ANTENOVA.COM](https://www.antenova.com)

Request a volume quotation for antennas:

sales@antenova.com

Global headquarters

Antenova Ltd, 2nd Floor Titan Court, 3 Bishop Square, Hatfield, AL10 9NA

+44 (0) 1707 927589