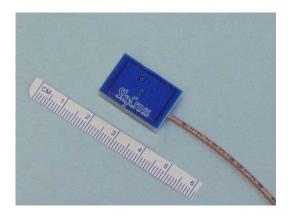


WLAN Tri Band Antenna for 802.11b and 802.11a/HiperLAN2 Embedded Wireless Applications



Features

- Very Efficient MLA Technology
- Covers all Three WLAN Bands:
 - 802.11b (2.44 GHz)
 - 802.11a (5.25 GHz)
 - HiperLAN2 (5.8 GHz)
- Very Low Profile for Embedded Applications
- Optimized for Remote Cable Mounting in Desktop/Laptop Applications

This tri band WLAN antenna provides exceptional performance in a compact package for embedded wireless applications implementing multiple frequencies. This Meander Line Antenna provides superior efficiency and gain directivity and is the best performance solution for developers implementing a multiple frequency WLAN system in both the lower and upper WLAN bands.

Electrical Specifications †

Frequency 2400—2500 MHz Ranges 5150—5850 MHz

Gain 3.0 dBi Peak at 2440 MHz

3.25 dBi Peak at 5250 MHz 2.0 dBi Peak at 5800 MHz

VSWR < 1.8:1 in the lower band

< 2.0:1 in the upper band

Polarization Linear

Patterns 2440 MHz Uni directional

5250 MHz Uni directional 5800 MHz Uni directional

Feed 50 Ohms Unbalanced

Impedance

Mechanical Specifications

Size $0.87 \times 0.59 \times 0.24$ inches

22.3 x 14.9 x 6.2 mm

Weight* 3.9 g

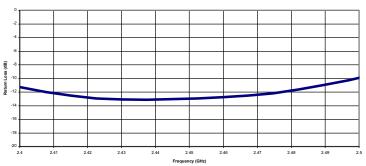
Cable/ Customer to specify cable

type, cable length and connector type

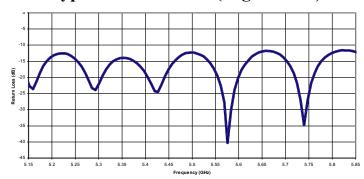
*weight with out cable

Connectors

Typical Return Loss (Low Band)

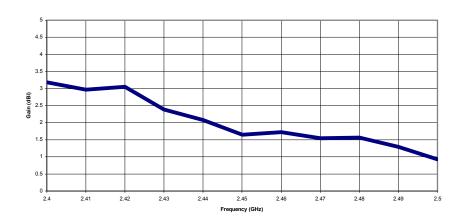


Typical Return Loss (High Bands)

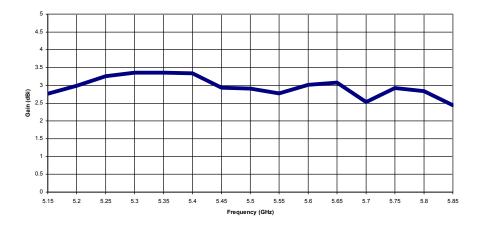




Swept Gain for Low Band †

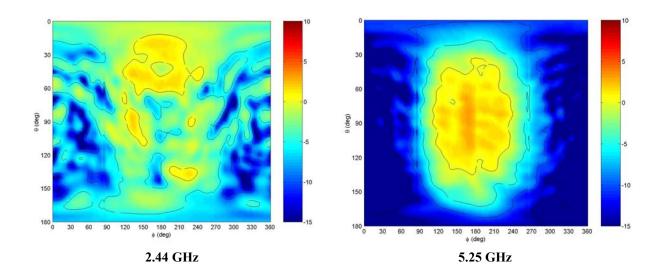


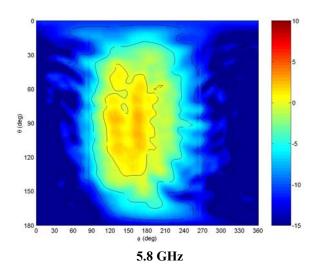
Swept Gain for High Band †





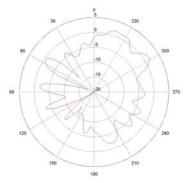
Spherical Gain Contour Maps †







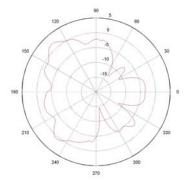
Gain Pattern at 2.45



Phi = 0 degrees

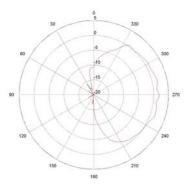


Phi= 90 degrees

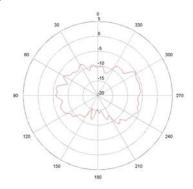


Theta = 90 degrees

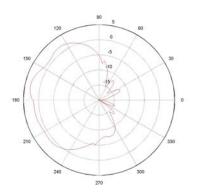
Gain Pattern at 5.25



Phi = 0 degrees



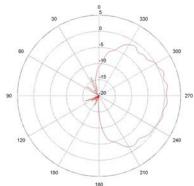
Phi= 90 degrees



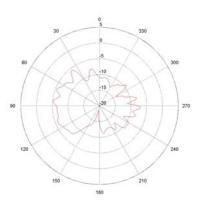
Theta = 90 degrees



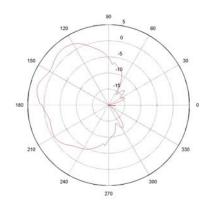
Gain Pattern at 5.8







Phi= 90 degrees



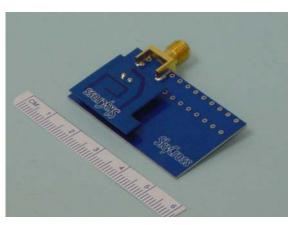
Theta = 90 degrees

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Antenna Products

WLAN Tri Band Antenna for 802.11b and 802.11a/HiperLAN2 **Embedded Wireless Applications**



