



DATASHEET

DEIMOS2 | SZW-N-5M13 | IP65 Terminal | ISM 915

Features:

ISM: 902-928MHz
>3.0dBi Peak Gain, >65% Efficiency

Dimensions: 160.8 x Ø12.9mm
Connector: SMA Male
IP 65
RoHs Compliant

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Introduction

DEIMOS 2, part number SZW-N-5M13, is a compact external sub-GHz antenna designed specifically for operation in the 915MHz ISM band. The antenna is optimized to provide stable impedance matching, consistent radiation characteristics, and reliable efficiency when integrated into low power wireless devices.

DEIMOS 2 demonstrates low VSWR and balanced omnidirectional radiation patterns across the 915 MHz ISM band. The antenna delivers reliable gain and efficiency performance suitable for long range, low data rate wireless applications. The external antenna form factor supports robust RF performance while simplifying mechanical integration.

DEIMOS1 is intended for applications that require dependable long-range connectivity, low power operation, and repeatable RF behavior in real world environments.

Features

- Optimized for 915MHz ISM band operation
- Low VSWR across the 915MHz ISM band
- Balanced omnidirectional radiation pattern
- High radiation efficiency for its size class
- External antenna form factor for improved RF performance
- Validated through VNA and anechoic chamber testing

Applications

- LPWAN and IoT devices operating in the 915MHz ISM band
- Smart metering systems
- Asset and wildlife tracking
- Industrial monitoring and sensing
- Smart city infrastructure
- Sub GHz wireless gateways

Mechanical Specifications

Parameter	
Part Number	SZW-N-5M13
Name	DEIMOS 2
Dimensions (mm)	160.80 x Ø12.90
Antenna Type	Terminal Flexible

Electrical / RF Specifications

Band	Frequency Range (MHz)	Average Efficiency (%)	Peak Gain (dBi)	VSWR (worst case)	Impedance
ISM 915	902-928	78.6	3.62	1.88:1	50 Ω

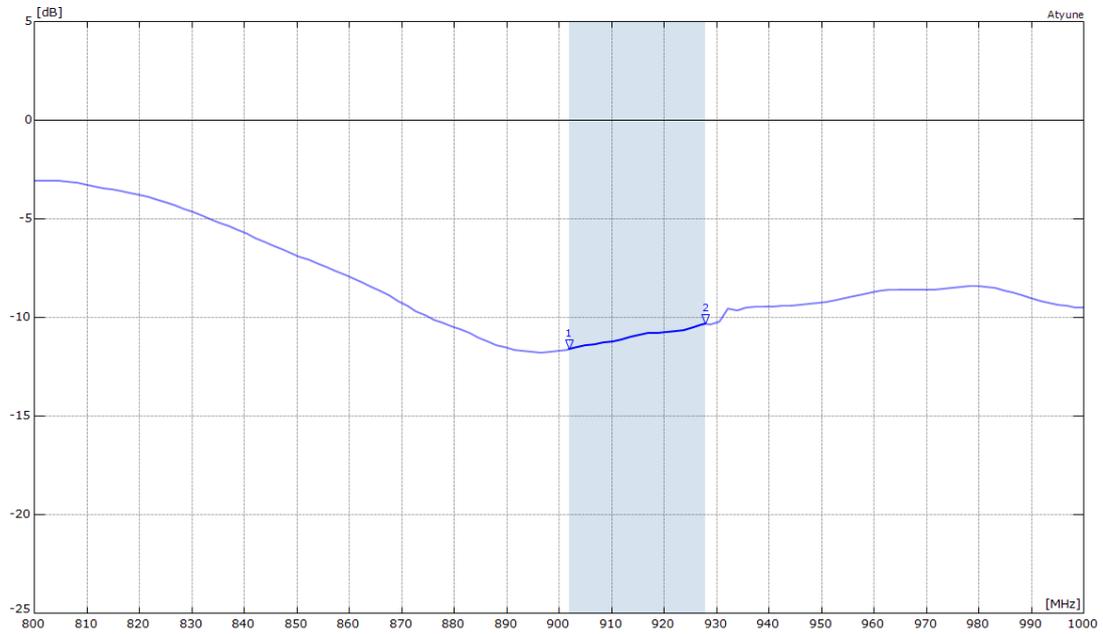
Environmental

Parameter	
Operational Temperature	-35 to +75°C
Storage Temperature	-35 to +75°C
IP Rating	IP65
RoHs and REACH compliant	Yes

