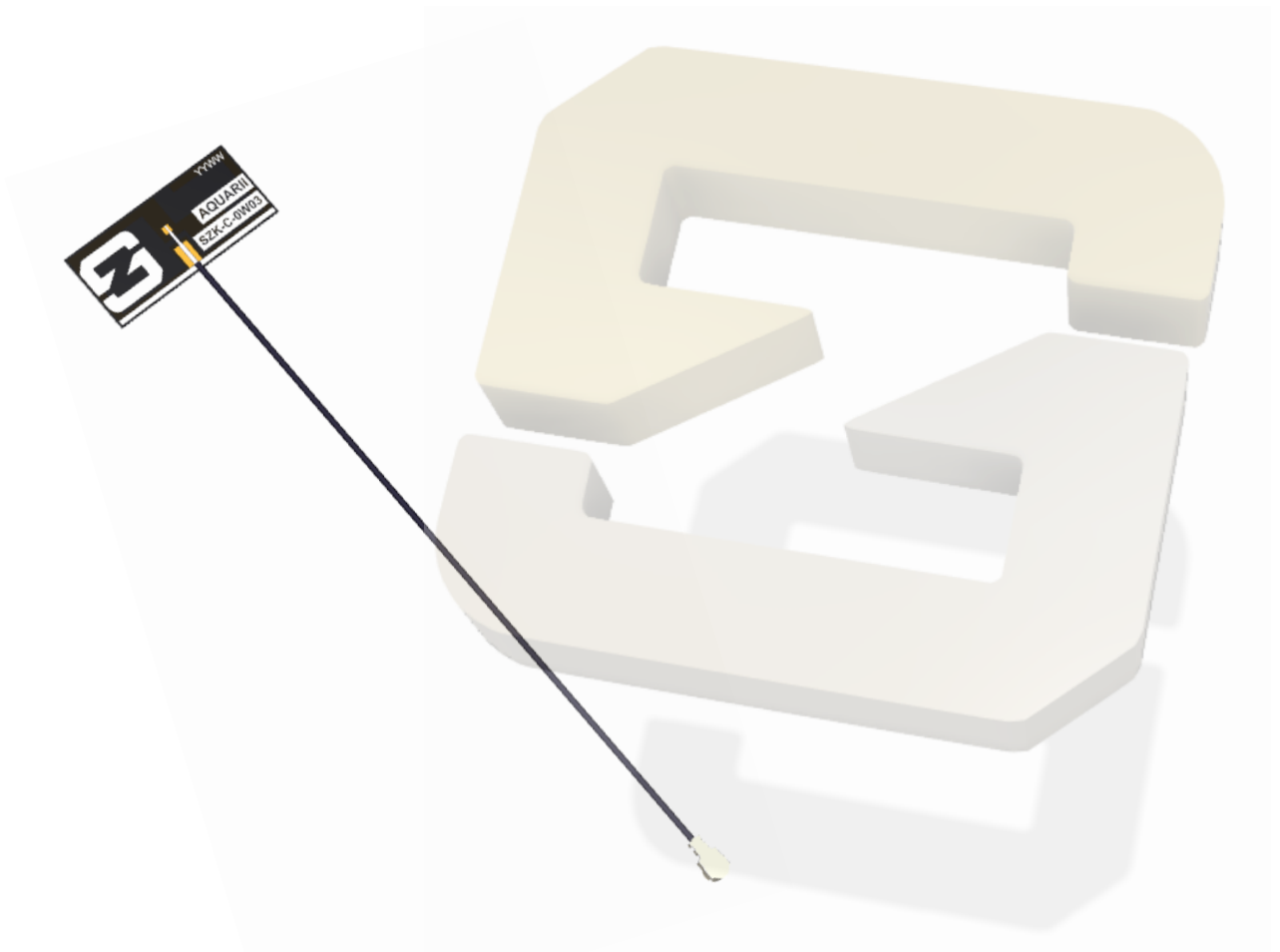




Dual Band WLAN FPC Antenna

SZK-C-0W03

WLAN/BLE: 2400 – 2500; 4900 - 6000 MHz



Name: AQUARII

Part Number: SZK-C-0W03

Description: WLAN (802.11a/b/g/n/ac FPC with cable and connector IPEX MHF (U.FL))

