

# I530 ANTENNA

5GHz ISM Band Frequency

\*Contents in this sheet are subject to change without prior notice

## Descriptions

This embedded antenna is designed for 5GHz ISM Band. Both of wireless LAN IEEE 802.11 a/n/11ac .This Antenna provides a high efficiency and a good performance.

## Features

The I530 Embedded Antenna is defined by the following features:

- IEEE 802.11 a/n/11ac standards
- Single 5GHz Band operation
- 2.9dBi @5.2Ghz peak gain; 2.94 dBi @ 5.5 GHz peak gain; 3.5 dBi @ 5.8 GHz peak gain
- Cable route and Case mount
- Easy integration

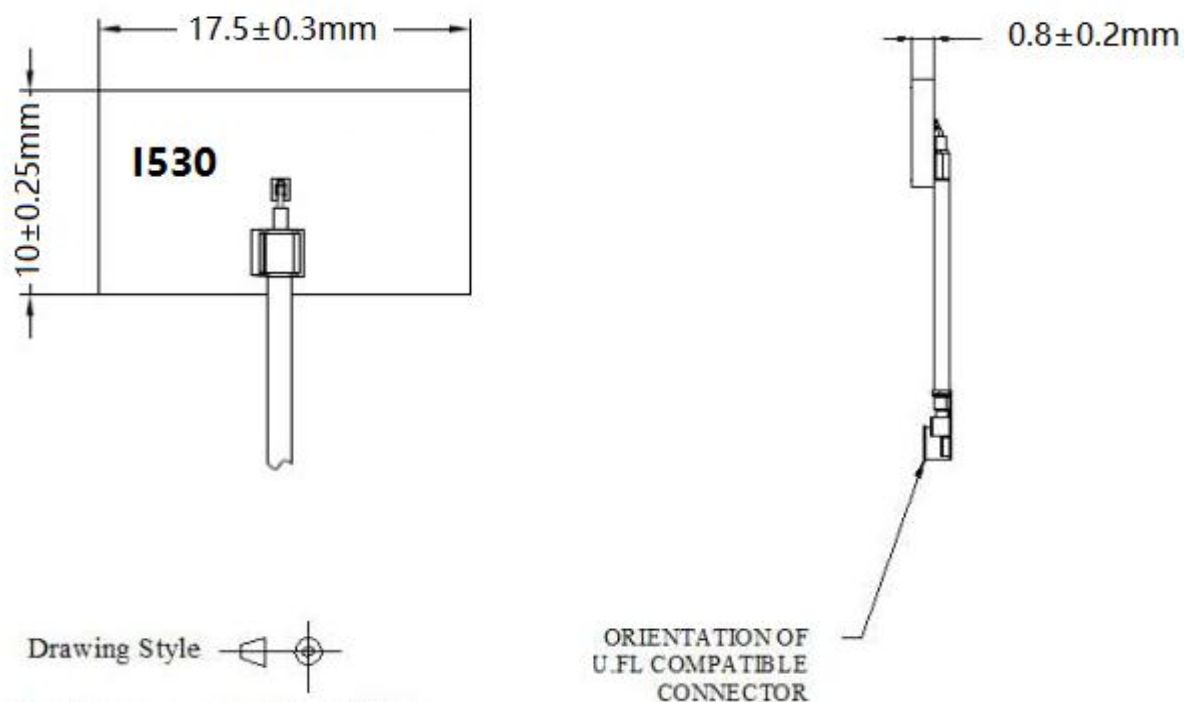
## Applications

- Wireless LAN
- ISM band 5GHz wireless applications

## Electrical Specifications

<b>Standard</b>	IEEE 802.11 a/n/11ac standards
<b>Frequency range</b>	4.9 to 5.9 GHz
<b>Peak gain</b>	2.9 dBi @ 5.2 GHz, 2.94 dBi @ 5.5 GHz, 3.5 dBi @ 5.8 GHz
<b>VSWR</b>	< 2:1
<b>Feed impedance</b>	50 ohms
<b>Power handling</b>	30 dBm
<b>Interface</b>	50 ohms, 1.13 mm diameter, micro coax cable (available with optional U.FL-compatible cable connector and/or cable- mounted EMI ferrites)
<b>Antenna dimensions</b>	17.5mm X 10mm X 0.8mm (LxWxH)
<b>Temperature range</b>	Operating: -40° C to +75° C (-40° F to +167° F)  Storage: -40° C to +85° C (-40° F to +185° F)
<b>Humidity range</b>	0% to 95% non-condensing