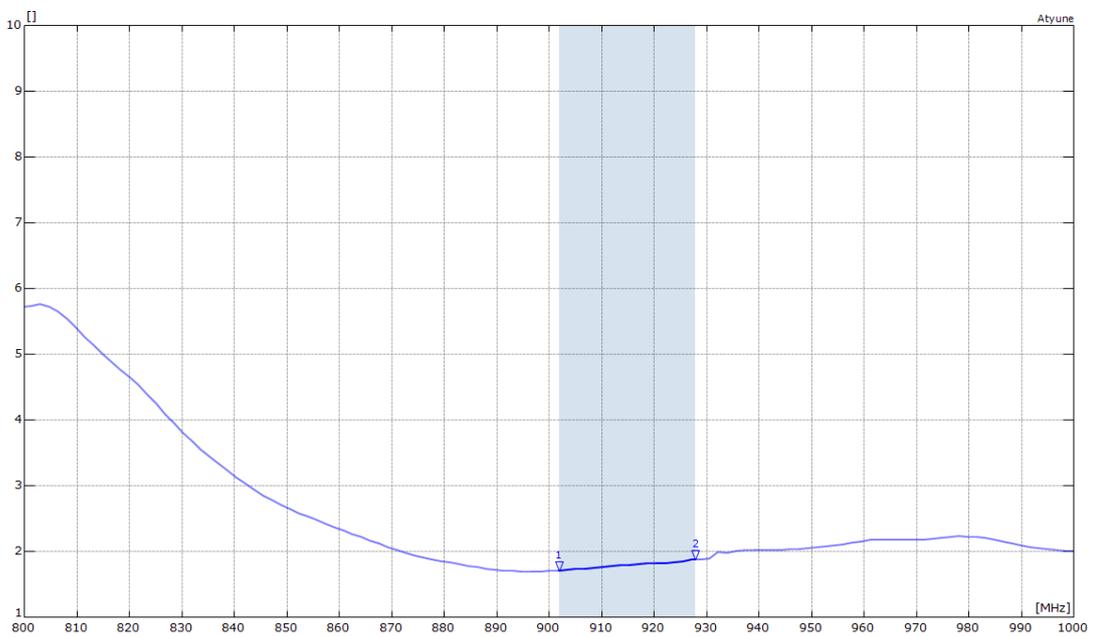


RF Characteristics

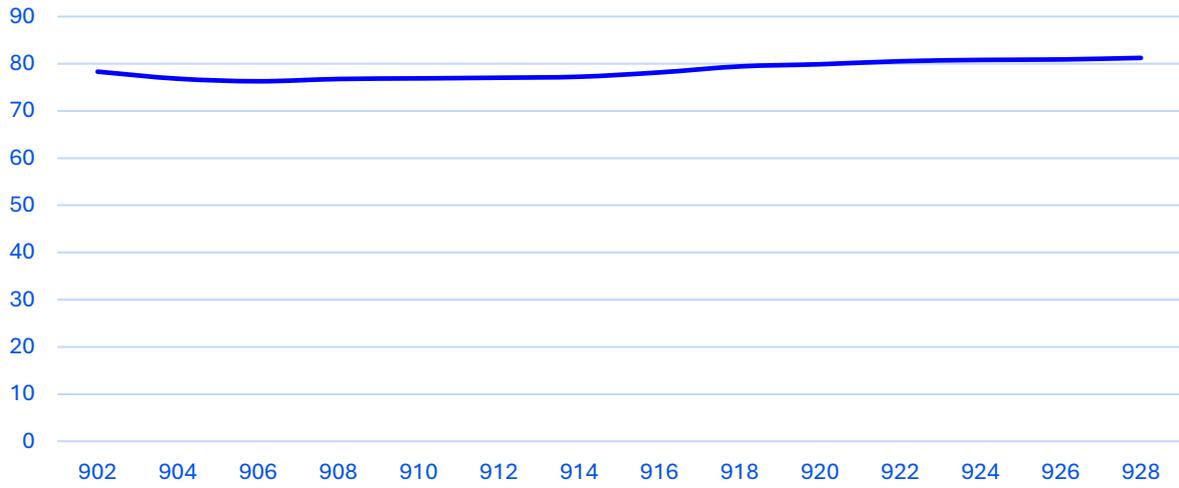
Return loss



VSWR



Efficiency



Peak Gain

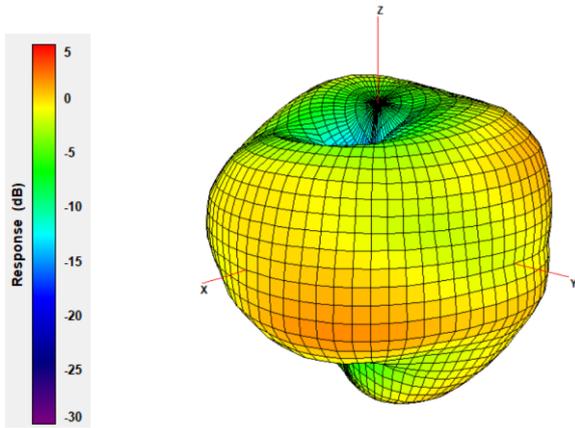


Average Gain

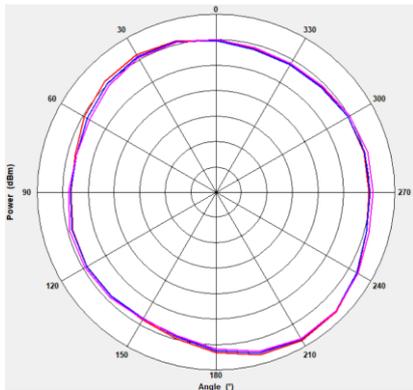


RF Radiation Patterns

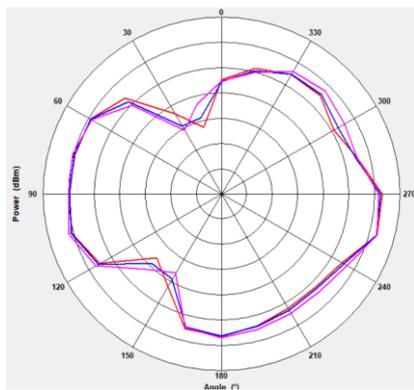
