



# Meraki

## MG21 Internal Antenna Datasheet

The internal antenna on the MG21 are enclosed inside for a sleek look while maintaining excellent performance. When in use the internal antenna has a bias towards the front face. The dipole shape of coverage the antennas generally excel at allowing users to place the MG in areas where a directional patch antenna cannot be mounted. A benefit of the internal antenna is the smaller footprint where it will be mounted.



## Specifications

Category	Specifications
Electrical	<b>Antenna Type</b> Planar Inverted F Antenna (PIFA)
	<b>Main Antenna</b>
	<b>Frequency Range</b> <ul style="list-style-type: none"><li>• 829 (698 - 960) MHz</li><li>• 1940 (1710 - 2170) MHz</li><li>• 2495 (2300 - 2690) MHz</li></ul>
	<b>Peak Gain (per range)</b>

	<ul style="list-style-type: none"> <li>• 829 @ 2.9dBi</li> <li>• 1940 @ 4.8dBi</li> <li>• 2495 @ 3.8dBi</li> </ul> <p><b>Polarization</b></p> <p>Linear, vertical</p>
	<p><b>Auxiliary Antenna</b></p> <p><b>Frequency Range</b></p> <ul style="list-style-type: none"> <li>• 829 (698 - 960) MHz</li> <li>• 1940 (1710 - 2170) MHz</li> <li>• 2495 (2300 - 2690) MHz</li> </ul> <p><b>Peak Gain (per range)</b></p> <ul style="list-style-type: none"> <li>• 829 @ 2.7dBi</li> <li>• 1940 @ 3.8dBi</li> <li>• 2495 @ 3.3dBi</li> </ul> <p><b>Polarization</b></p> <p>Linear, vertical</p>
<b>Physical and Environmental</b>	<p><b>MG21 Dimensions</b></p> <p>160.45 x 160.45 x 34.45mm</p> <p><b>MG21 Operating Temperature</b></p> <p>-20°C to 50°C (-4°F to 122°F)</p> <p><b>Material of Radiator</b></p> <p>Sheet metal</p>
<b>Regulatory</b>	Certified for use in the MG21

