



Dual-band ISM FPC Antenna

SZK-C-2M10

ISM 863-870 & 902-928MHz

Description

A Flexible antenna for ISM/LoRa applications. For use internal to a device which requires an integrated antenna solution. High performance with a small form factor for simple integration.

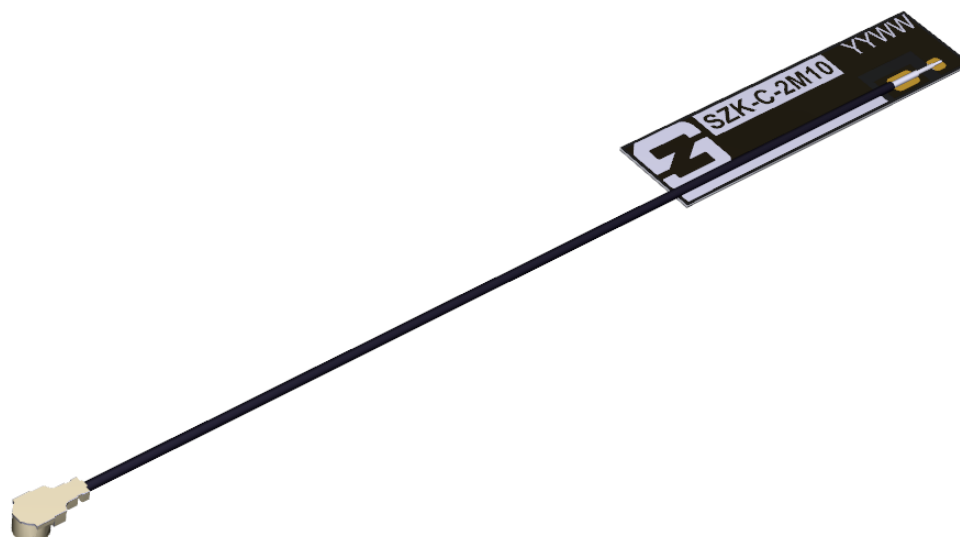
- For ISM/LoRa Applications 863-928MHz
- High performance with dual band coverage
- Simple integration, plug and operate the device without designing onboard antenna.
- Small form factor of 33.0 x 8.0 x 0.20 (mm) including clearance area.
- Alternate cable lengths and connectors available upon request, contact sales@synzen.com.tw

Applications

Industrial/Scientific/Medical
Smart Grid

M2M Industrial
Healthcare

Smart Meters
Tracking





General Specifications

Mechanical Specifications

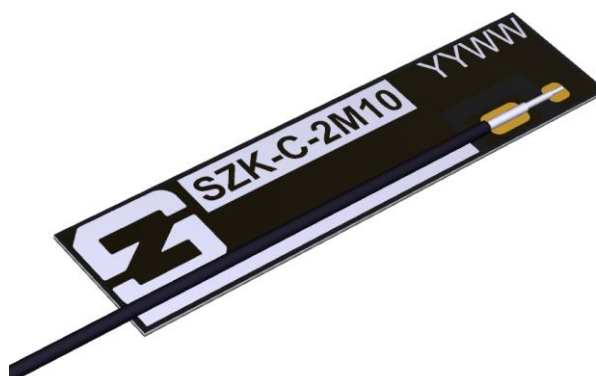
Part Number	SZK-C-2M10
Name	DRACONIS
Dimensions	33.0 x 8.0 x 0.20 (mm)
Weight	<0.5g
Antenna Type	FPC Self-Adhesive
Cable Length	100mm
Cable type	Mini Coax $\varnothing$ 1.13mm
Connector	MHFI (U.FL Compatible)
Adhesive backing	3M 468

RF Specifications

Band	Frequency Range (MHz)	Efficiency (%)	Peak Gain (dBi)	Impedance	Polarization
ISM 868	863-870	>75	1.40	50 Ω	Linear
ISM 915	902-928	>65	0.76		

