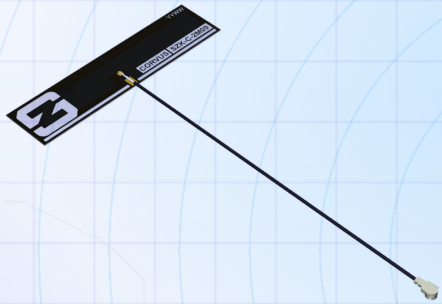
SP TECHNOLOGY

PRODUCT DATASHEET



ISM / LORA FPC

CORVUS

ISM 868 FPC Antenna

SZK-C-2M09

FREQUENCY	PEAK GAIN	CONNECTOR	SIZE
863 to 870 MHz	0.91 dBi	MHF1, 100 mm	60.0 × 15.0 × 0.2 mm

ISM 868	863 to 870 MHz	Covers ISM, LoRa

Key Features

- For ISM / LoRa applications 863 to 870 MHz
- High performance ISM 868 band coverage
- Simple integration, plug and operate the device without designing onboard antenna
- Small form factor of 60.0 × 15.0 × 0.20 mm
- Alternate cable lengths and connectors available upon request, contact sales@synzen.com.tw

Synzen Precision Technology Ltd
Taipei, Taiwan · www.synzen.com.tw · sales@synzen.com.tw

2026
Rev A

1 Introduction

A flexible antenna for ISM / LoRa applications. For use internal to a device which requires an integrated antenna solution.

Features

- For ISM / LoRa applications 863 to 870 MHz
- High performance ISM 868 band coverage
- Simple integration, plug and operate the device without designing onboard antenna
- Small form factor of 60.0 × 15.0 × 0.20 mm
- Alternate cable lengths and connectors available upon request, contact sales@synzen.com.tw

Applications

- Industrial / Scientific / Medical
- M2M Industrial
- Smart Meters
- Smart Grid
- Healthcare
- Tracking

2 Mechanical Specifications

Part Number	SZK-C-2M09
Name	CORVUS
Dimensions (mm)	60.0 × 15.0 × 0.20
Weight	<0.5 g
Antenna Type	FPC Self-Adhesive
Cable Length*	100 mm
Cable Type	Mini Coax Ø 1.13 mm
Connector*	MHF1 (U.FL Compatible)
Adhesive Backing	3M 468

**Alternate cable length and connectors available on request*

3 RF Specifications

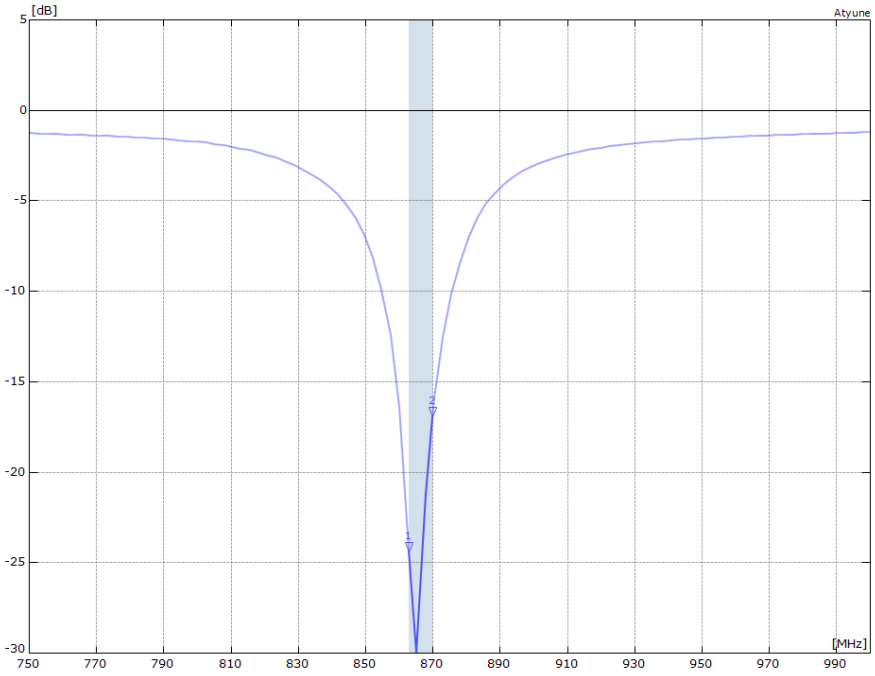
Band	Frequency Range (MHz)	Efficiency (%)	Peak Gain (dBi)	Impedance	Polarization
ISM 868	863 to 870	>64	0.91	50 Ω	Linear

