

Features

- WiFi / Bluetooth
- Indoor Antenna
- 50 Ohm Impedance
- 2400-2500MHz & 5150-5850MHz
- Omni Radiation

Applications

- Bluetooth & IEEE 802.11a/b/g/ac
- Wireless Communication
- Portable Device
- Machine To Machine Communication
- Network Devices



Part Numbering Guide

S AT IA 160H19A WF B3

SUNTSU

ANTENNA

INDOOR ANTENNA

PACKAGE SIZE*

160H19A = 160.0mm x 19.0mm

APPLICATION

WF= WiFi

FREQUENCY

B3 = 2400-2500MHz
5150-5850MHz



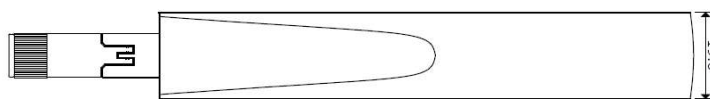
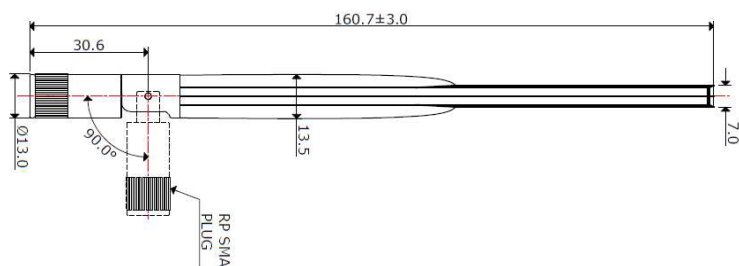
* Where letters denote decimal location (A=0, B=1, C=2, etc.); e.g. B5=0.15, 3A5=3.05, 9A=9.0

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2400		2500	
Impedance	Ω		50		
Polarization			Vertical		
Peak Gain	dBi		2.15		At 2450MHz
Efficiency	%		75		At 2450MHz
VSWR				2	At Center Frequency
Operating Temperature	C	-20		65	

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	5150		5850	
Impedance	Ω		50		
Polarization			Vertical		
Peak Gain	dBi		4.4		At 5550MHz
Efficiency	%		61		At 5550MHz
VSWR				2	At Center Frequency
Operating Temperature	C	-20		65	

Outline Drawing

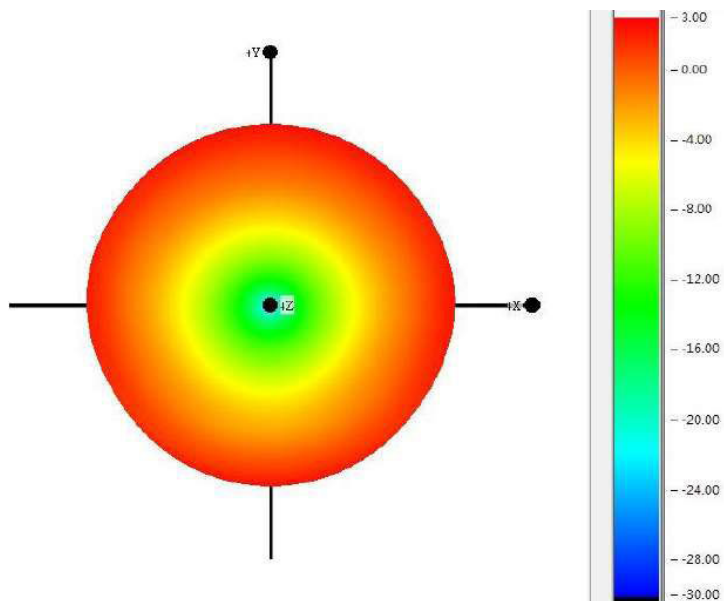
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



