



ISM / 4G LTE Panel Mount Antenna

SZW-N-2L27

ISM433/868/915/LTE450/4G LTE: 433-480; 863-928; 698-960; 1710-2200; 2300-2400; 2500-2690MHz

Description

OPHELIA, 4GLTE/ISM Wall Mount antenna for global cellular coverage. Suitable for mounting on metallic or non-metallic surfaces.

- Ground plane independent omni-directional radiation patterns.
- UV stabilized Impact resistant material.
- Single hole installation with optional screw fixing.
- Alternate cable lengths and connectors available upon request, contact sales@synzen.com.tw

Applications

Automotive
Industrial

Smart City
Remote Monitoring

Smart home
Remote Sensors





General Specifications

Mechanical Specifications

Part Number	SZW-N-2L27
Name	OPHELIA
Dimensions	130.0 x 45.0 x 27.0 (mm)
Weight	<10g
Antenna Type	Wall Mount with screw fixings
Cable Length	1.5m
Cable type	RG174
Connector	SMA Plug
Color	RAL 7035
Material	Impact Resistance/ UV stabilized Polypropylene Copolymer

*Alternate cable lengths available

RF Specifications

Band	Frequency Range (MHz)	Avg Efficiency (%)	Peak Gain (dBi)	Impedance	Polarization
ISM433/LTE 450 B31,72,73	430-480	>20	-4.50	50Ω	Linear
ISM868/915	863-928	>60	2.73		
5GNR/4G LTE B5,8,12,13,14,17,18,20,26,27,28,29	698-960	>50	3.77		
5GNR/4G LTE B21,32,74,75,76	1427-1518	>50	1.29		
5GNR/4G LTE B1,2,3,4,9,23,35,39,66	1710-2200	>55	1.56		
5GNR/4G LTE B40	2300-2400	>60	3.18		
5GNR/4G LTE B7,38,41	2490-2690	>55	3.43		

Environmental Specifications

Operational Temperature	-40 to +85 (°C)
Storage Temperature	-10 to +40 (°C)