4 Environmental

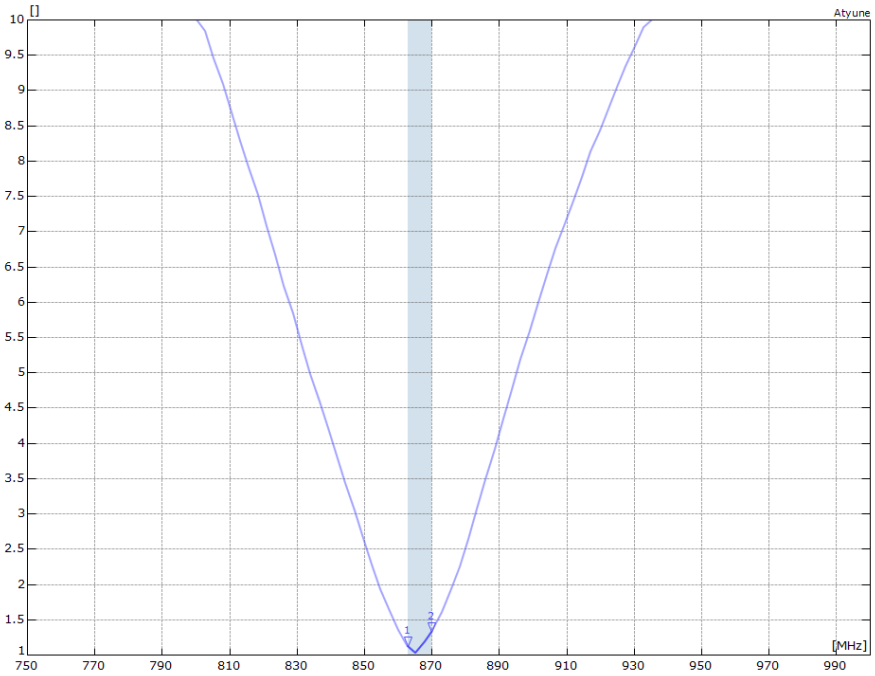
Operational Temperature	-40 to +85°C
Storage Temperature	-10 to +40°C
Relative Humidity	≤75%

