MT540A-12-001-C

Amphenol

Datasheet

2.4-2.5GHz & 5.15-5.85GHz

Internal Antenna



 $30 \times 10 \times 1.27 \text{ mm}$

FPC Antenna

Features:

- Adhesive backing on the FPC simplifies mounting within the device
- Global frequency coverage
- FPC antenna assembly

Applications:

- Smart metering and utilities
- Industrial IoT
- Quick service restaurants
- Medical devices



Electrical Specifications Antenna Characteristics Radiation Pattern Polarization Max. Input Power **Impedance** Antenna Type **FPC** Antenna Omni **1W** 50Ω Linear 5.15~5.825 2.4~2.5 Frequency (GHz) < -10 Return Loss (dB) < -10 1.9 2.2 Peak Gain (dBi) -1.1 Average Gain (dB) -1.5 Efficiency (%) 71 77



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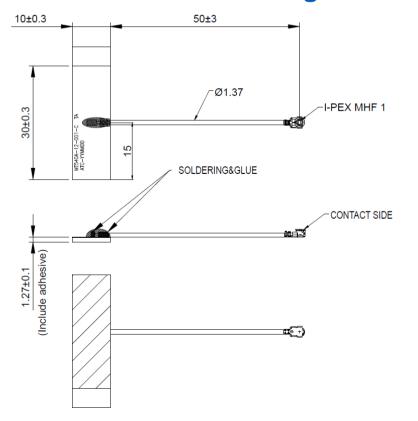
Mechanical Opecinications				
Mechanical Mechanical				
Dimension (mm)	30.0 × 10.0 × 1.27			
Connector Type	I-PEX MHF 1			
Cable Type	Coaxial Cable Ø 1.37			

Machanical Specifications

Adnesive.	Foam
Material	FPCB
Weight (g)	0.65

Environmental			
Temperature Range (°C)	-40 to 85		
Humidity	Non-condensing 65°C 95% RH		
RoHS Compliant			

Mechanical Drawing

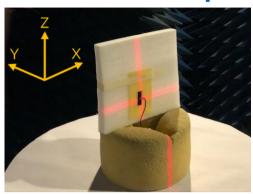


Unit: mm

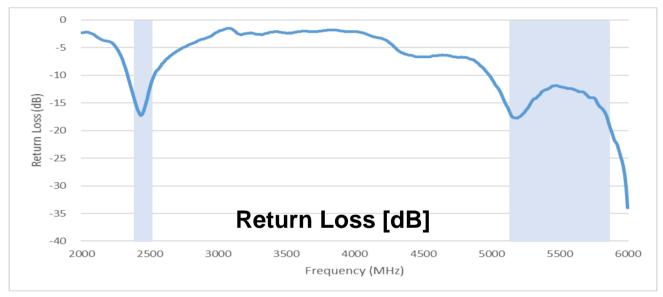
Wi-Fi MT540A-12-001-C

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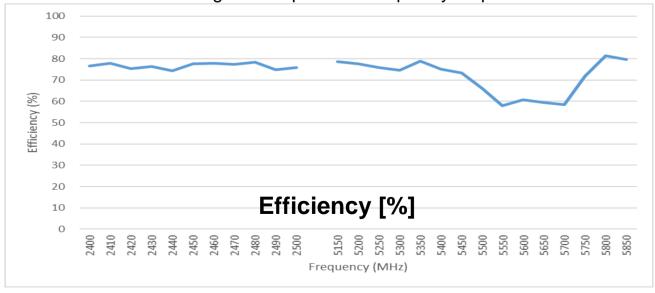
Charts In Free Space



Test setup, measurement performed in 3D anechoic chamber.



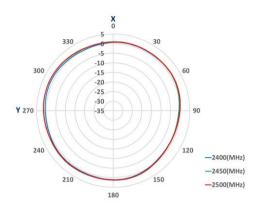
Blue background represents frequency response.

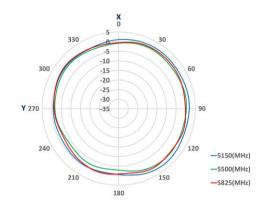


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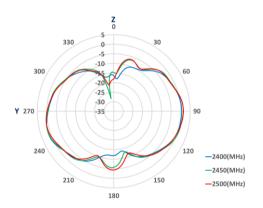
Radiation Pattern - Free Space

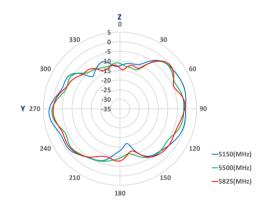
XY - Plane



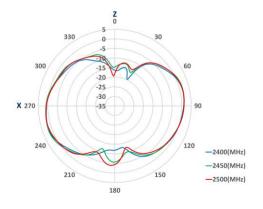


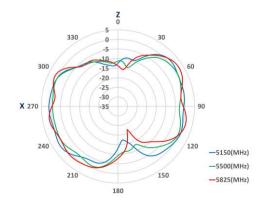
YZ - Plane





XZ - Plane





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Revisions					
Rev.	Description	Date	ECN	Approval	
А	Initial Release	2025-04-09	MT540A-12-001-C-RA00	ATC	

Vender				
MFG.	Address			
安諾電子股份有限公司 (Amphenol Taiwan Corporation)	330桃園市桃園區中山路956巷71號 No. 71, Ln. 956, Zhongshan Rd., Taoyuan Dist., Taoyuan City 330052, Taiwan (R.O.C.)			

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