- Flexible PCB Antenna using 3M 468 adhesive
- Dimensions: 25 x 11 x 0.2 (mm)
- Cable: 100mm length, 1.13mm diameter
- RoHS & Reach Compliant



Dual Band WLAN FPC Antenna

SZK-C-0W03

WLAN/BLE: 2400 – 2500; 5150 - 5850 MHz

Description

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

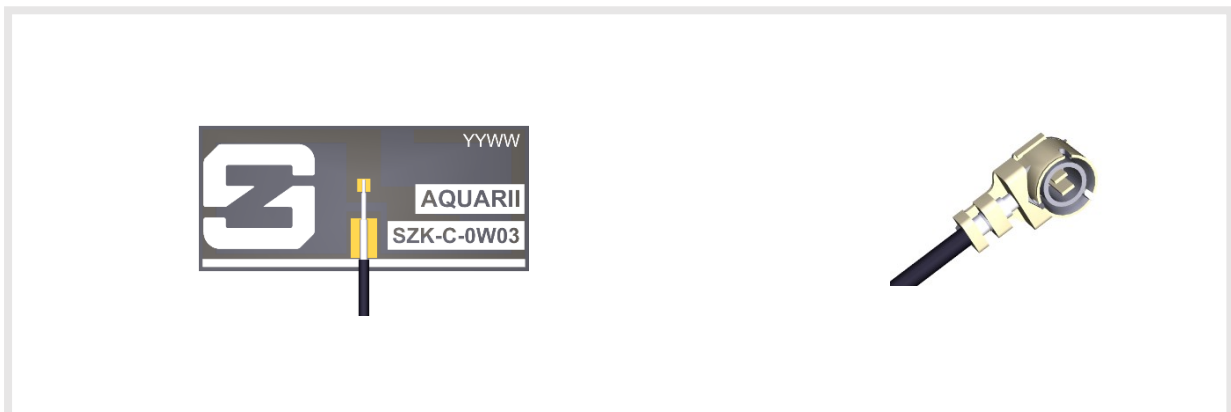
- For WLAN/Bluetooth/ISM Applications 2.4-2.5GHz; 4.9-6.0GHz
- Alternate cable lengths available upon request, contact sales@synzen.com.tw
- Ideal for MIMO systems 2x2, 4x4, 8x8.
- Simple integration, plug and operate the device without designing onboard antenna.
- Can be tuned for various environments and plastic thickness with additional Pi-network, free tuning service available.

Applications

Access Points
Smart Grid

M2M Industrial
Healthcare

Smart Meters
Set Top Box





General Specifications

Mechanical Specifications

Part Number	SZK-C-0W03
Name	AQUARII
Dimensions	25 x 11 x 0.2 (mm)
Weight	<1g
Antenna Type	FPC + Cable
Cable Length	100mm, Black
Cable Type	Mini Coax \varnothing 1.13mm
Connector	MHFI (U.FL Compatible)
Adhesive backing	3M 468

RF Specifications

Frequency Range	2400 – 2500MHz	4900 – 5850MHz
Average Efficiency	>65%	>65%
Peak Gain	1.85dBi	5.50
S11 (max)	<-10.4dB	<-10.3dB
VSWR (max)	1.85:1	1.90:1
Impedance		50 Ω
Polarization		Linear
Max Input Power		3W

Note: All performance stated is measured 2.0mm ABS plastic, RF chokes used to prevent cable radiation.

