



# SYNZEN

## PRODUCT DATASHEET

### DIONE | L1/L5 STACKED CERAMIC PATCH | GPS/GALILEO/GLONASS

#### Part Number / Name

- SZC-N-3G30
- DIONE

#### Description

- GPS ceramic through hole patch

#### Features

- GPS L1 and L5
- BeiDou B1, GALILEO E1 and E5a, IRNSS L5
- Through hole mount
- High Gain
- Dimensions: 25.0 x 25.0 x 8.16 (mm)





## Contents

Introduction .....	3
General.....	4
Specifications .....	4
RF Characteristics.....	5
Mechanical.....	6
Packaging .....	7
Environmental.....	8

## Introduction

### Introducing the Synzen DIONE (SZC-N-3G30) Patch Antenna

In the ever-evolving landscape of high-precision global navigation and positioning systems, the Synzen DIONE (SZC-N-3G30) Patch Antenna stands as a testament to cutting-edge technology and performance.

DIONE antenna boasts an advanced wide-band dual stacked ceramic patch antenna with optimized gain for GPS L1/L5, Galileo, GLONASS, and BeiDou bands. The result is a high-performance directional antenna that promises unparalleled precision and rapid positioning, making it an ideal choice for a diverse range of applications.

### Key Features of the Synzen DIONE (SZC-N-3G30) Patch Antenna:

- **Multi-Band Excellence:** The DIONE antenna is adept at covering the multi-band spectrum, catering to the needs of GPS, BeiDou/Compass, and IRNSS systems.
- **Compact Design:** With a compact form factor, measuring just 25 x 25 x 8mm, the DIONE antenna is designed for versatility while maintaining its high-performance standards.
- **Versatile Applications:** Typical applications for this innovative antenna include real-time kinematic (RTK) solutions, wearables, transportation systems, agriculture technology, navigation devices, security solutions, and autonomous vehicles.

DIONE antenna can be tailored to specific customer device environments, with customization options available. For personalized assistance or integration and performance testing services, we encourage you to contact our regional Synzen customer support team. Embrace the future of high-precision positioning with the DIONE antenna, where innovation meets performance.

### Typical Applications

- RTK
- Precision agriculture
- Automotive
- Autonomous Vehicles / Drones
- Navigation



## General

### Mechanical Specifications

<b>Part Number</b>	SZC-N-3G30
<b>Name</b>	DIONE
<b>Dimensions</b>	25.0 x 25.0 x 8.16 (mm)
<b>Weight</b>	<14g
<b>Antenna Type</b>	Through Hole Patch
<b>Material</b>	Ceramic

### Electrical / RF Specifications\*

Band	Frequency Range (MHz)	Avg Efficiency (%)	Peak Gain (dBi)	Impedance	Polarization
L1	1575.42 ±2	>60	2.50	50Ω	RHCP
L5	1176.42 ±12	>65	3.50		

