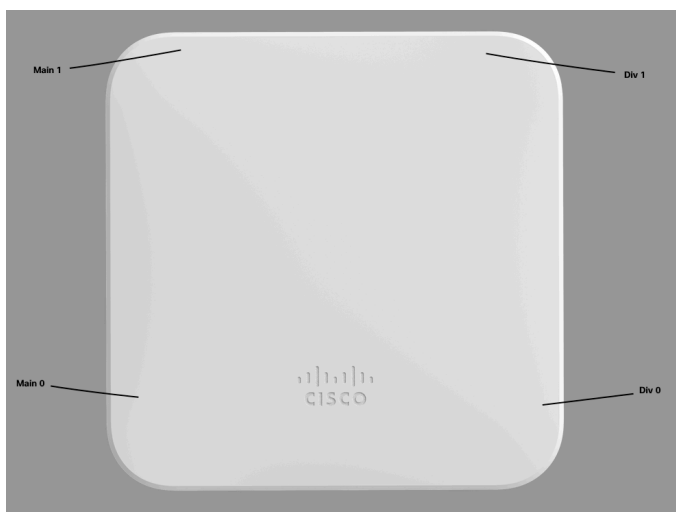


MG51 Internal Antenna Datasheet

MG51 also has a GPS antenna but the GPS functionality is not supported yet.

The internal antenna on the MG51 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. Internally, the MG51 has 2 main and 2 diversity antennas.



Specifications

Category	Specifications
Electrical	Antenna Type Planar Inverted F Antenna (PIFA)

Main 0 Antenna

Frequency Range

- 860 (617 - 960) MHz
- 1452 (1452 - 1496) MHz
- 2100 (1710 - 2200) MHz
- 2600 (2300 - 2700) MHz
- 4050 (3300 - 4200) MHz
- 4750 (4400 - 5000) MHz
- 5950 (5150 - 5925) MHz

Peak Gain (per range)

- 860 @ 2.87dBi
- 1452 @ 4.04dBi
- 2100 @ 3.98dBi
- 2600 @ 4.97dBi
- 4050 @ 2.26dBi
- 4750 @ 2.91dBi
- 5925 @ 5.0dBi

Polarization

Linear, vertical

Main 1 Antenna

Frequency Range

- 1475 (1452 - 1496) MHz
- 2200 (1710 - 2200) MHz

- 2550 (2300 - 2700) MHz
- 4200 (3300 - 4200) MHz
- 4400 (4400 - 5000) MHz
- 5300 (5150 - 5925) MHz

Peak Gain (per range)

- 1475 @ 0.86dBi
- 2200 @ 4.40dBi
- 2550 @ 4.97dBi
- 4200 @ 2.37dBi
- 4400 @ 2.64dBi
- 5300 @ 3.13dBi

Polarization

Linear, vertical

Div 0 Antenna

Frequency Range

- 920 (617 - 960) MHz
- 1496 (1452 - 1496) MHz
- 1800 (1710 - 2200) MHz
- 2550 (2300 - 2700) MHz
- 4150 (3300 - 4200) MHz
- 4800 (4400 - 5000) MHz
- 5250 (5150 - 5925) MHz

Peak Gain (per range)

- 920 @ 3.43dBi
- 1496 @ 2.39dBi
- 1800 @ 4.40dBi
- 2550 @ 4.93dBi
- 4150 @ 2.22dBi
- 4800 @ 3.42dBi
- 5250 @ 4.14dBi

Polarization

Linear, vertical

Div 1 Antenna

Frequency Range

- 1496 (1452 - 1496) MHz
- 1800 (1710 - 2200) MHz
- 2500 (2300 - 2700) MHz
- 3950 (3300 - 4200) MHz
- 4750 (4400 - 5000) MHz
- 5400 (5150 - 5925) MHz

Peak Gain (per range)

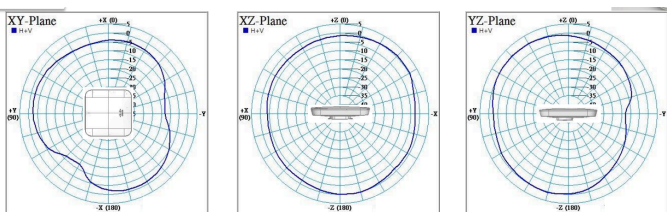
- 1496 @ 1.91dBi
- 1800 @ 3.69dBi
- 2500 @ 4.67dBi
- 3950 @ 2.49dBi
- 4750 @ 3.47dBi

	<ul style="list-style-type: none"> • 5400 @ 4.43dBi <p>Polarization</p> <p>Linear, vertical</p>
Physical and Environmental	<p>MG51 Dimensions</p> <p>173 x 173 x 36.5mm</p> <p>MG51 Operating Temperature</p> <p>-40°C to 50°C (-40°F to 122°F)</p> <p>Material of Radiator</p> <p>Sheet metal</p>
Regulatory	Certified for use in the MG51