Band List

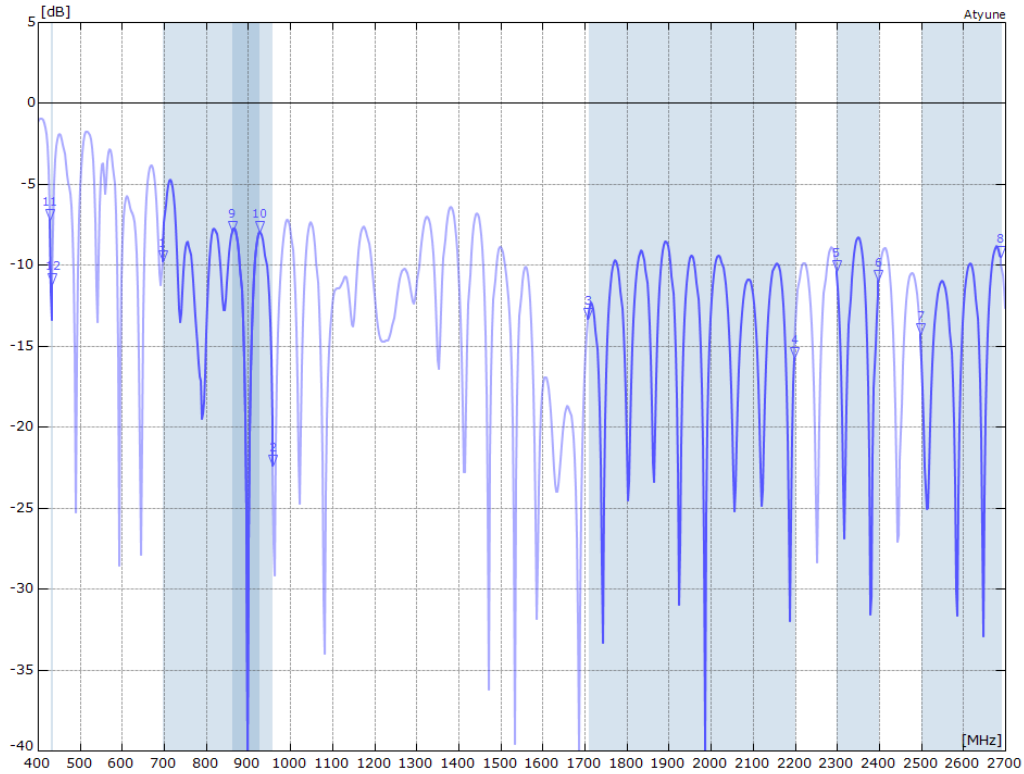
Supported Bands

Band	Frequency Band	Uplink(MHz)	Downlink (MHz)	Supported
1	2100	1920-1980	2110-2170	YES
2	1900	1850-1910	1930-1990	YES
3	1800	1710-1785	1805-1880	YES
4	1700	1710-1755	2110-2155	YES
5	850	824-849	869-894	YES
7	2600	2500-2570	2620-2690	YES
8	900	880-915	925-960	YES
9		1749.9-1784.9	1844.9-1879.9	YES
10	1700	1710-1770	2110-2170	YES
11	1500	1427.9-1447.9	1475.9-1495.9	YES
12	700	699-716	729-746	YES
13	700	777-787	746-756	YES
14	700	788-798	758-768	YES
17	700	704-716	734-746	YES
18	850	815-830	860-875	YES
19	850	830-845	875-890	YES
20	800	832-862	791-821	YES
21	1500	1447.9-1462.9	1495.9-1510.9	YES
22	3500	3410-3490	3510-3590	YES
24	1600	1626.5-1660.5	1525-1559	No
25	1900	1850-1915	1930-1995	YES
26	850	814-849	859-894	YES
27	800	807-824	852-869	YES
28	700	703-748	758-803	YES
29	700	N/A	717-728	YES
30	2300	2305-2315	2350-2360	YES
31		452.5-457.5	462.5-467.5	YES
32	1500	N/A	1452-1496	YES
33	2100	1900-1920		YES
34	2100	2010-2025		YES
35	1900	1850-1910		YES
36	1900	1930-1990		YES
37		1910-1930		YES
38	2600	2570-2620		YES
39	1900	1880-1920		YES
40	2300	2300-2400		YES
41	2500	2496-2690		YES
42	3500	3400-3600		No
43	3700	3600-3800		No
44	700	703-803		YES
45	1500	1447-1467		YES
46	5200	5150-5925		No
47	5900	5855-5925		No
48	3600	3550-3700		No
50	1500	1430-1517		YES
51	1500	1427-1432		YES
65	2100	1920-2010	2110-2200	YES
66	1700	1710-1780	2110-2200	YES
67	700	N/A	738-758	YES
68	700	698-728	753-783	YES
69	2600	N/A	2570-2620	YES
70	2000	1695-1710	1995-2020	YES
71		663-698	617-652	YES
72		451 - 456	461 - 466	YES
73		450 - 455	460 - 465	YES
74		1427-1518		YES
77		3300-4200		No
78		3300-3800		No
79		4400-5000		No
85		698-716	728-746	YES