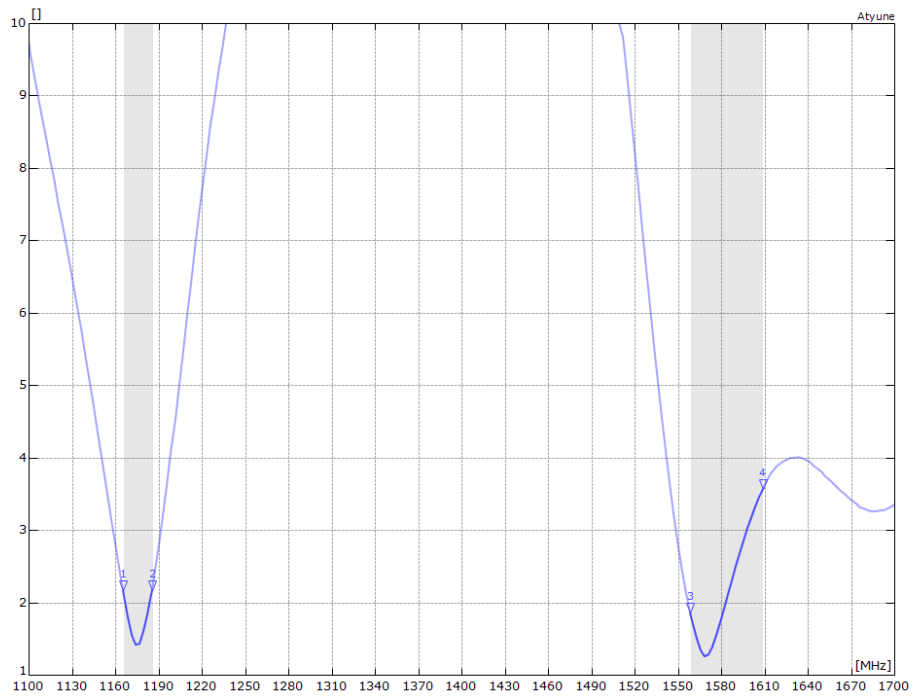
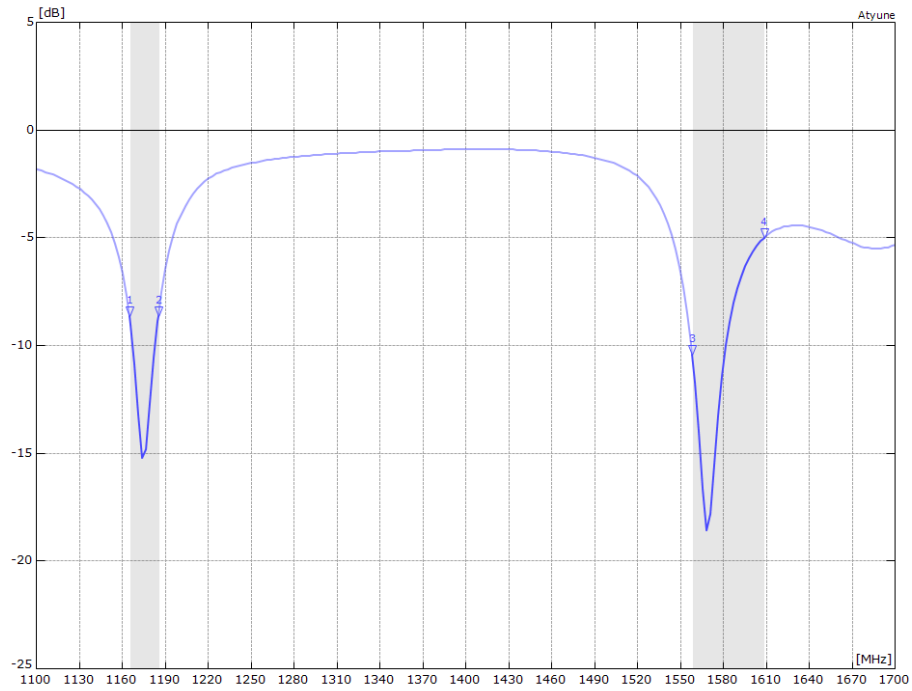
\*All performance stated is measured on a 70x70 mm GND.

### Environmental Specifications

<b>Operational Temperature</b>	-40 to +85 (°C)
<b>Storage Temperature</b>	-10 to +110 (°C)
<b>Relative Humidity</b>	≤75%
<b>Moisture Sensitivity Level (MSL)</b>	NA
<b>RoHs &amp; REACH compliant</b>	Yes

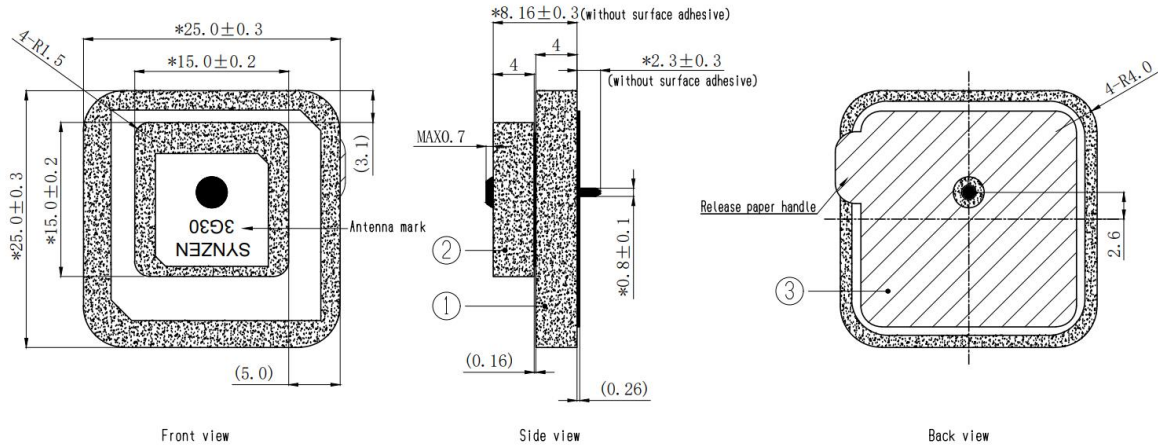
## RF Characteristics

### S11 / VSWR



## Mechanical

### Antenna Mechanical Drawing



3	Adhesive	NITTO 5000	1
2	Antenna	Ceramic,15*15*4mm	1
1	Antenna	Ceramic,25*25*4mm	1
NO	DESCRIPTION		Q' TY



## Packaging

Packaging Type	Quantity
Tray	50
Inner Box	150
Outer Box	600

## Environmental

### **Material Regulation**

The antenna has been tested to conform to RoHS requirements. A certificate of conformance is available upon request.





Synzen Precision Technology Ltd makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Synzen reserves all rights to this document and the information contained herein. Reproduction use or disclosure to third parties without express permission is strictly prohibited.