Environmental Specifications

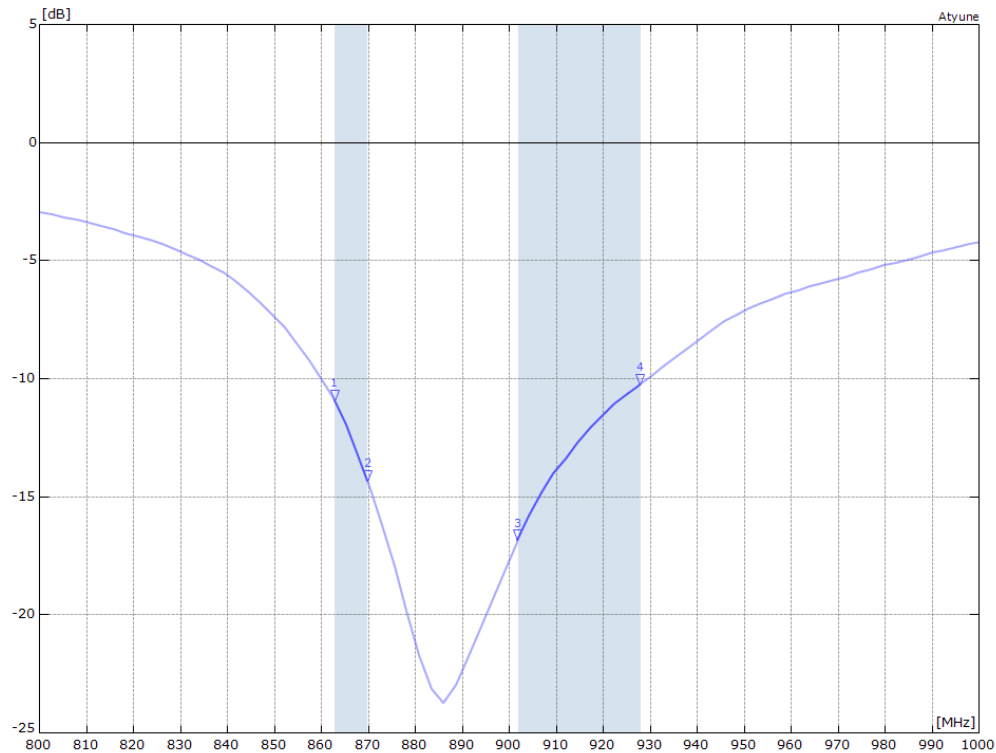
Operational Temperature	-40 to +85 (°C)
Storage Temperature	-10 to +40 (°C)
Relative Humidity	≤75%