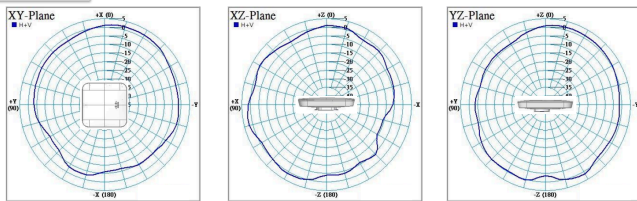
Radiation Patterns

Div 0 Antenna

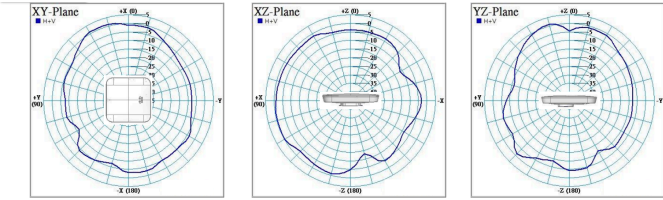
Low Band



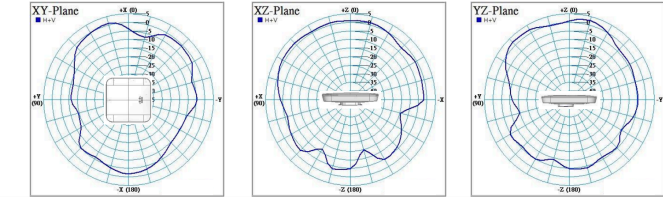
Middle Band



High Band

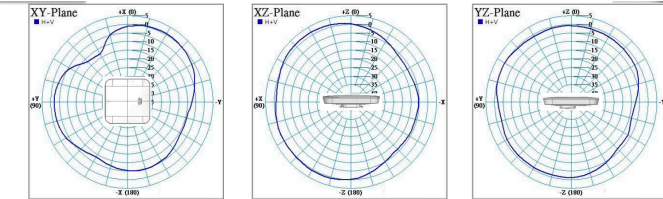


Ultra High Band

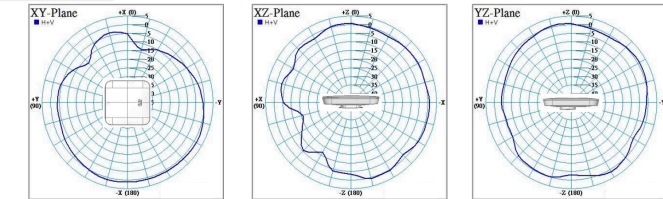


Main 0 Antenna

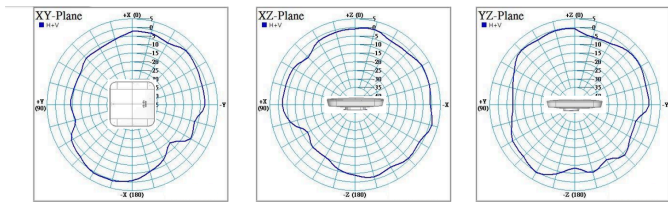
Low Band



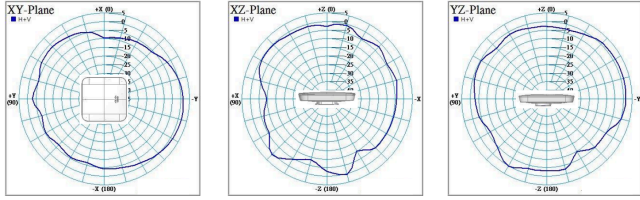
Middle Band



High Band

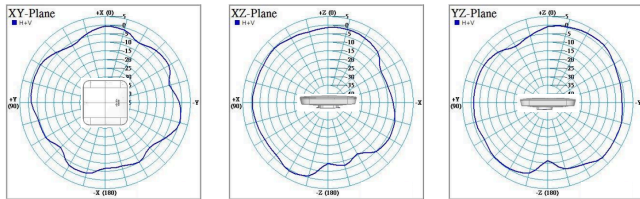


Ultra High Band

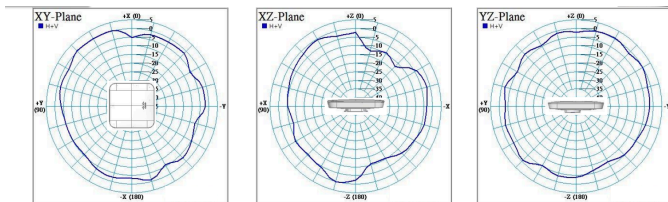


Div 1 Antenna

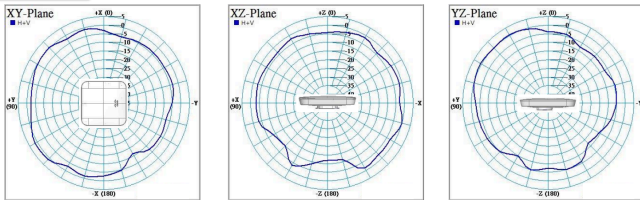
Middle Band



High Band

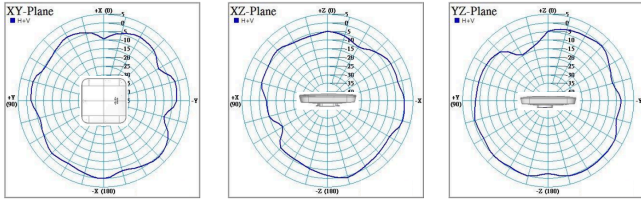


Ultra High Band

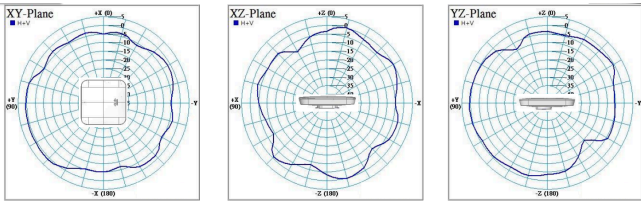


Main 1 Antenna

Middle Band



High Band



Ultra High Band