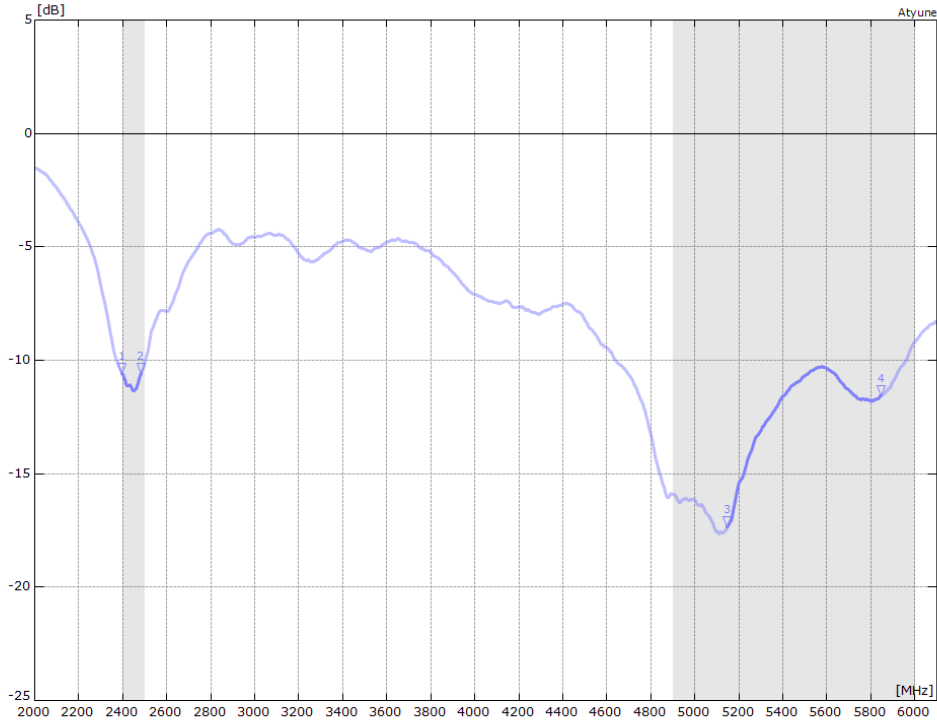
Environmental Specifications

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

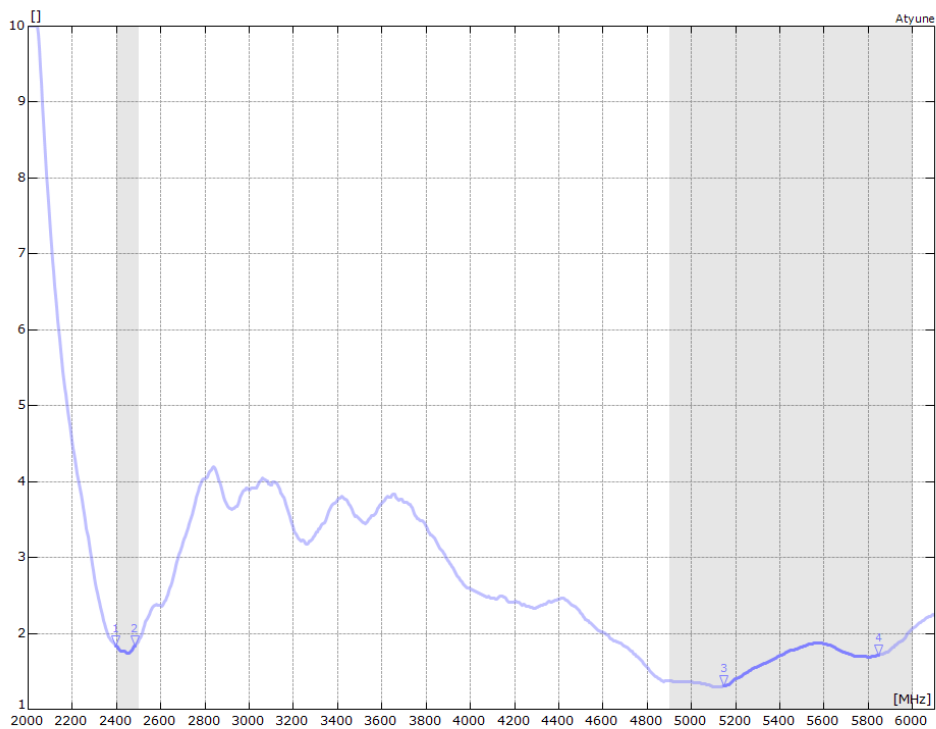


RF Characteristics

S11 Parameter



VSWR