## Dimensions

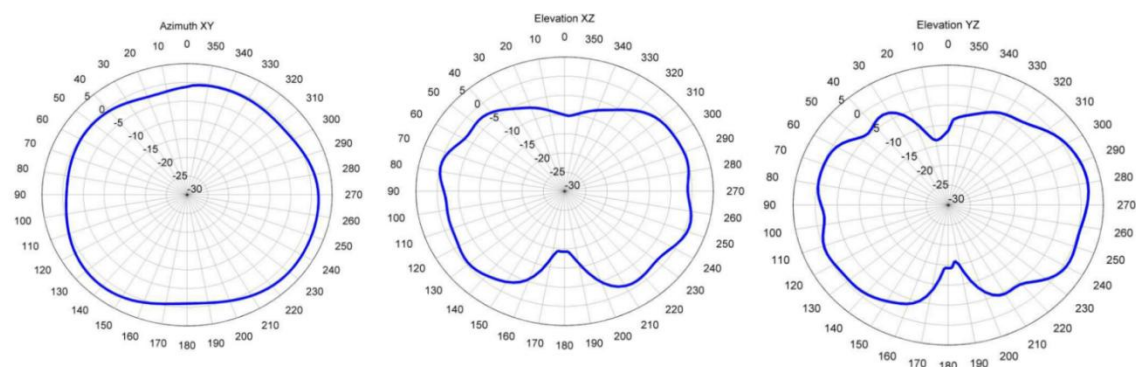


Tape's tolerances are all in +/-0.5mm

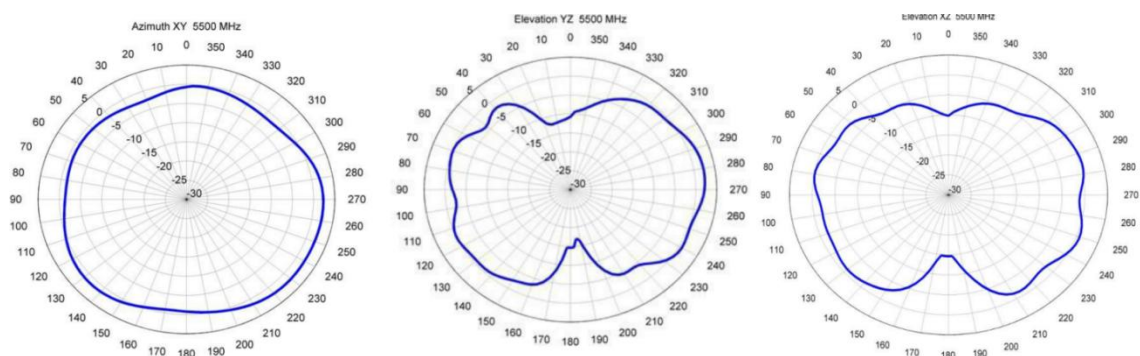
Unless otherwise specified, tolerances are +/-0.2mm

## Radiation Pattern

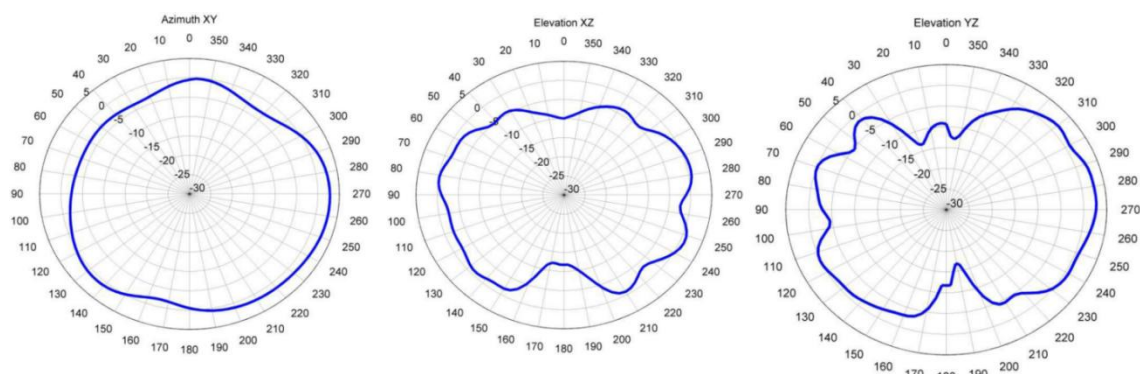
Radiation patterns were taken with the antenna mounted in testing ABS box.



### 5.2GHz Radiation Pattern



### 5.5GHz Radiation Pattern



### 5.8GHz Radiation Pattern

Frequency (MHz)	Peak gain (dBi)
5150	2.80172
5200	2.90327
5250	2.50134
5300	2.93138
5350	3.16844
5400	3.07323
5450	3.02252
5500	2.94389
5550	3.14225
5600	3.47876
5650	3.58019
5700	3.52742
5750	3.45618
5800	3.50625
5850	3.65774
AVG	3.179638667

### Gain Frequency list