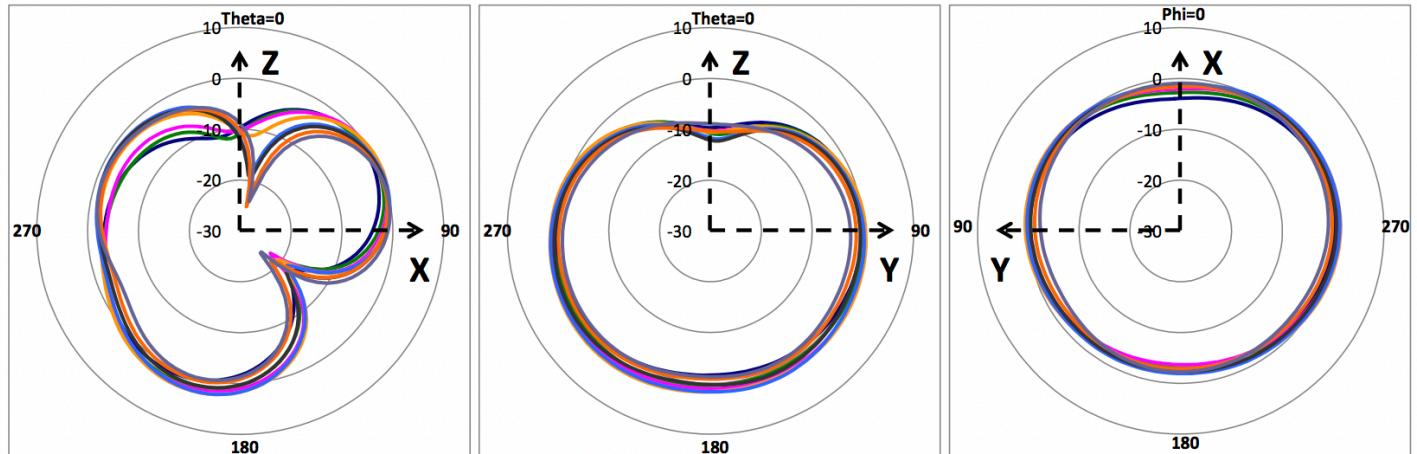
## Radiation Patterns

### Main Antenna

## 829 (698 - 960) MHz

### Main Radiation Pattern

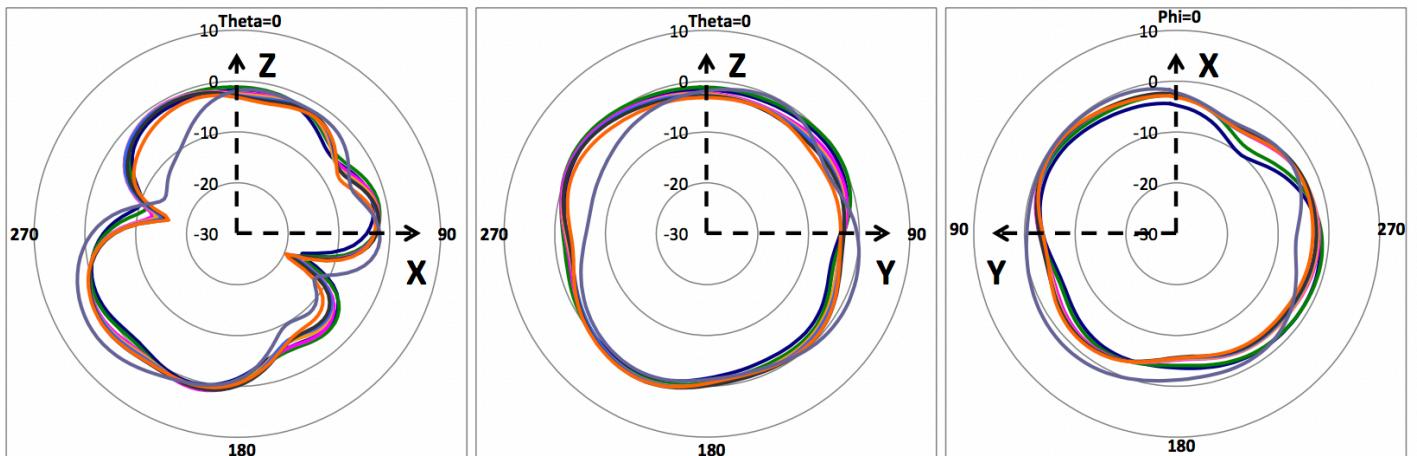
— 704MHz      — 836MHz  
 — 734MHz      — 867MHz  
 — 763MHz      — 897MHz  
 — 806MHz      — 955MHz



## 1940 (1710 - 2170) MHz

### Main Radiation Pattern

— 1715MHz      — 1900MHz  
 — 1747MHz      — 1925MHz  
 — 1842MHz      — 1975MHz  
 — 1875MHz      — 2165MHz