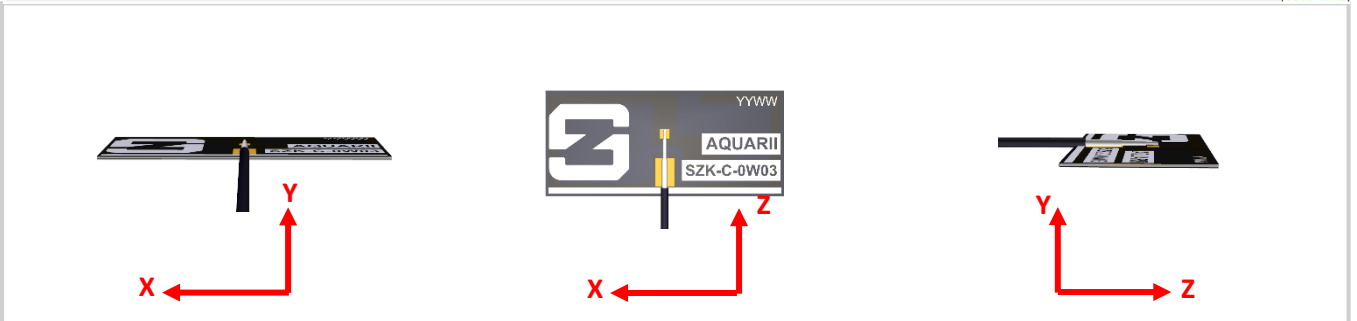
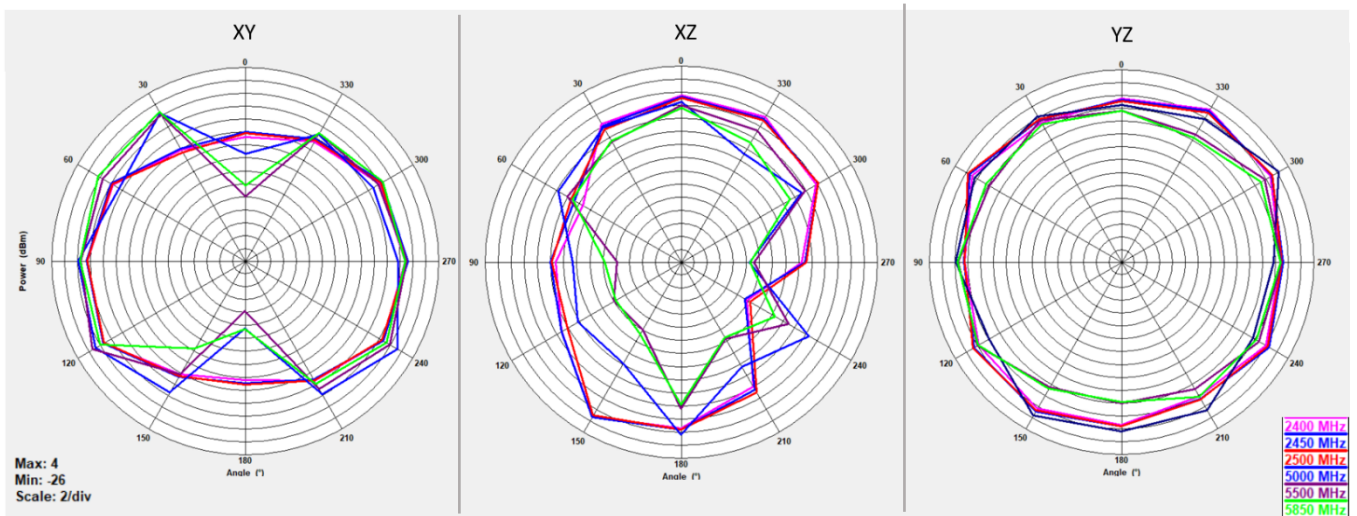




Radiated Performance

2D Polar Plot

The data shown was measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation.

