ST0227-41-501-A

Amphenol

Datasheet

2.4-2.5GHz & 5.15-5.85GHz

External / In-building



Bar Antenna

Features:

High performing Wi-Fi dual-band antenna with RP-SMA connector, RG-174 cable for indoor applications.

Applications:

- CPE Router, Set-top boxes, Gateway
- IoT devices
- Wi-Fi Mesh
- Smart Metering
- Robotics



Electrical Specifications								
Antenna Characteristics								
Antenna Type	Radiation I	Pattern	Polarization	Max. Input Power		Impedance		
Bar Antenna	Omn	i	Linear	2W		50Ω		
Frequency (GHz)		2.4~2.5		5.15~5.825				
Return Loss (dB)		<-10		<-10				
Peak Gain (dBi)		3.0		2.0				
Average Gain (dB)		-2.4		-5.2				
Efficiency (%)		57		30				



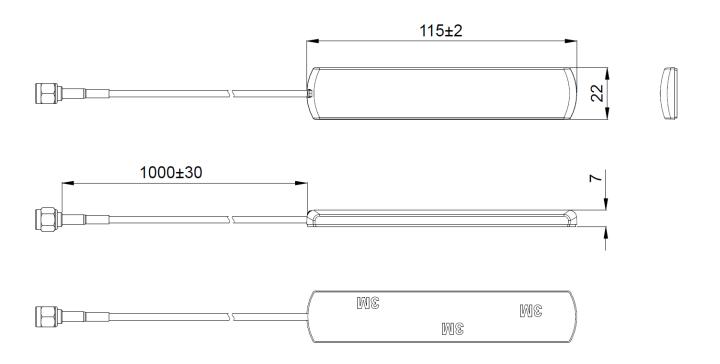
Mechanical Specifications

Environmental					
Temperature Range (°C)	-40 to 65				
RoHS Compliant					

Part Number	Length (mm)	Weight (g)	Connector Type	Cable Type	Radome
ST0227-41-501-A	115.0	25.2	RP-SMA (Plug)	RG-174	ABS

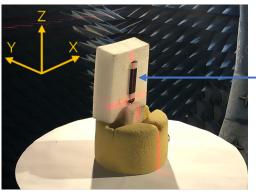
Mechanical Drawing

Unit: mm



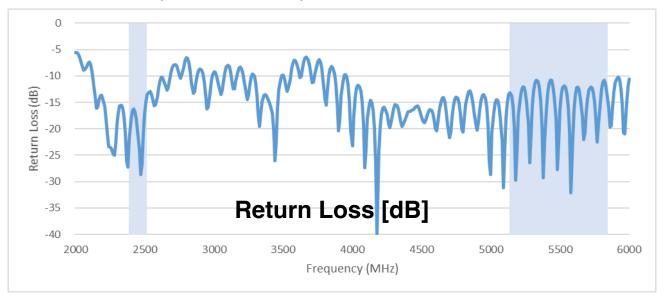
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Charts In Free Space

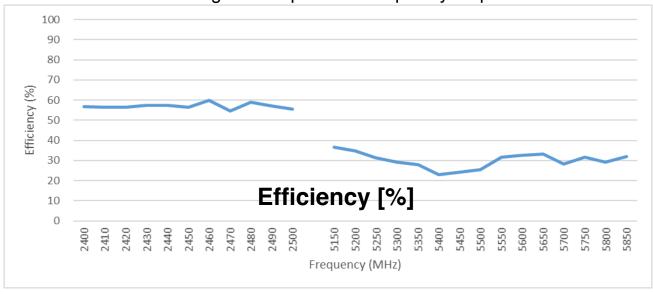


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Test setup, measurement performed in 3D anechoic chamber.

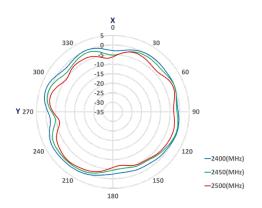


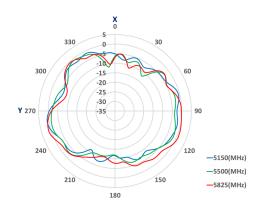
Blue background represents frequency response.



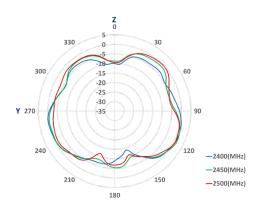
Radiation Pattern - Free Space

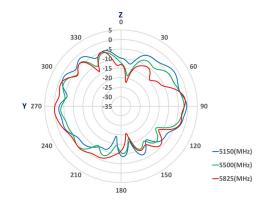
XY - Plane



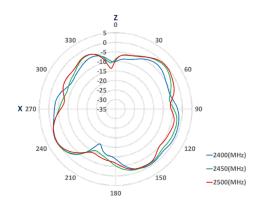


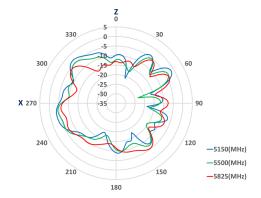
YZ - Plane





XZ - Plane







Revisions						
Rev.	Description	Date	ECN	Approval		
Α	Initial Release	2022-12-06	ST0227-41-501-A-RA00	ATC		

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