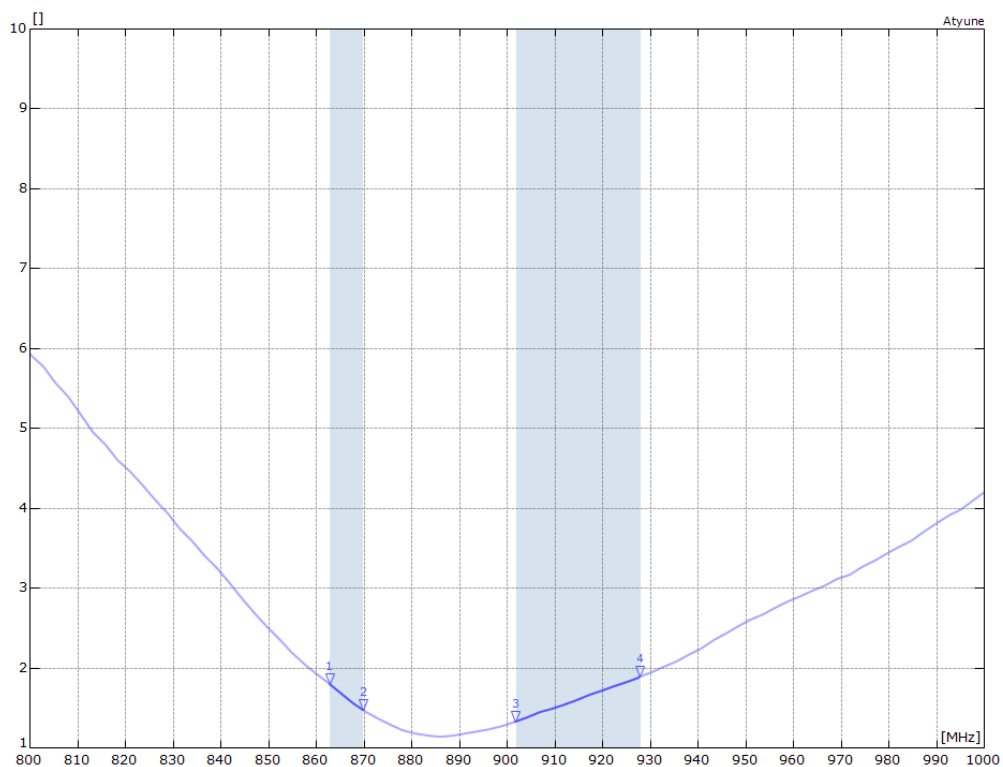


RF Characteristics

S11 Parameter



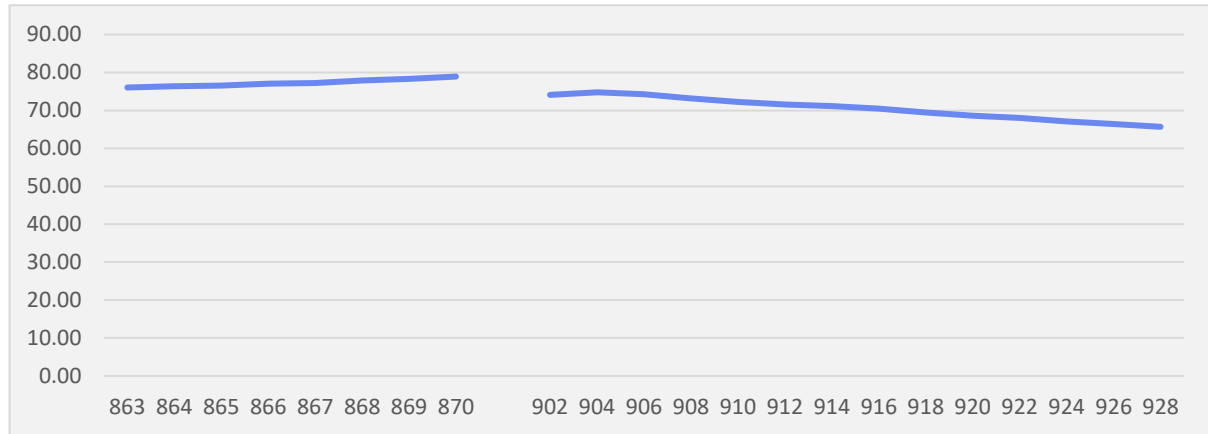
VSWR



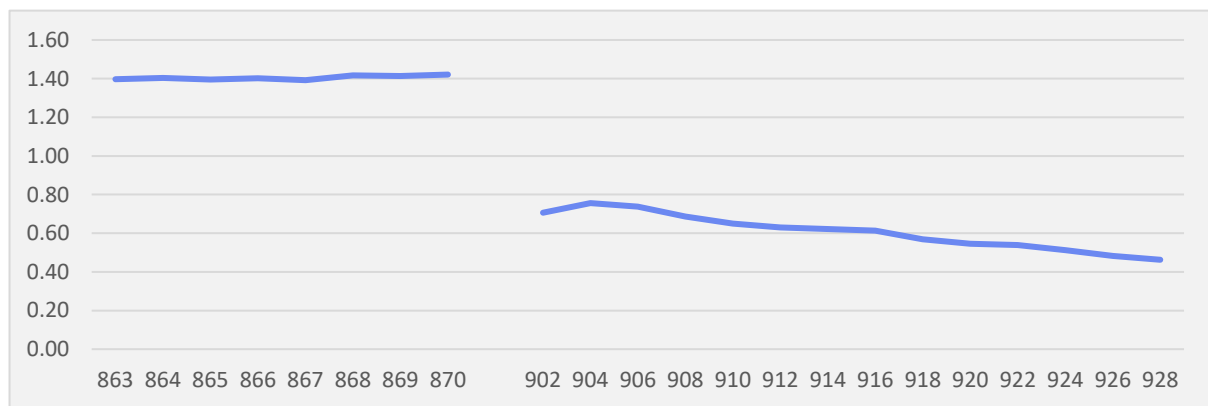