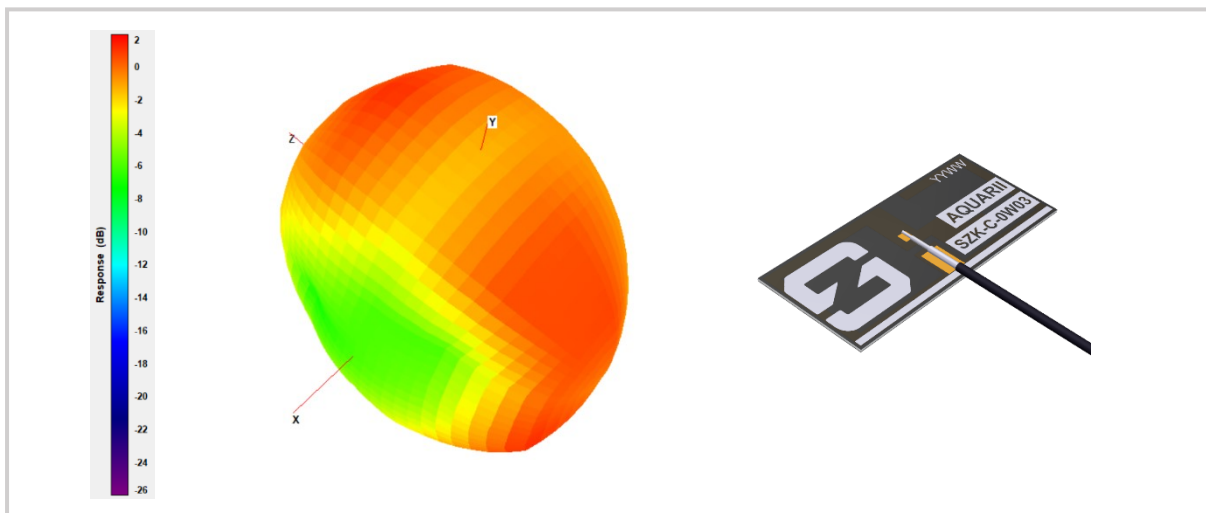
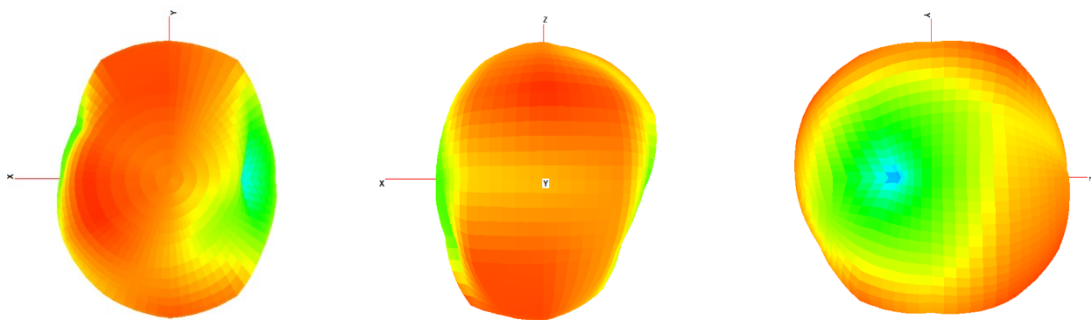
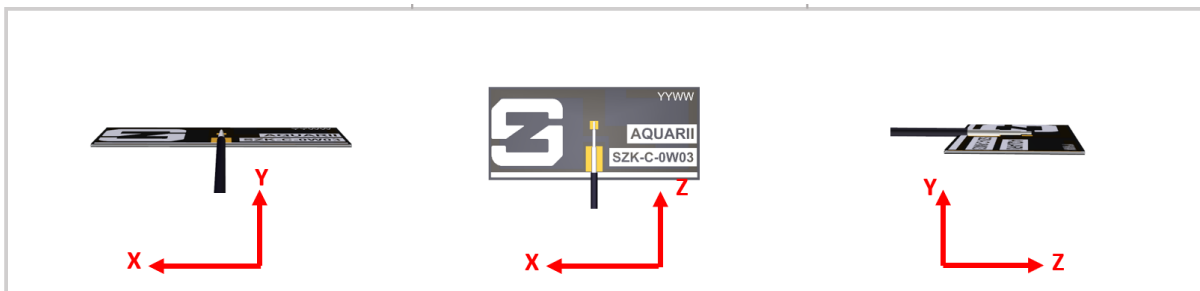




