ST0428-40-001-B

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Datasheet

0.69-0.96GHz & 1.7-5.9GHz

External / In-building

Features:

High performing full Sub-6 band antenna with SMA connector for indoor applications.



- CPE Router, Set-top boxes, Gateway
- IoT devices
- Sub-6 Mesh
- Smart Metering
- Robotics







Electrical Specifications									
Antenna Characteristics									
Antenna Type	Radiation Pattern		Polarization	Max. Inp	ut Power	Impedance			
Stick Antenna	Omni		Linear	1	W	50Ω			
Frequency (GHz)		0.698~0.96	1.71~2.17	2.3~2.69	3.3~5	5.15~5.925			
Return Loss (dB)		< -6	< -6	< -6	< -6	<-6			
Peak Gain (dBi)		4.1	3.8	2.9	4.6	4.8			
Average Gain (dB)		-2.7	-1.4	-1.1	-1.5	-1.7			
Efficiency (%)		54	73	77	70	68			

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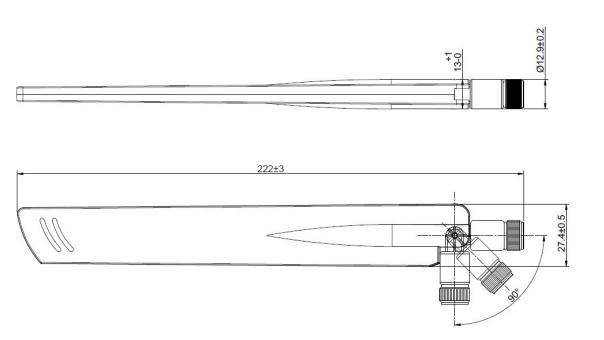
IV	Mechanical Specifications				
	Mechanical				
	222.0				

Dimension (mm)	222.0
Connector Type	SMA (Plug)
Material	ABS
Weight (g)	34.1

Environmental					
Temperature Range (°C)	-30 to 75				
Humidity	Non-condensing 65°C 95% RH				
RoHS Compliant					

Mechanical Drawing

Unit: mm



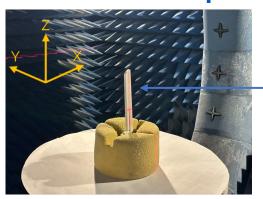
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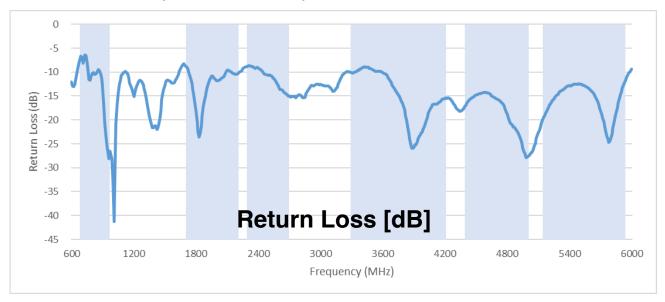
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Charts In Free Space

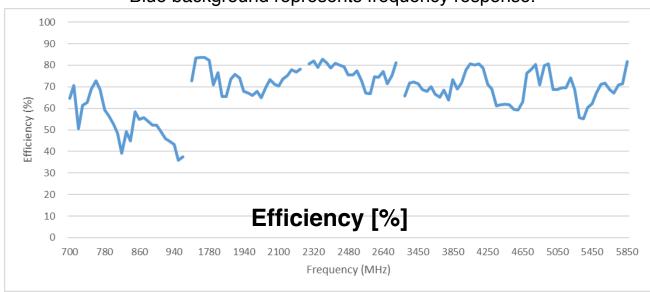


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Test setup, measurement performed in 3D anechoic chamber.



Blue background represents frequency response.

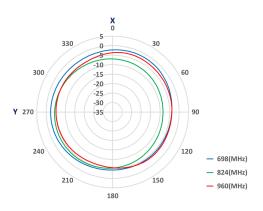


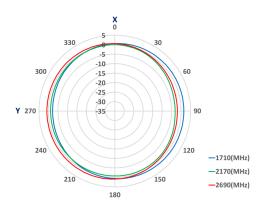
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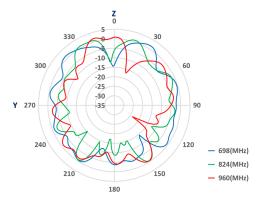
Radiation Pattern - Free Space

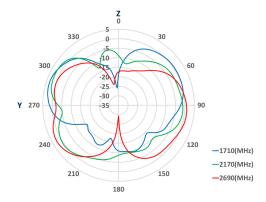
XY - Plane



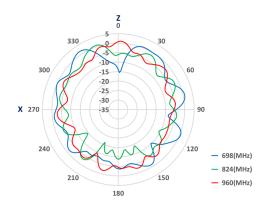


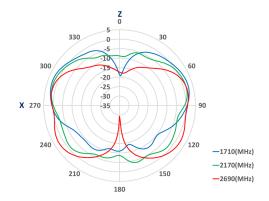
YZ - Plane





XZ - Plane



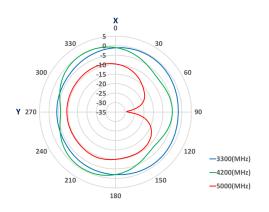


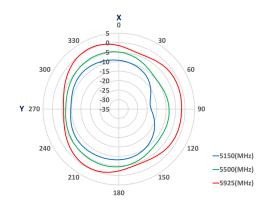
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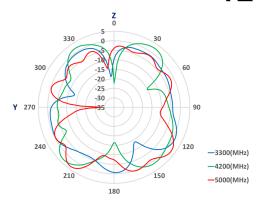
Radiation Pattern - Free Space

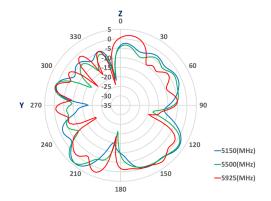
XY - Plane



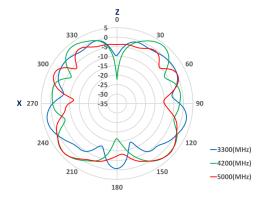


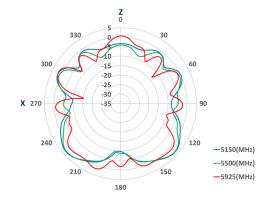
YZ - Plane





XZ - Plane





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Revisions						
Rev.	Description	Date	ECN	Approval		
Α	Initial Release	2023-02-20	ST0428-40-001-B-RA00	ATC		

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