Antenna Performance

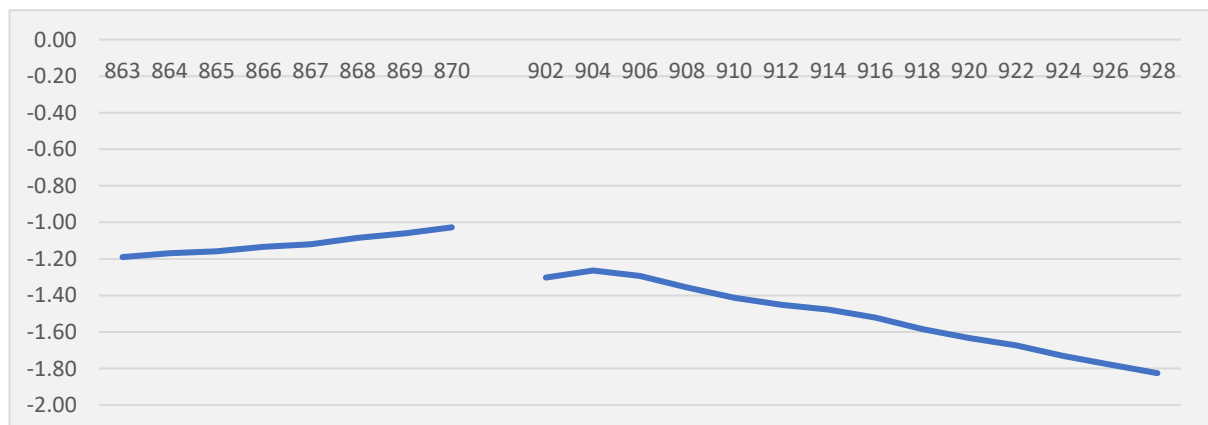
Efficiency



Peak Gain



Average Gain

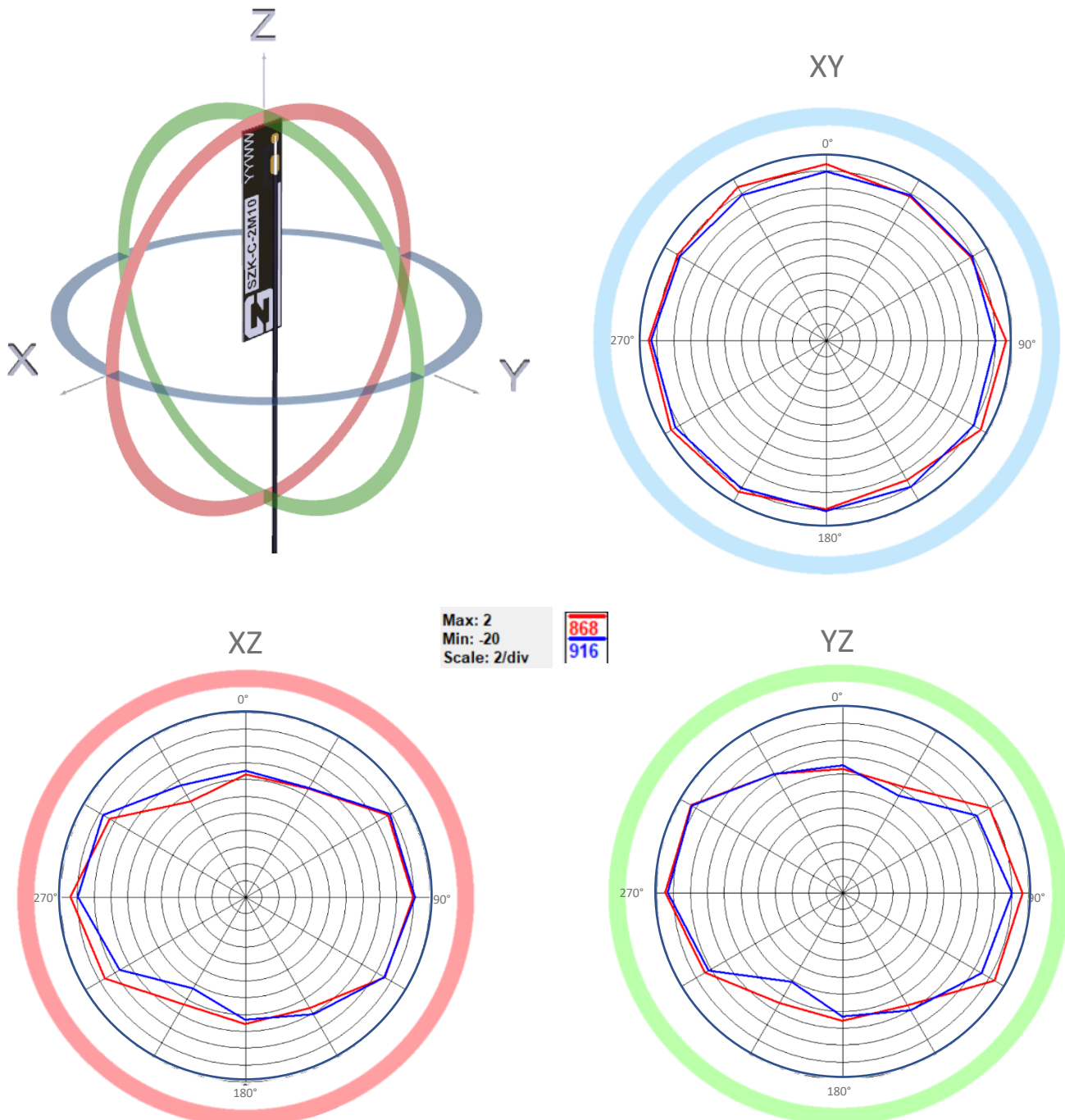




Radiated Performance