Radiated Performance 2400-2500MHz

3D Radiation Pattern

The data shown was measured on measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation. The frequency point shown here is 2450MHz.

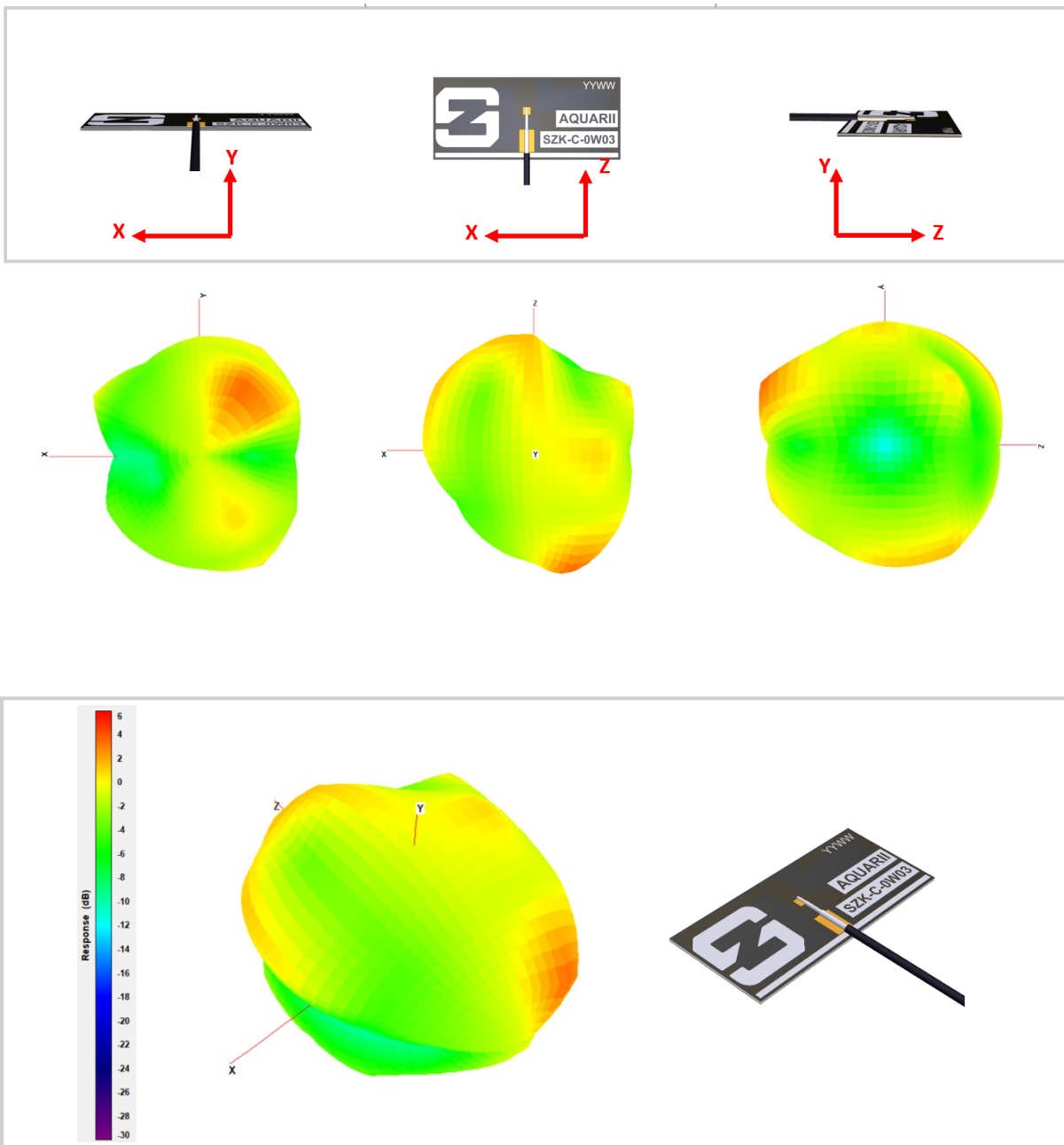




Radiated Performance 4900-6000MHz

3D Radiation Pattern

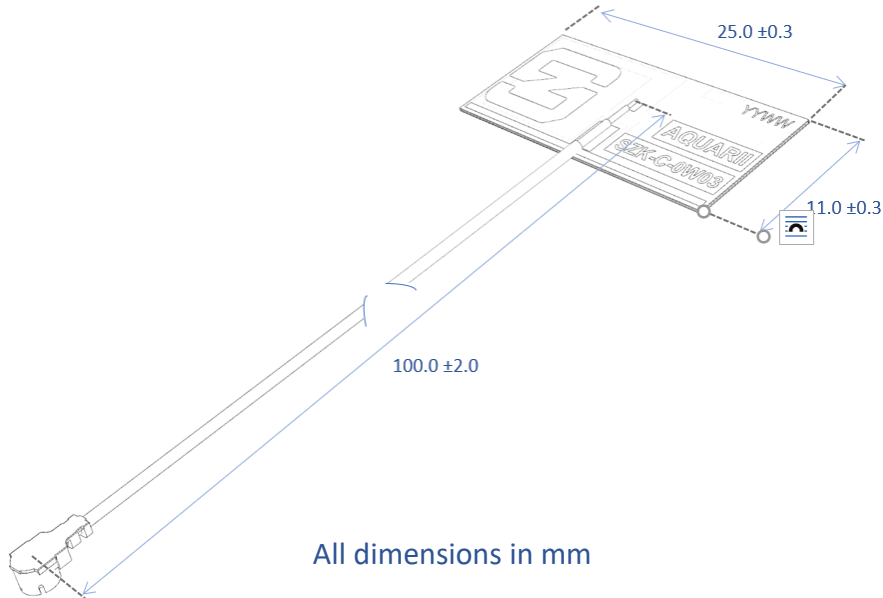
The data shown was measured on measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation. The frequency point shown here is 5500MHz.



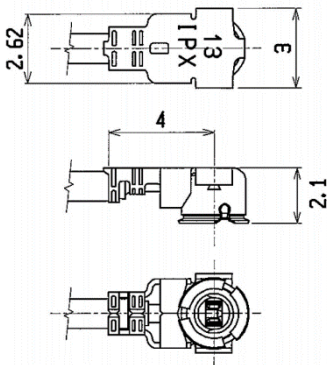


Mechanical

Antenna Mechanical Drawing



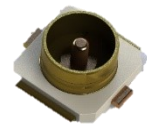
The plug connector on the antenna cable is an IPEX MHFI.



Suitable PCB mating connector (U.FL) example

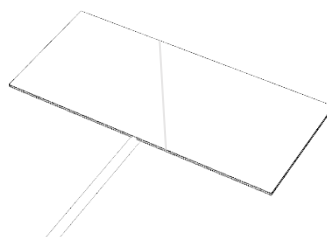
Joymax: Model: CT-MPB01X

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 Individually packed in PE bag (1 antenna per bag)





100pcs per larger PE bag with product label

Bag dimensions = 180 x 100(mm)



Label

	
SYNZEN SYNZEN PRECISION TECHNOLOGY	
Part Number:	SZK-C-0W03
	
Description :	WLAN Dual-Band FPC Antenna
Name:	AQUARII
Quantity:	1000
Date code:	YYWW
<small>A3, 4F, No. 58, Zhouzi St, Neihu Dist., Taipei City, 11493, Taiwan Tel: +886 (02) 2659 8030 www.synzen.com.tw</small>	