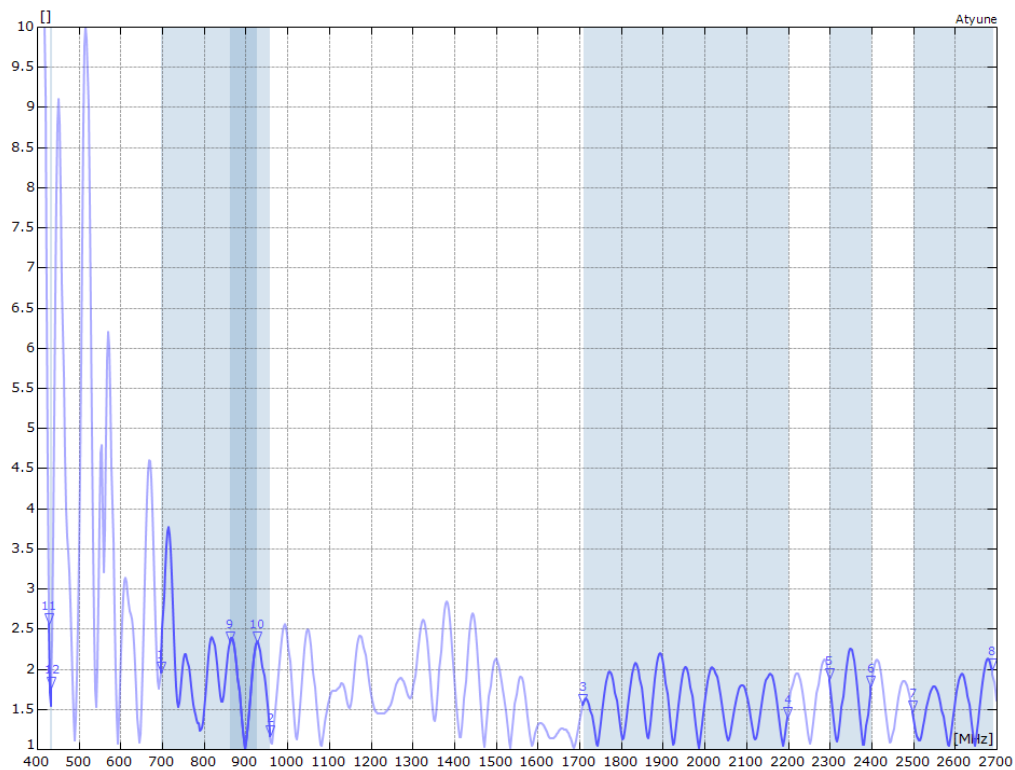


RF Characteristics

S11 Parameter



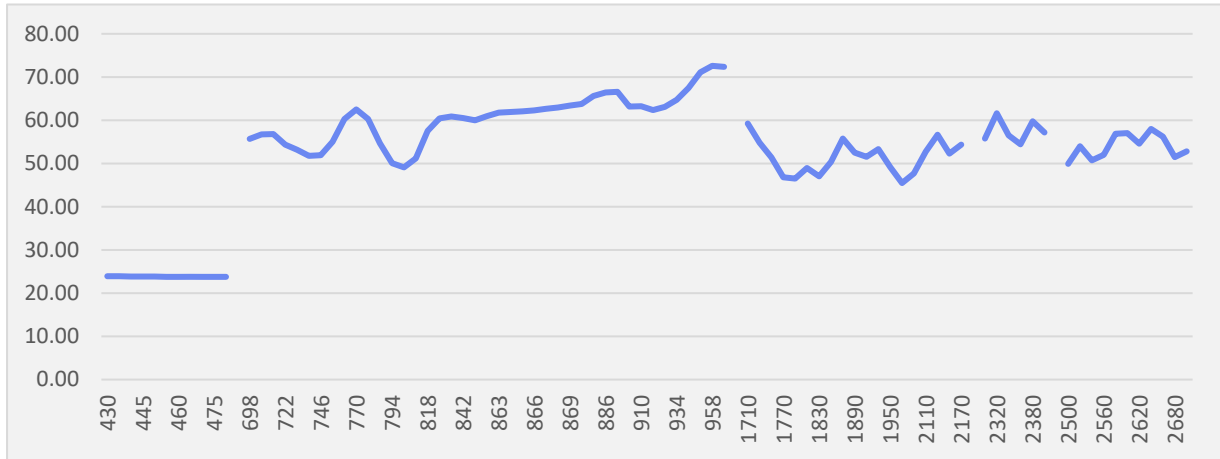
VSWR



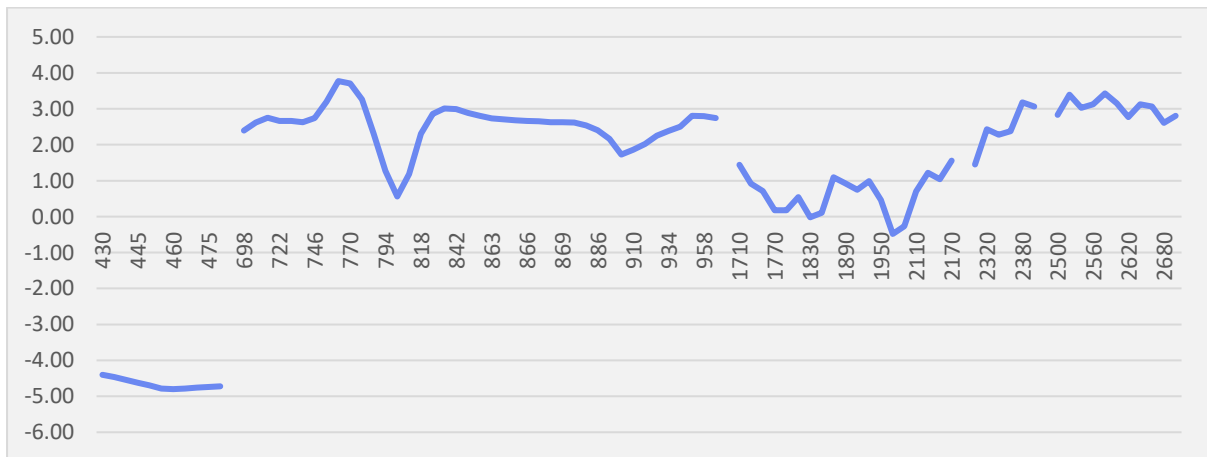