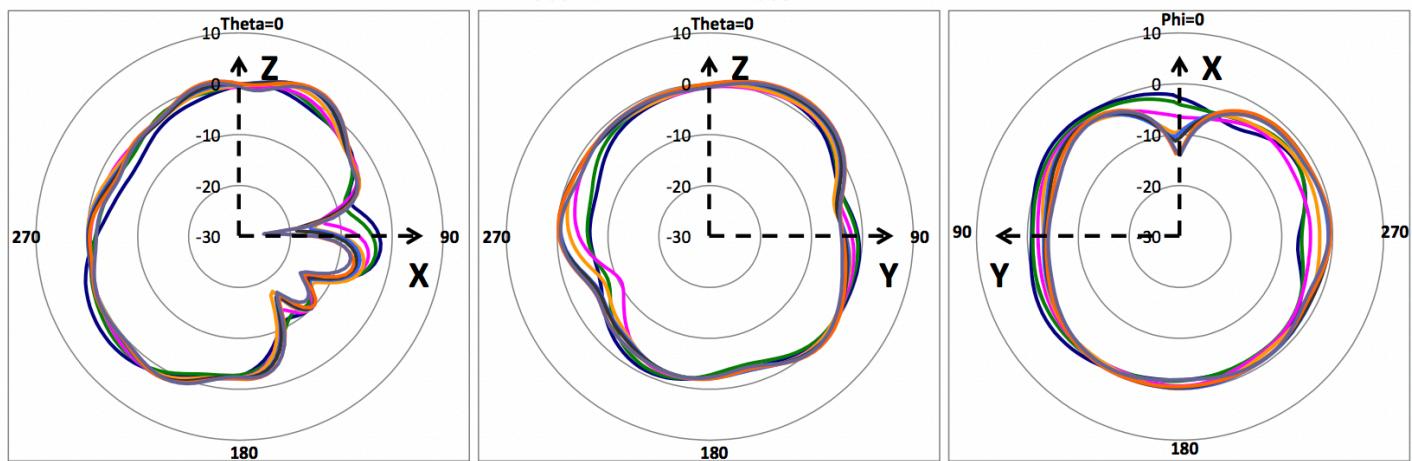




2495 (2300 - 2690) MHz

### Main Radiation Pattern

- |         |         |
|---------|---------|
| 2310MHz | 2593MHz |
| 2390MHz | 2610MHz |
| 2506MHz | 2655MHz |
| 2565MHz | 2685MHz |