5 RF Characteristics

S11 Parameter

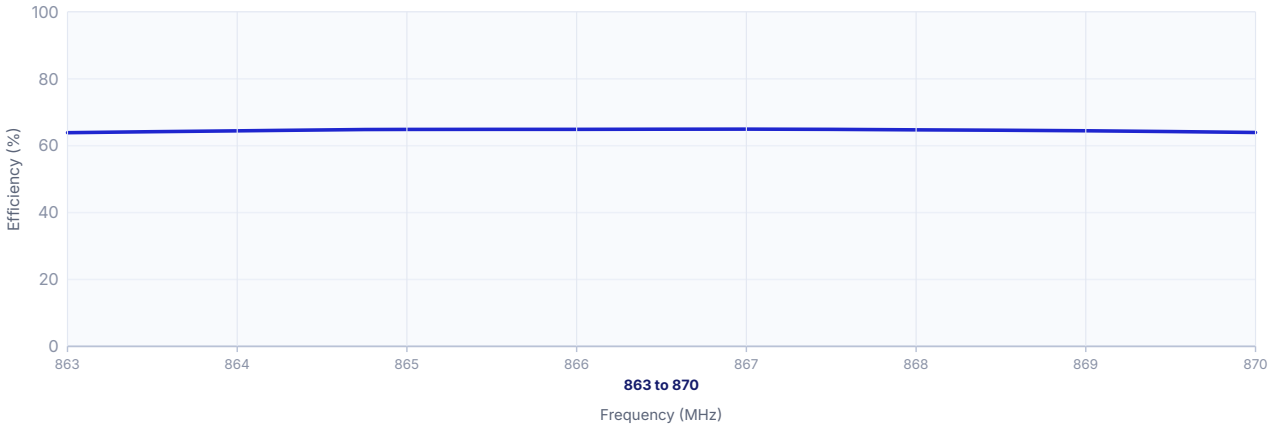


VSWR

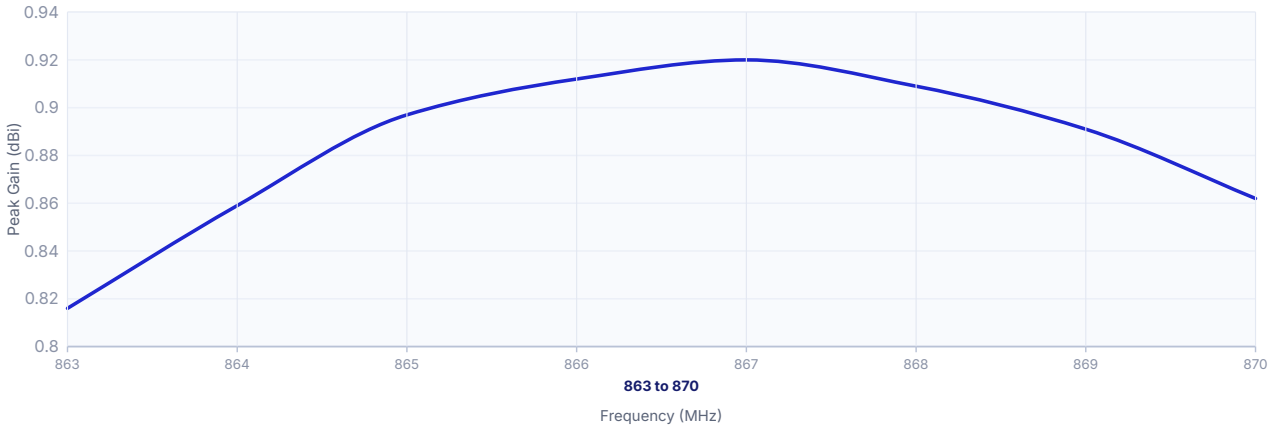


6 Antenna Performance

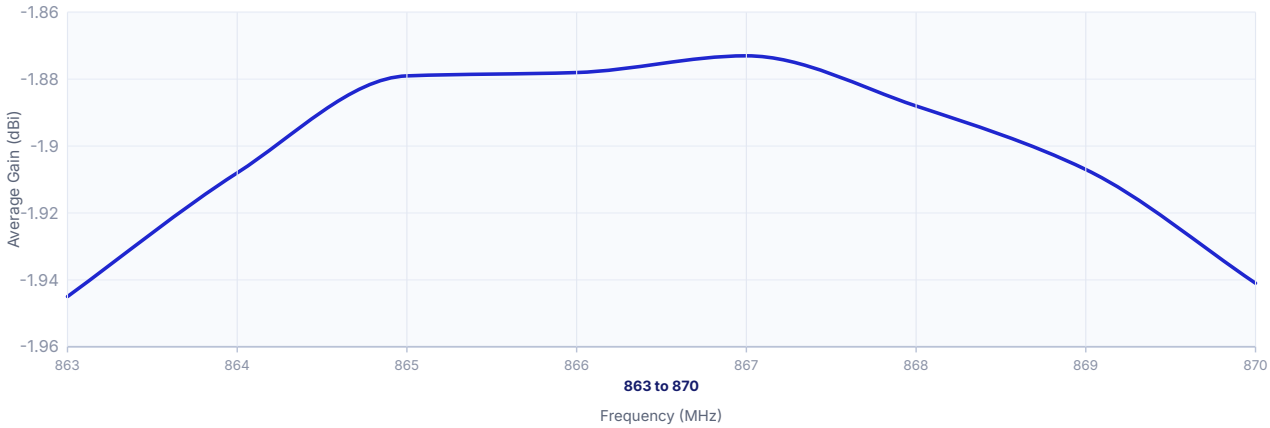
Efficiency



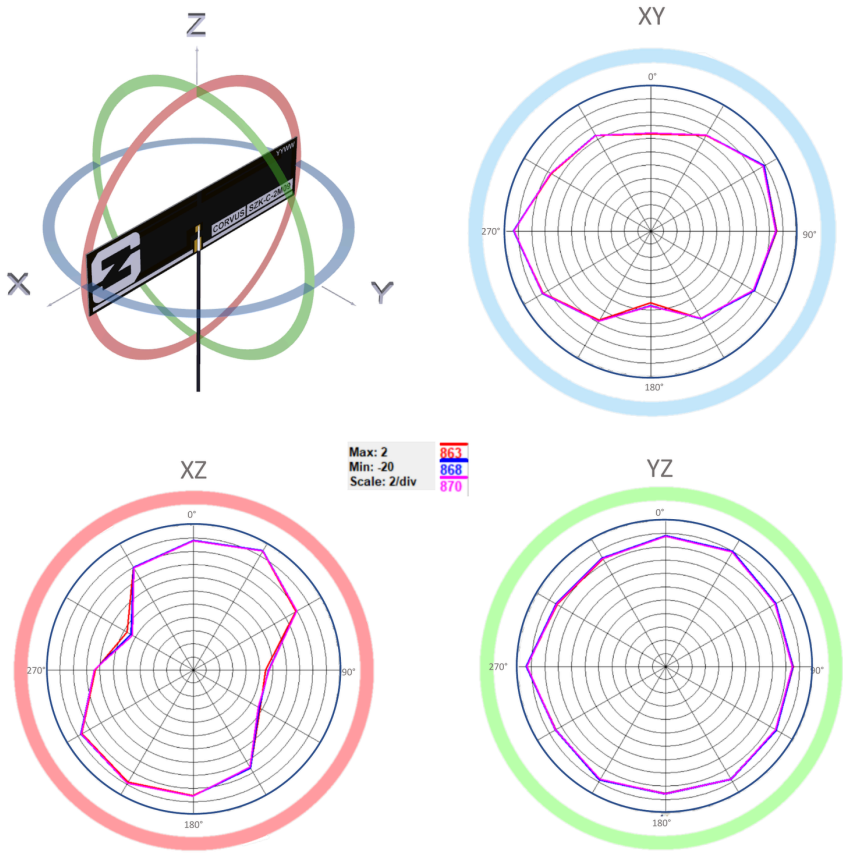
Peak Gain



Average Gain

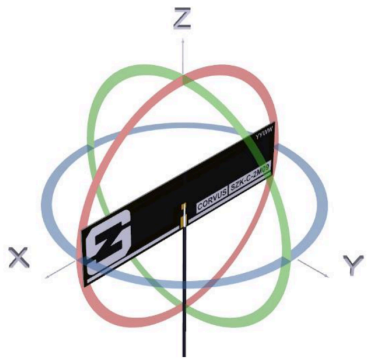


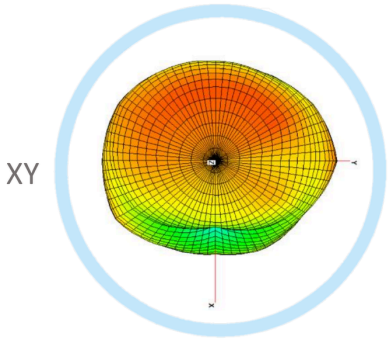
7 2D Polar Plot

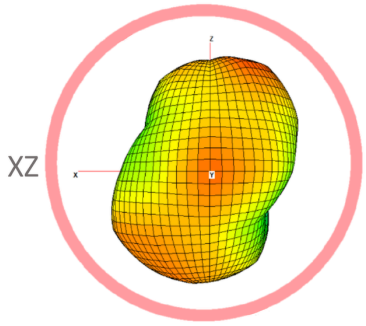


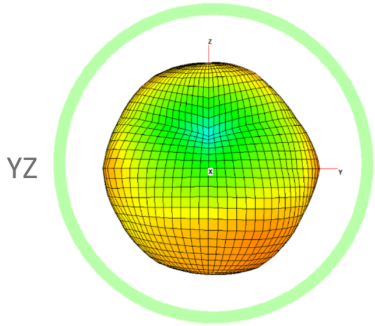
8 3D Radiation Pattern at 868 MHz

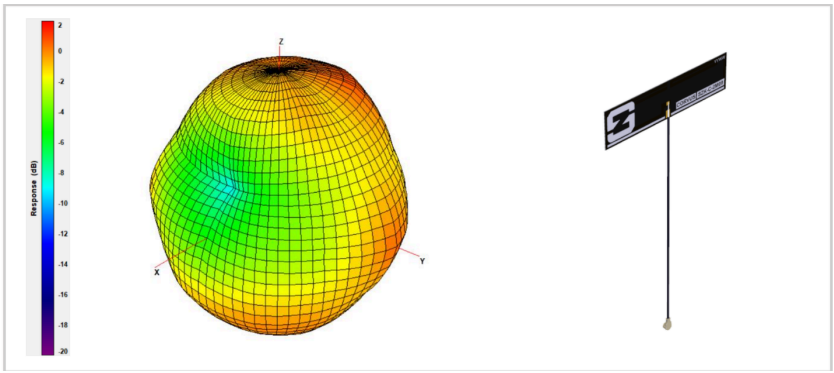
FREQUENCY POINT 868 MHZ