Antenna Performance

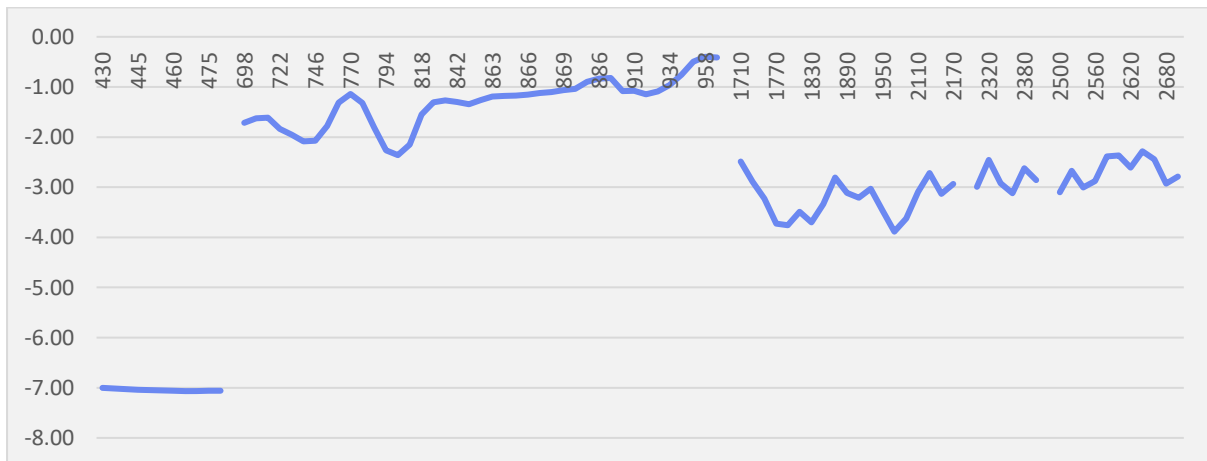
Efficiency



Peak Gain



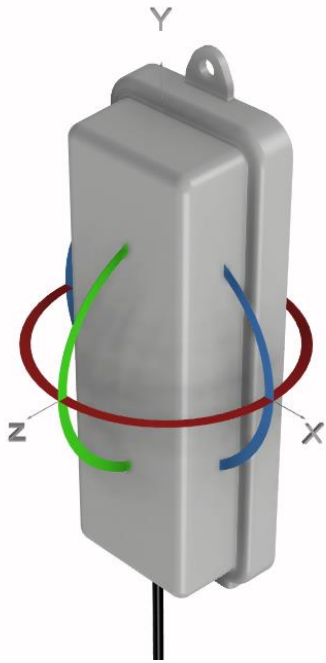
Average Gain



