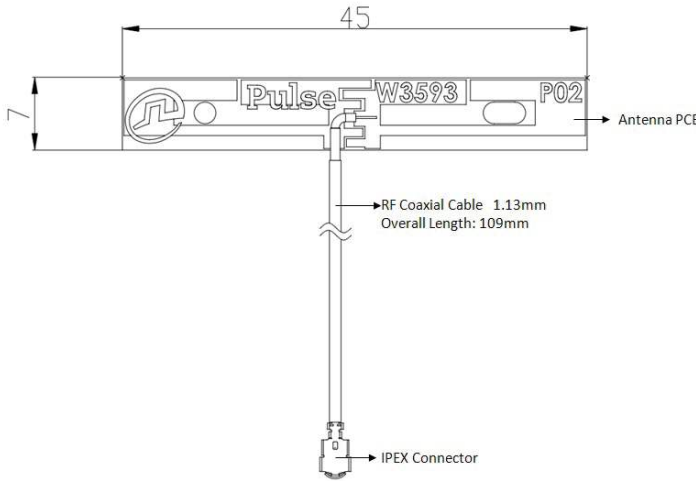


# Internal Single-Band Dipole Antenna 4.9-5.85 GHz

Pulse Part Number W3593B0100



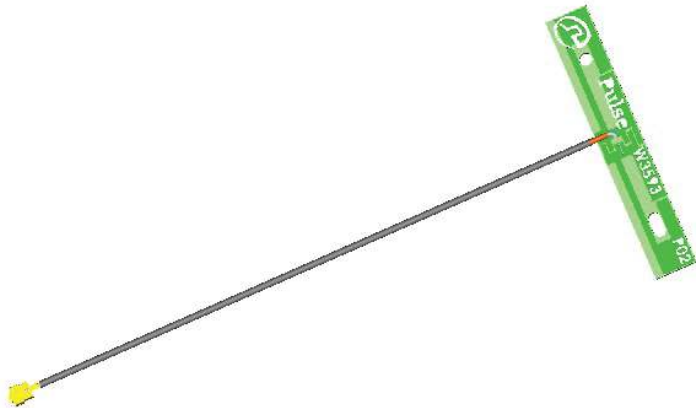
The W3593B antennas are internal PCB Single Band dipoles that cover the entire 4.9 – 5.85 GHz band. The W3593B0100 has a 100MM cable assembly with a standard IPEX connector for ease of connection on the board. With efficiency over 50% and a gain of 2dbi, the W3593 antennas are perfect internal options for WiFi applications. The wideband coverage is an ideal solution for industrial applications and data transmission and communication especially in IoT devices. The W3593B0100 is also an excellent internal solution for many applications in the Public Safety market.

### Features

- Size WxLxH (7 x 45 x .8mm)
- For WiFi devices using 4.9 – 5.8 GHz and other applications in 4.9 – 5.8 GHz band
- Omnidirectional radiation pattern provides broad 360° coverage
- 10 inches cable length
- Various cable length from 3.9 to 10 inch also available
- RoHS Compliant

### Applications

- WiFi in the 4.9 – 5.85 GHz band
- Data Transmission in IoT devices
- Industrial Applications
- Public Safety



Part Number	Cable Type	Cable Length (Inches/Meters)	Connector Type & Gender
W3593B0100	RF Coaxial 1.13mm	10/109mm	IPEX

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Vancouver, Washington  
360 944 7551

Europe  
49 7032 7806 0

China  
86 512 6807 9998

# Internal Single-Band Dipole Antenna 4.9-5.85 GHz

Pulse Part Number W3593B0100

## Electrical Specifications

<b>Frequency</b>	Freq 1	4.9-5.85 GHz
<b>Nominal Impedance [<math>\Omega</math>]</b>		50
<b>Efficiency (Typical) Freq.</b>		50%
<b>VSWR</b>	Freq 1	2:1 Max
<b>Peak Gain Frequency</b>		2 dBi
<b>RL</b>		-10 dB Min

## Environmental Specifications

<b>Operating Temperature</b>	-40/ +85 C°
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## Mechanical Specifications