2D Polar Plot 863-928MHz

The data shown was

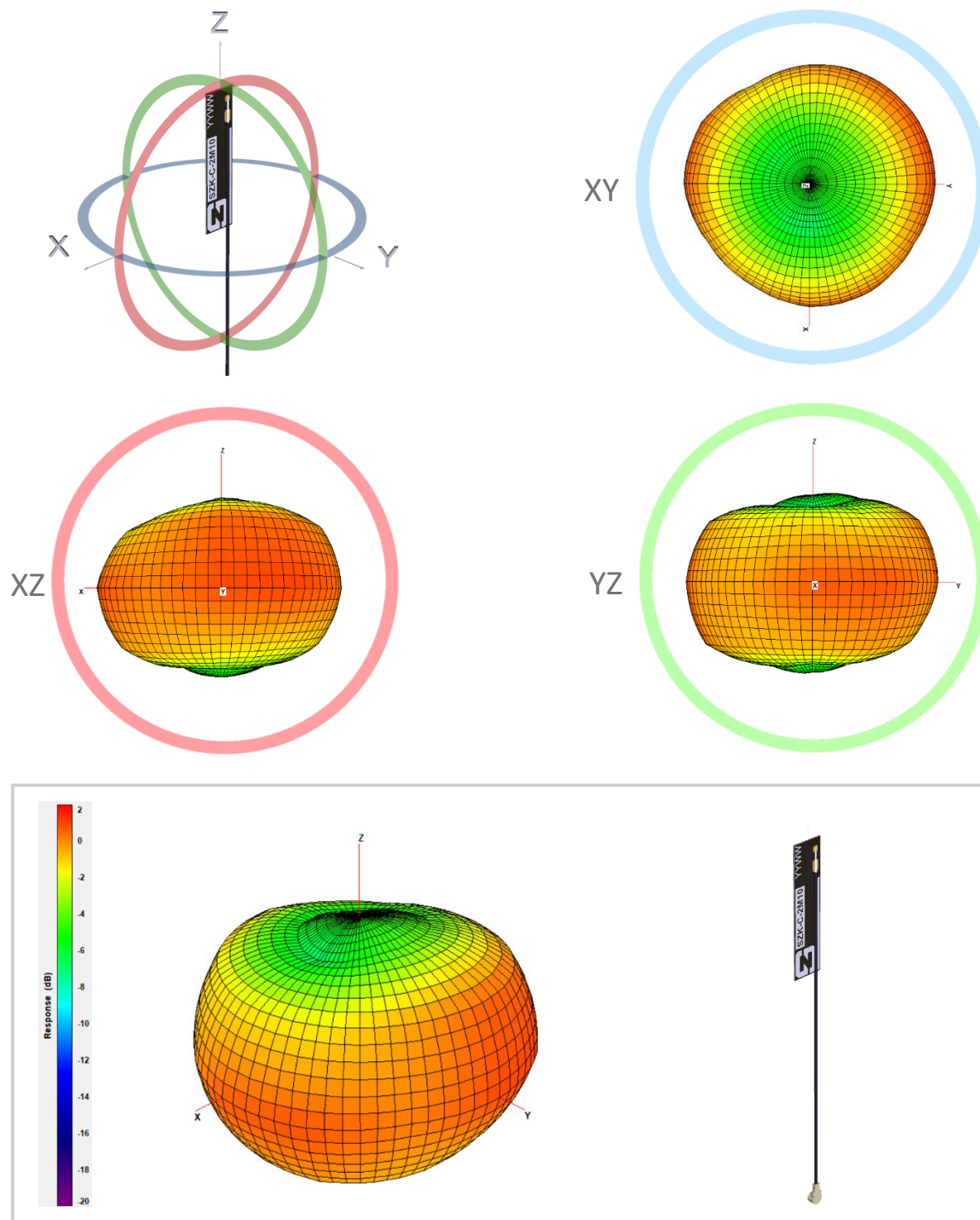




Radiated Performance

3D Radiation Pattern at 868MHz

The frequency point shown here is 868MHz.