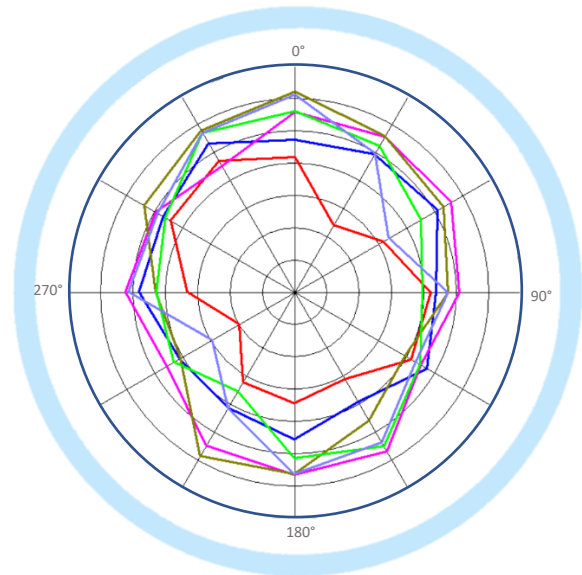


Radiated Performance

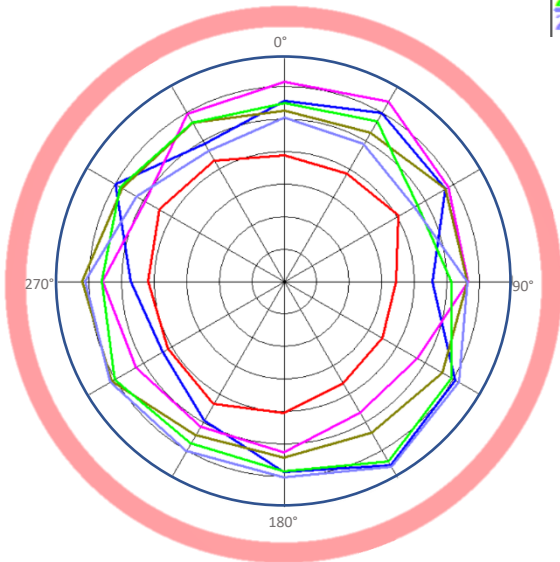
2D Polar Plot 698-2690MHz



XY

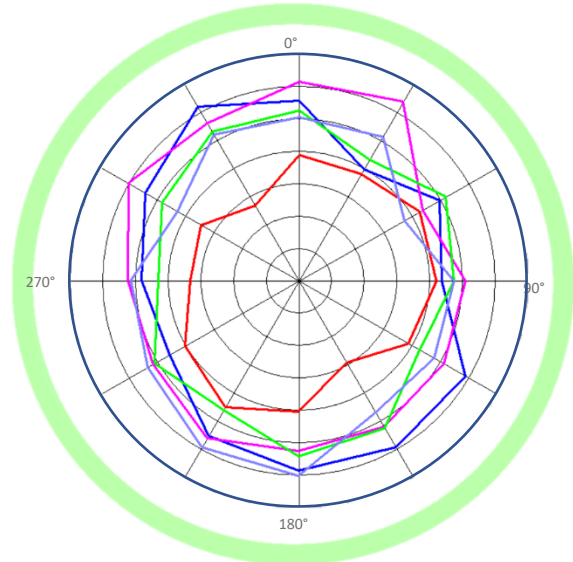