RF Radiation Patterns at 915MHz



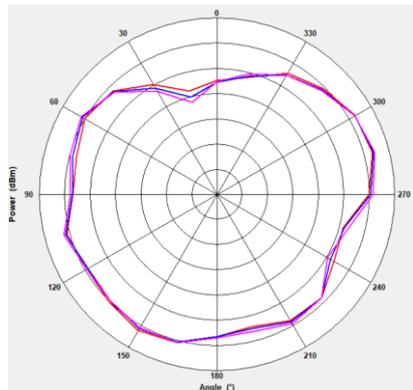
XY



XZ



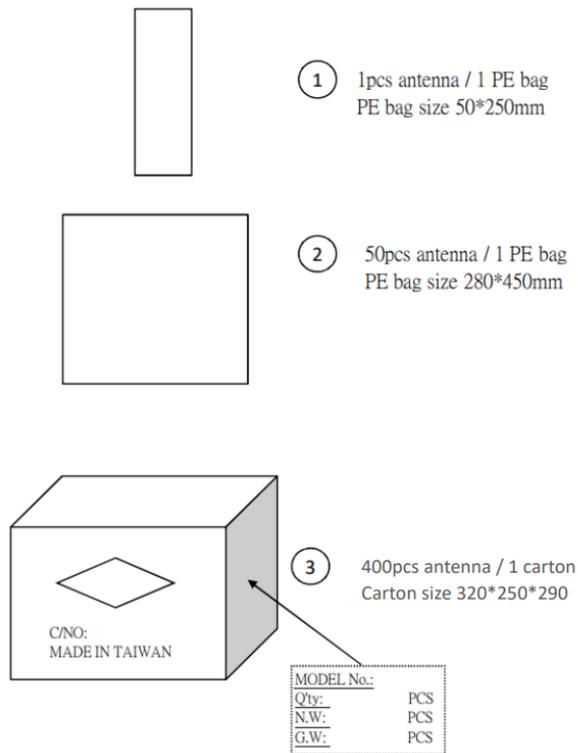
YZ



Max: 5
Min: -30
Scale: 5/div

902
914
928

Packaging



Material Regulation

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

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