Features

- Very Efficient MLA Technology
- Covers all Three WLAN Bands:
 - 802.11b (2.4 GHz)
 - 802.11a (5.25 GHz)
 - HiperLAN2 (5.6 GHz)
- Very Low Profile for Embedded Applications
 - Only 3 mm High
- 60% Efficiency

This tri band WLAN antenna provides exceptional performance in a compact package for embedded wireless applications implementing dual frequency. This Meander Line Antenna provides superior efficiency and gain directivity and is the best performance solution for developers implementing a dual frequency WLAN system in both the lower and upper WLAN bands.

Electrical Specifications	
Frequency Ranges	2400—2500 MHz 5150—5850 MHz
Gain	+1.3 dBi Peak at 2440 MHz +2.45 dBi Peak at 5300 MHz +5.0 dBi Peak at 5700 MHz
VSWR	< 3.0:1 in the lower band < 3.0:1 in the upper band
Polarization	Linear
Patterns	2440 MHz Omni directional 5300 MHz Uni directional 5700 MHz Uni directional
Feed Impedance	50 Ohms Unbalanced

Mechanical Specifications

0.90 x 0.93 x 0.012 inches Size*

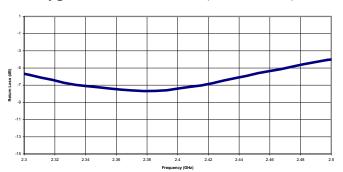
22.9 x 23.6 x 0.30 mm

Weight** 0.3 g

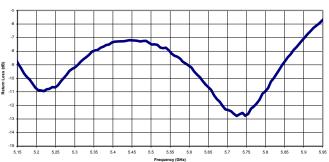
*antenna suspended 3 mm above ground plane with mounting pins

**weight with out connector or ground plane

Typical Return Loss (Low Band)

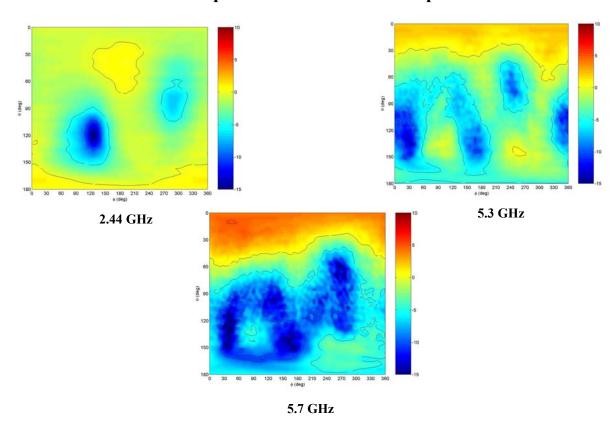


Typical Return Loss (High Bands)

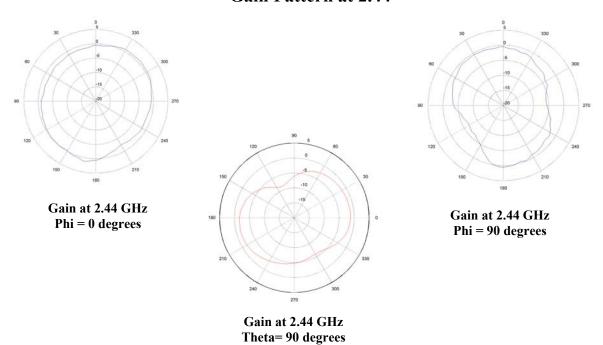




Spherical Gain Contour Maps

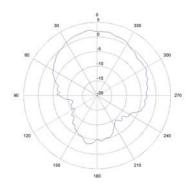


Gain Pattern at 2.44

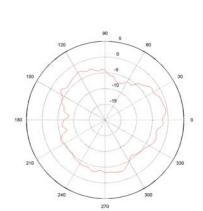




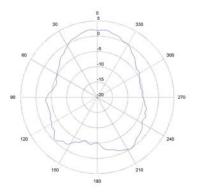
Gain Pattern at 5.3 GHz



Gain at 5.3 GHz Phi = 0 degrees



Gain at 5.3 GHz Theta= 90 degrees



Gain at 5.3 GHz Phi = 90 degrees

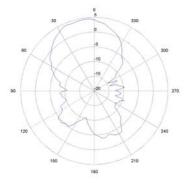
Gain Pattern at 5.7 GHz



Gain at 5.7 GHz Phi = 0 degrees



Gain at 5.7 GHz Theta= 90 degrees



Gain at 5.7 GHz Phi = 90 degrees

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