XZ



433	Max: 5
714	Min: -30
870	Scale: 5/div
1870	
2360	
2600	

YZ

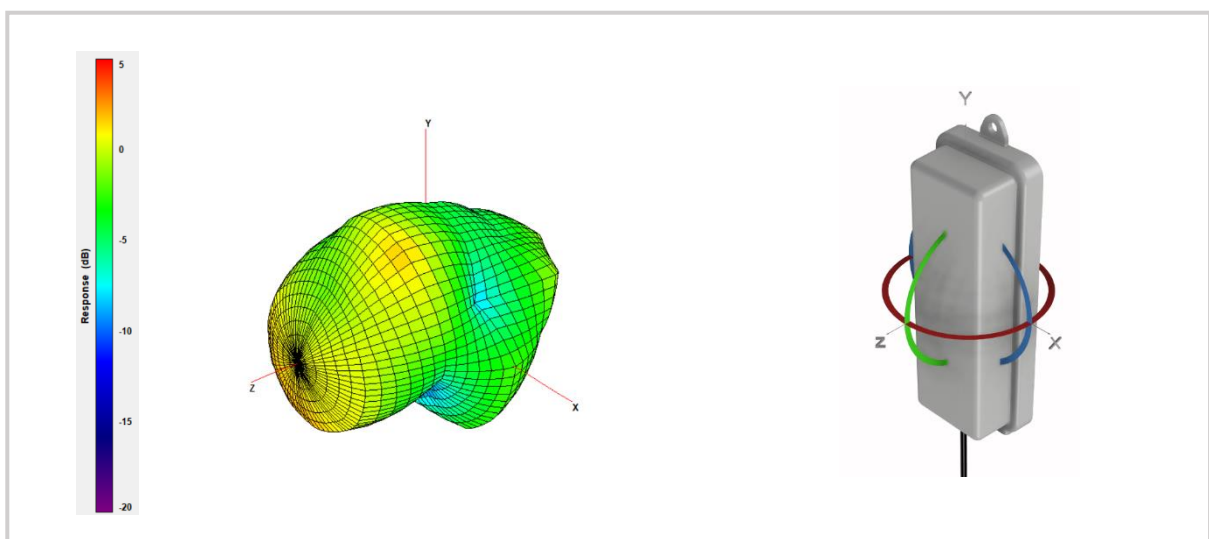
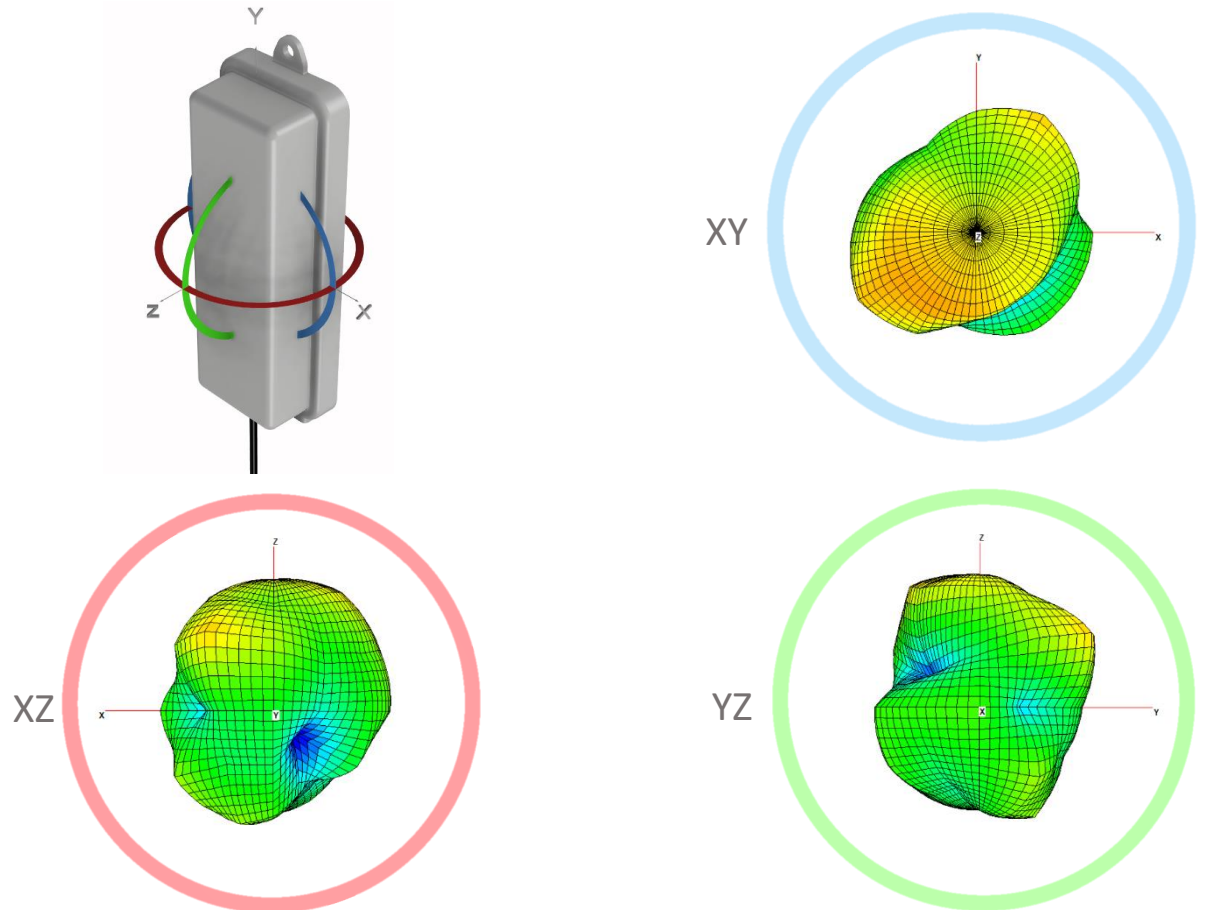