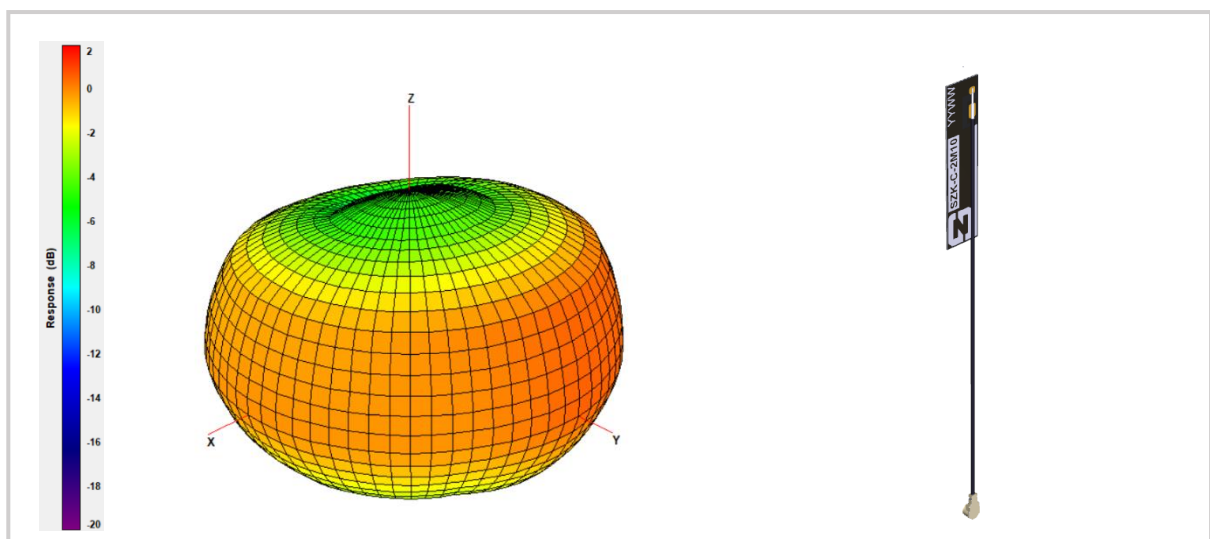
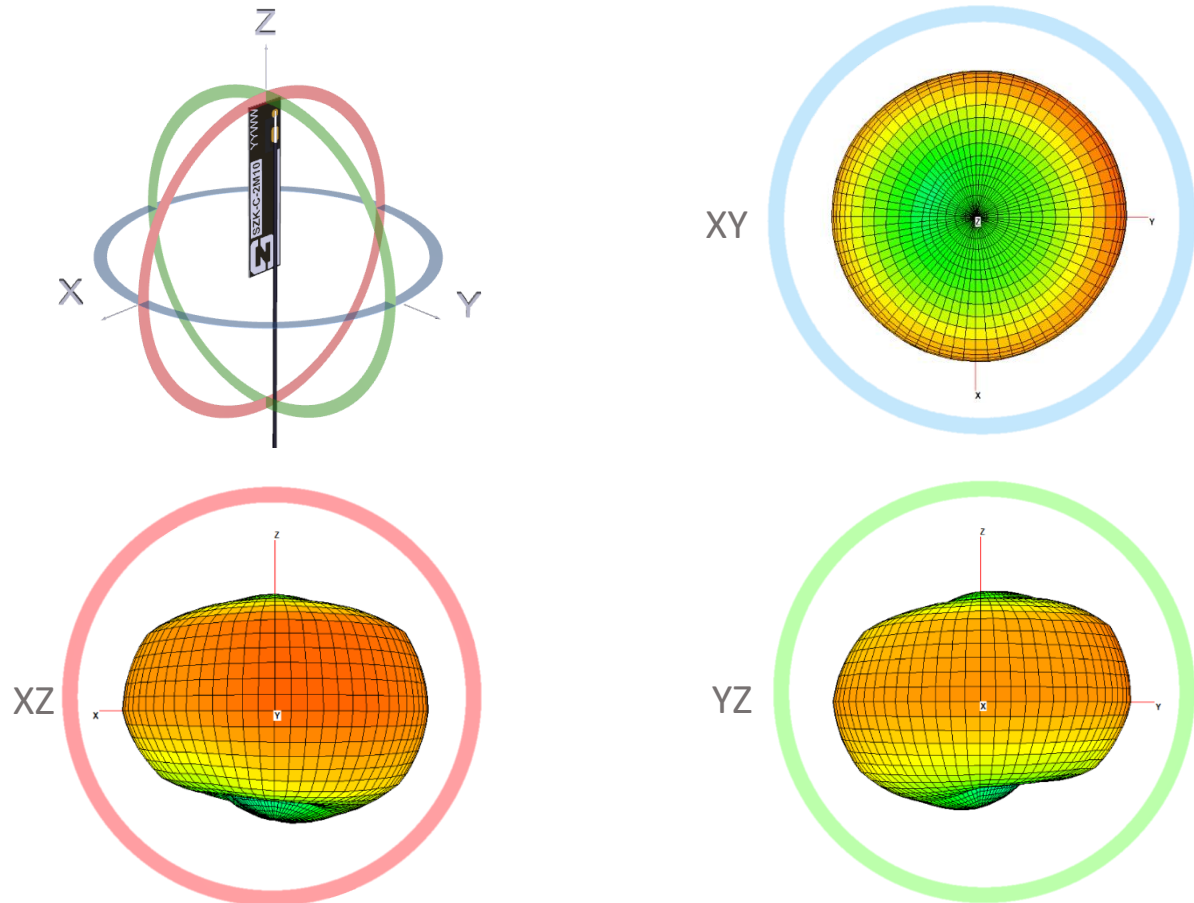




Radiated Performance