- 1000pcs per carton
- Carton dimensions = 33.7 x 32.2 x 10 (cm)



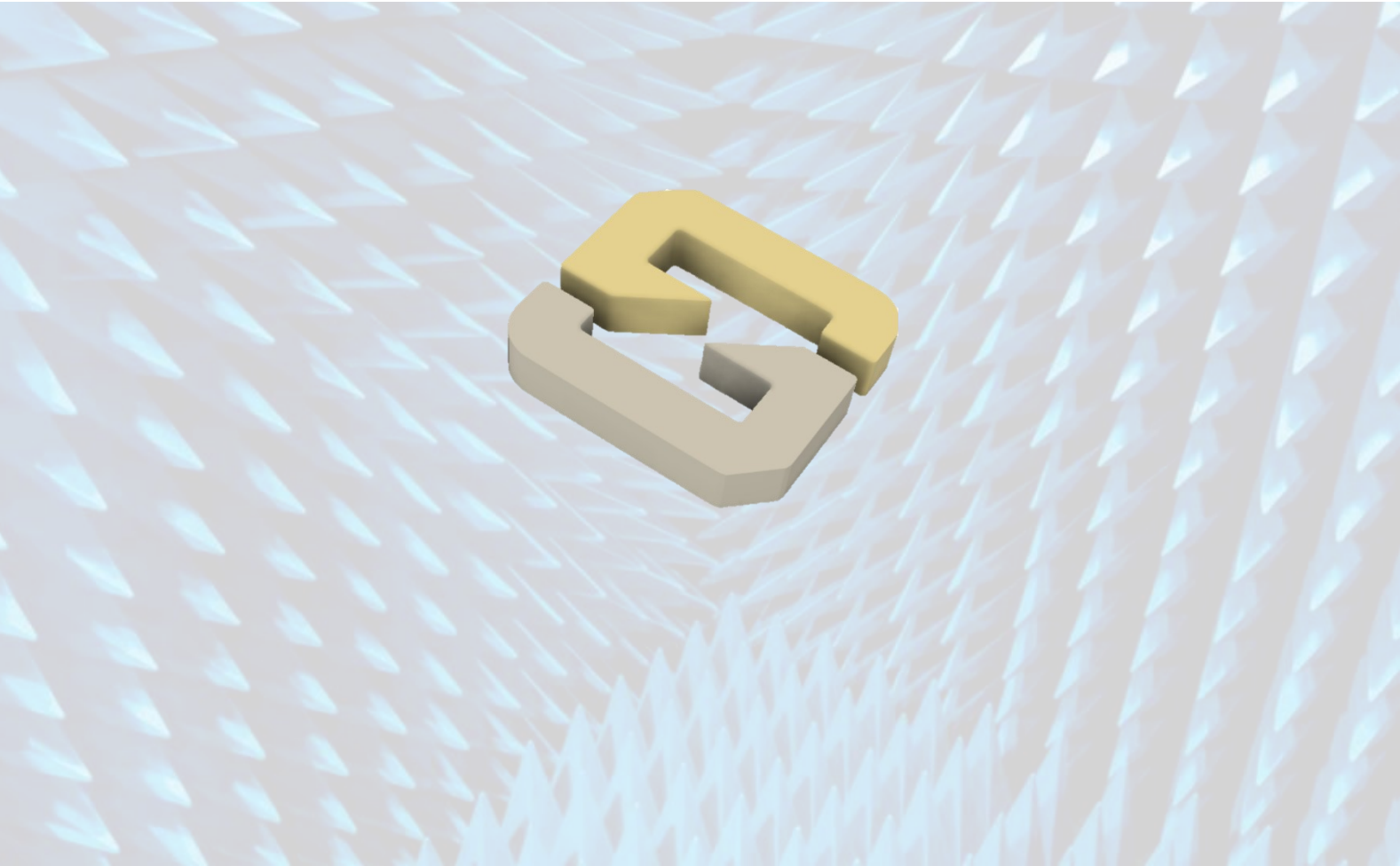
Environmental

Material Regulation

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



Synzen Precision Technology Ltd



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