Radiated Performance

3D Radiation Pattern at 880MHz

The frequency point shown here is 880MHz.

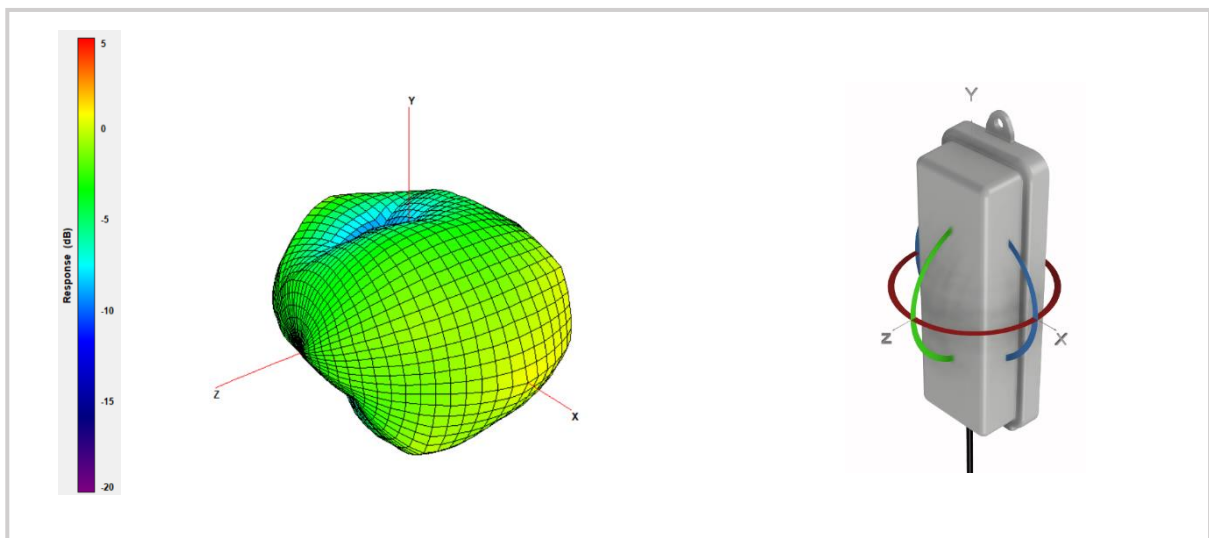
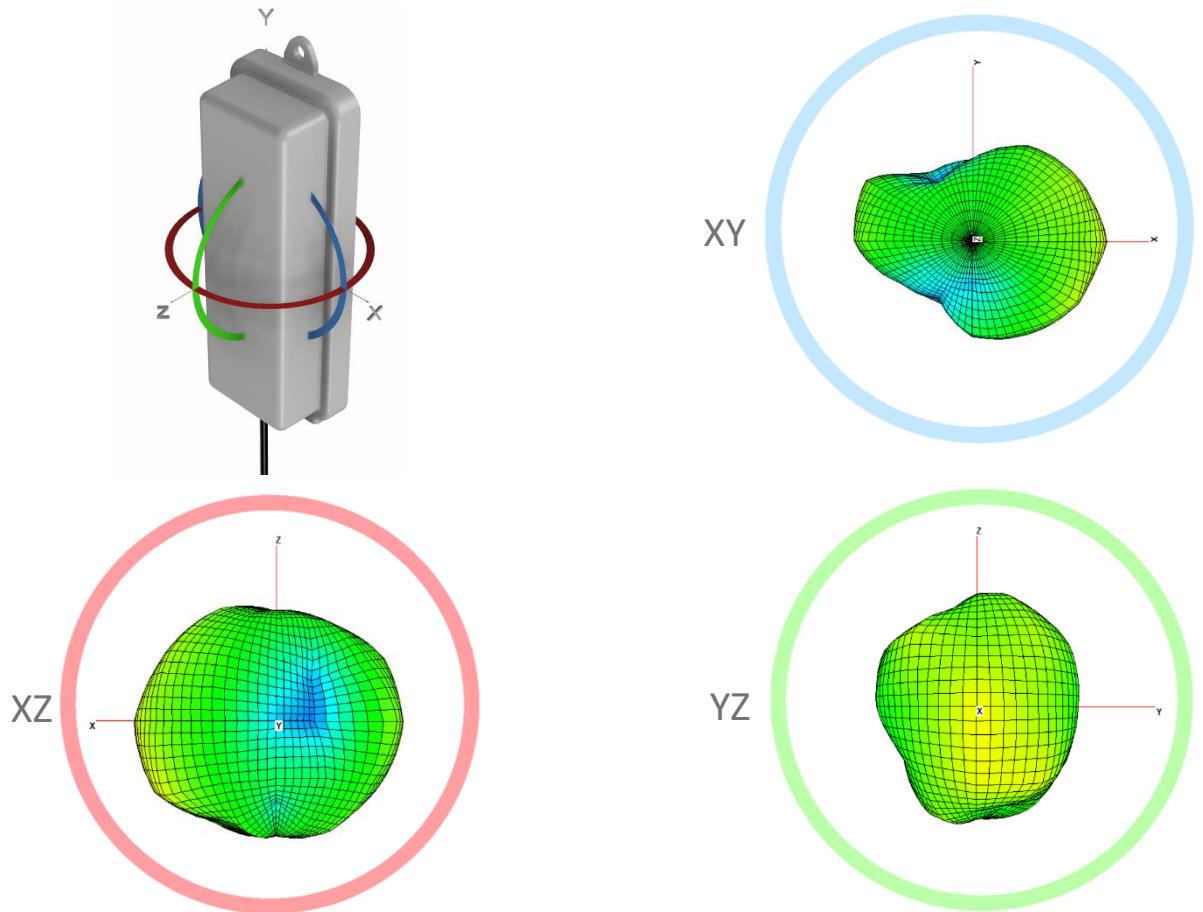