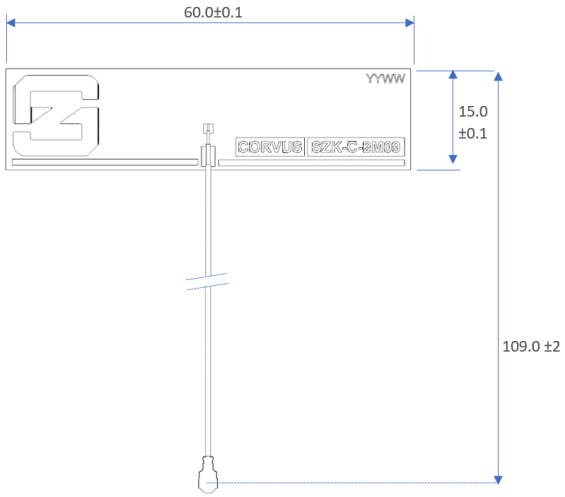






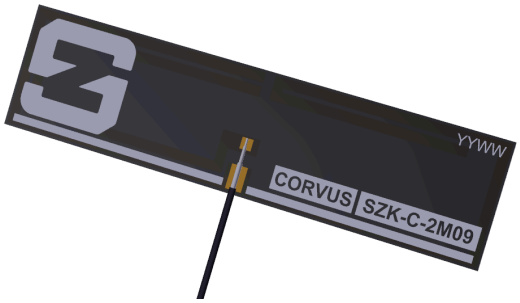


9 Antenna Mechanical Drawing

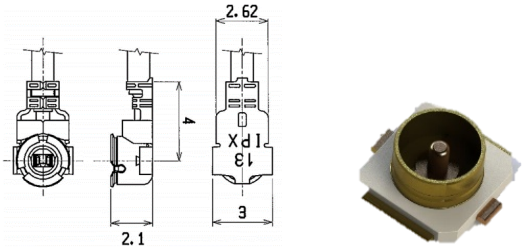


All dimensions in mm. The plug connector on the antenna is an IPEX MHF1.

10 Antenna Detail



11 Suitable PCB Mating Connector (U.FL)



Example: Joymax CT-MPB01X (www.joymax.com.tw)

12 Adhesive Backing

The antenna comes with 3M 468 adhesive backing upon a PI Kapton substrate. An easy peel cut is on the back side for easy cover removal.

13 Bag and Packaging Information

- Antennas packed in PE bag (20 per bag)
- Small bag dimensions: 28.5 × 9.5 cm
- 100 pcs per larger PE bag with product label
- Bag dimensions: 30 × 19 cm
- 1000 pcs per carton
- Carton dimensions: 33.7 × 32.2 × 10 cm

14 Compliance

ROHS
Compliant
Conforms to EU RoHS Directive 2011/65/EU as amended by Delegated Directive (EU) 2015/863.

REACH
Compliant
Conforms to EU REACH Regulation (EC) No 1907/2006.

CERTIFICATE
On request
A certificate of conformance is available upon request from sales@synzen.com.tw.

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