3D Radiation Pattern at 915MHz

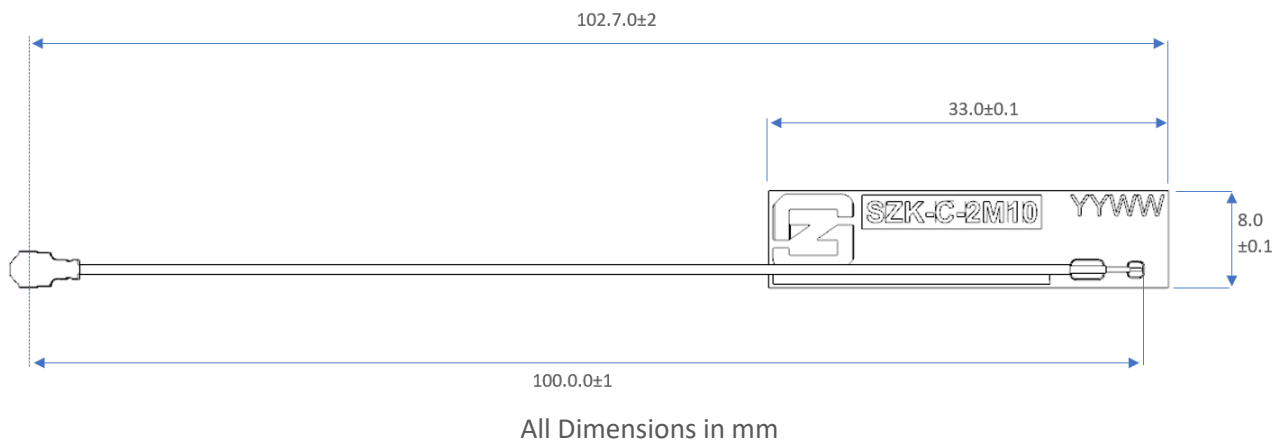
The frequency point shown here is 915MHz.