<b>Antenna PCB</b>	Base Material: Single side FR4
<b>Coaxial Cable (In/MM)</b>	10/1.13mm RF Coaxial Cable with IPEX Connector
<b>Weight (lbs/grams)</b>	0.84 g
<b>Thickness of PCB</b>	0.8 mm
<b>Overall Length of PCB</b>	45 x 7 mm
<b>Overall Length of Cable</b>	109 mm
<b>Mounting</b>	Internal

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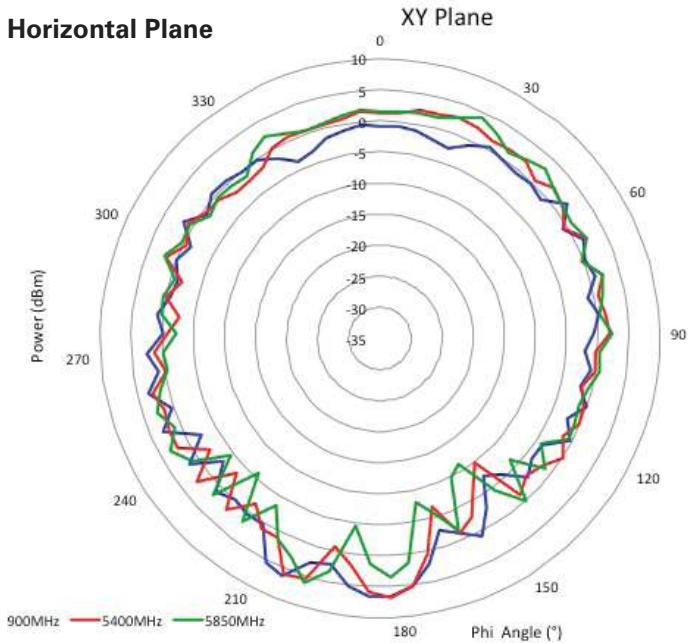
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# Internal Single-Band Dipole Antenna 4.9-5.85 GHz

Pulse Part Number W3593B0100

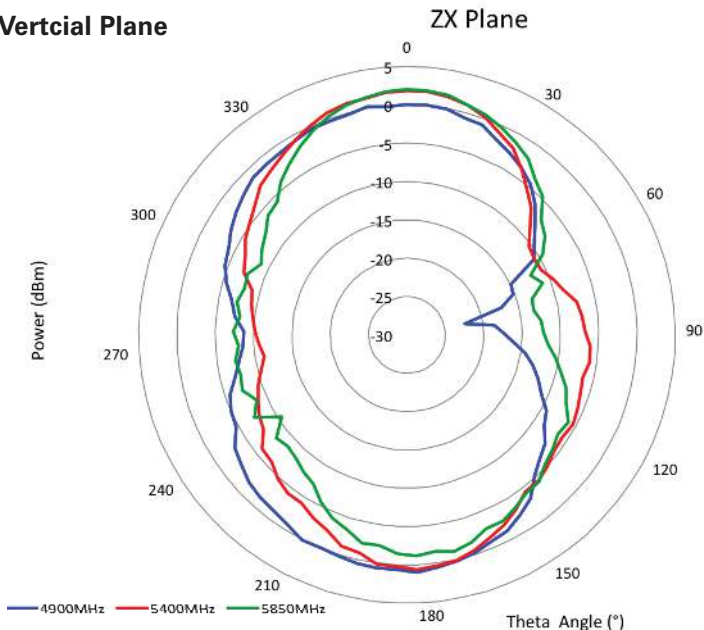
## Typical Radiation Patterns

### Horizontal Plane



4900MHz  
 Avg (dBi) =  
 Peak (dBi) =  
 Avg -3 (deg) =  
 5400MHz  
 Avg (dBi) =  
 Peak (dBi) =  
 Avg -3 (deg) =  
 5850MHz  
 Avg (dBi) =  
 Peak (dBi) =  
 Avg -3 (deg) =

### Vertical Plane



4900MHz  
 Avg (dBi) =  
 Peak (dBi) =  
 Avg -3 (deg) =  
 5400MHz  
 Avg (dBi) =  
 Peak (dBi) =  
 Avg -3 (deg) =  
 5850MHz  
 Avg (dBi) =  
 Peak (dBi) =  
 Avg -3 (deg) =

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