Radiated Performance

3D Radiation Pattern at 1880MHz

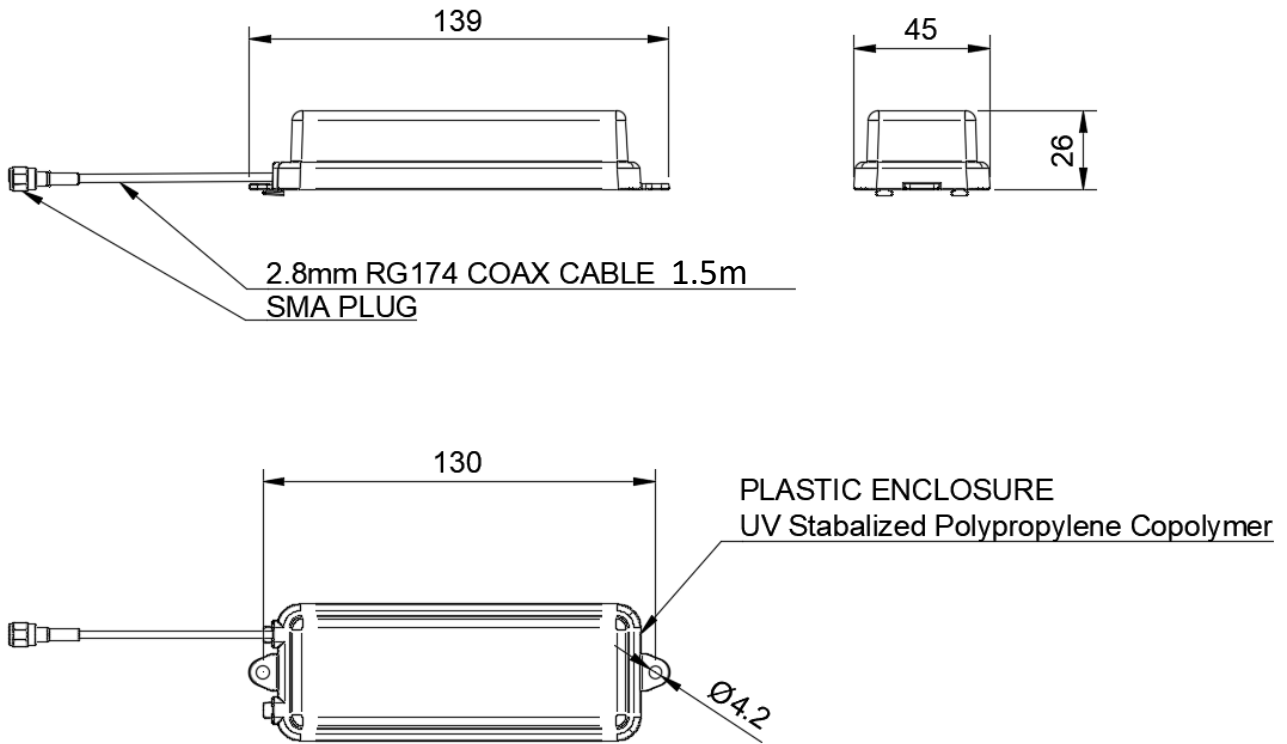
The frequency point shown here is 1880MHz.





Mechanical

Antenna Mechanical Drawing



ALL DIMENSIONS IN MM



Packaging

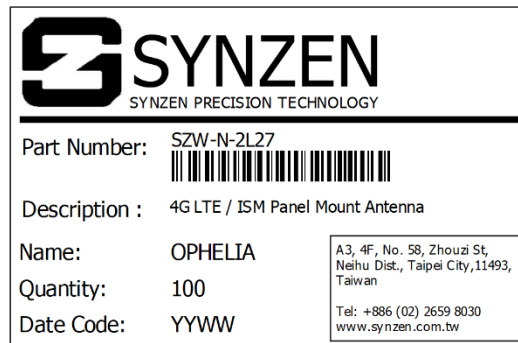
Bag and Packaging Information

Antennas packed in PE bag (1 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

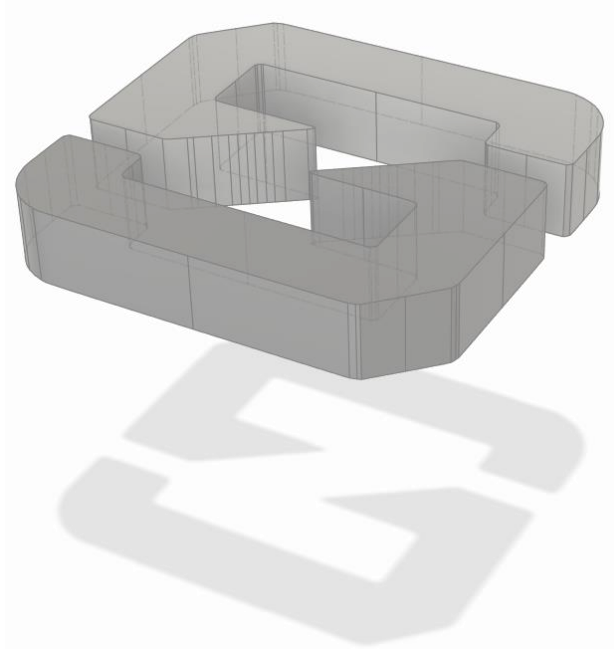
1. 100pcs per carton



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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