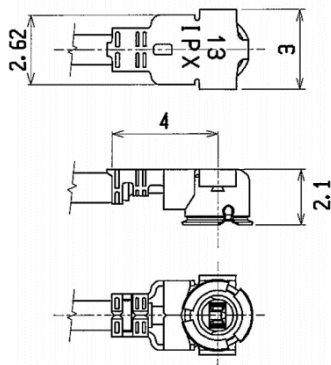


Mechanical

Antenna Mechanical Drawing



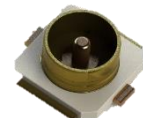
The plug connector on the antenna is an IPEX MHFI.



Suitable PCB mating connector (U.FL) example

Joymax: Model: CT-MPB01X

www.joymax.com.tw



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.



Packaging

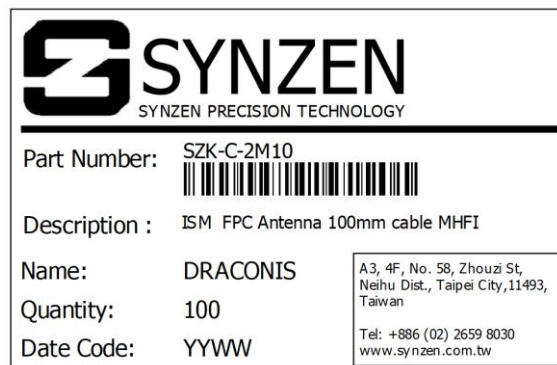
Bag and Packaging Information

Antennas packed in PE bag (20 per bag)

Small bag dimensions: 28.5 x 9.5 (cm)

100pcs per larger PE bag with product label

Bag dimensions = 30 x 19 (cm)



Label

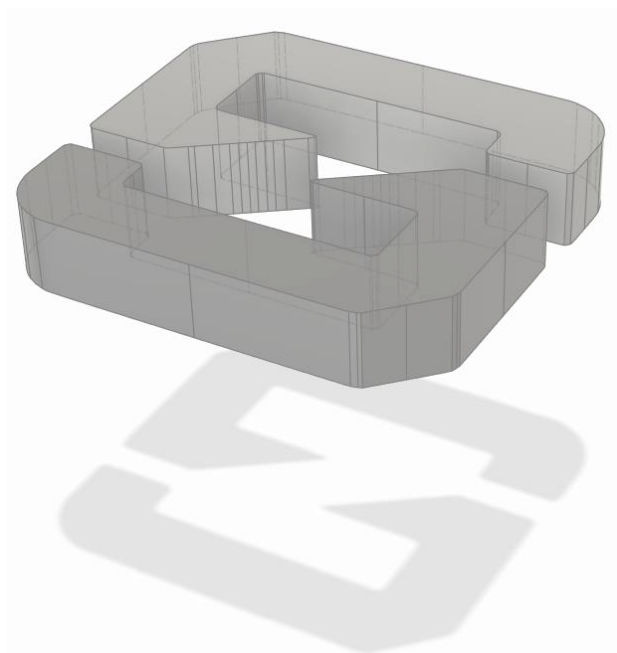
1. 1000pcs per carton
2. Carton dimensions = 33.7 x 32.2 x 10 (cm)



Environmental

Material Regulation

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



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