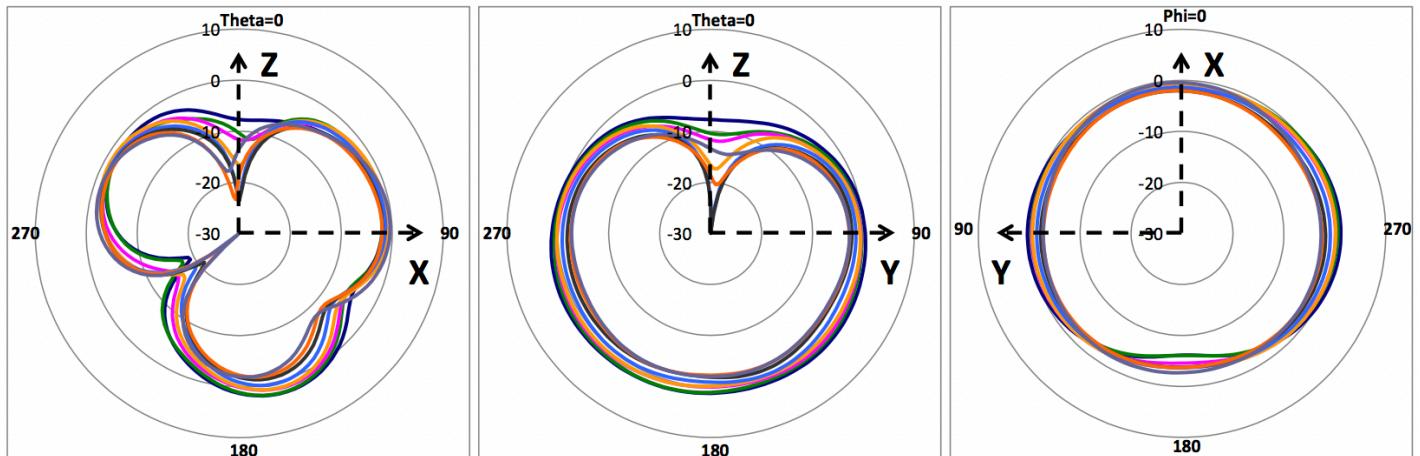


### Auxiliary Antenna

829 (698 - 960) MHz

### Auxiliary Radiation Pattern

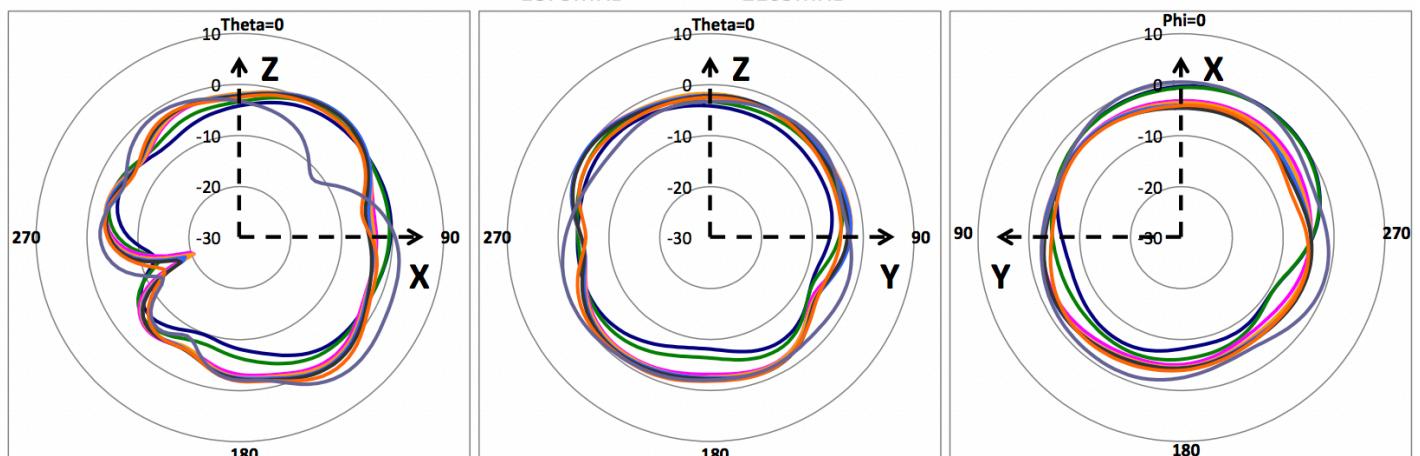
704MHz	836MHz
734MHz	867MHz
763MHz	897MHz
806MHz	955MHz



1940 (1710 - 2170) MHz

### Auxiliary Radiation Pattern

1715MHz	1900MHz
1747MHz	1925MHz
1842MHz	1975MHz
1875MHz	2165MHz



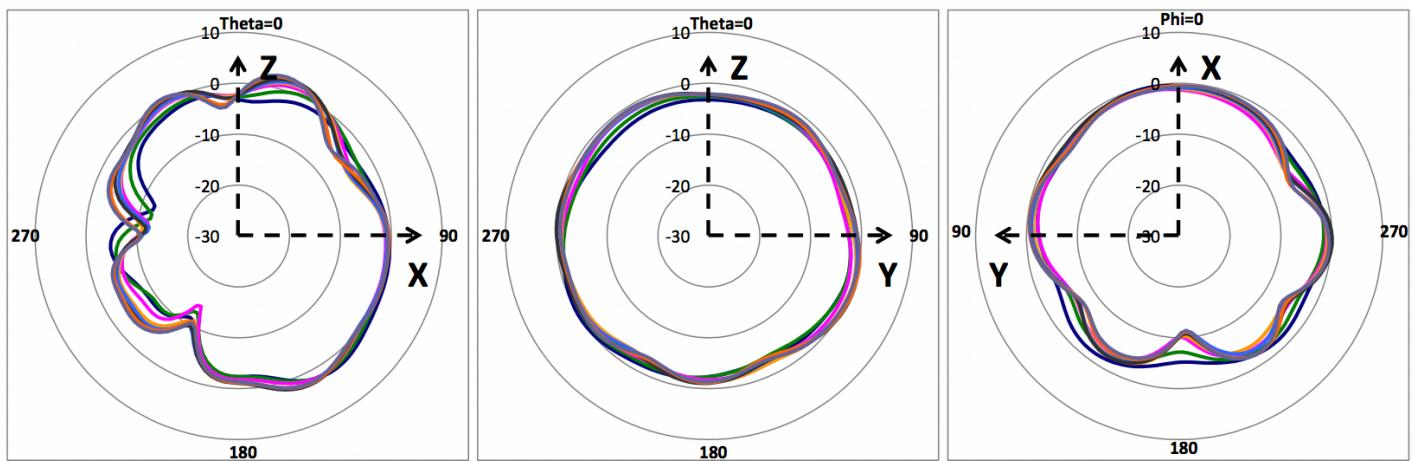


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2495 (2300 - 2690) MHz

## Auxiliary Radiation Pattern

- |           |           |
|-----------|-----------|
| — 2310MHz | — 2593MHz |
| — 2390MHz | — 2610MHz |
| — 2506MHz | — 2655MHz |
| — 2565MHz | — 2685MHz |



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