Item	Material
Whip	ABS
Connector	Brass
Connector Insulator	Teflon

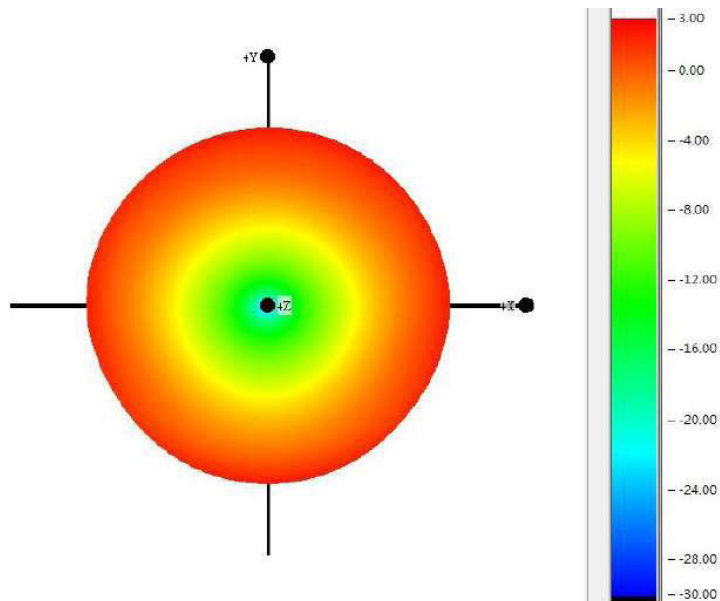
3D Radiation Pattern (Unit: dBi)

2400MHz



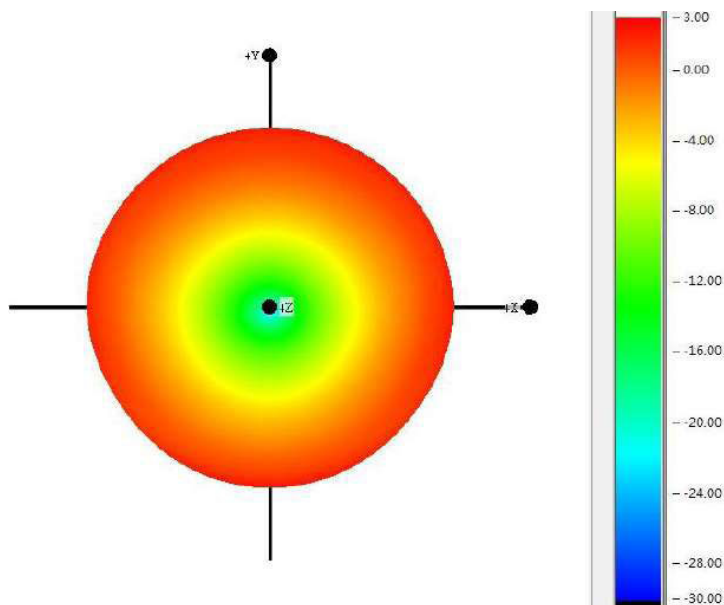
3D Radiation Pattern (Unit: dBi)

2450MHz



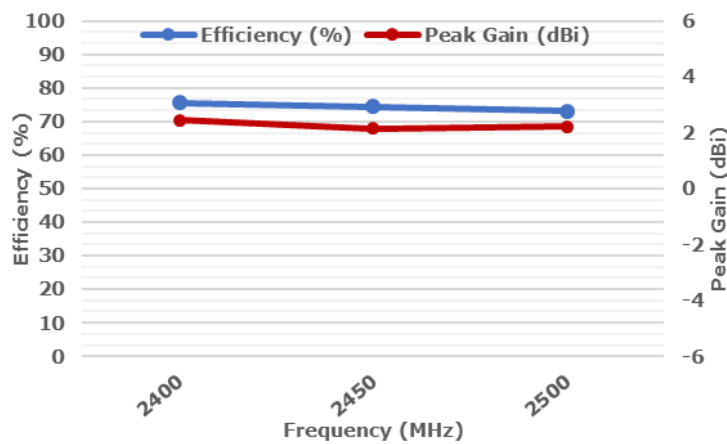
3D Radiation Pattern (Unit: dBi)

2500MHz



Efficiency vs Frequency

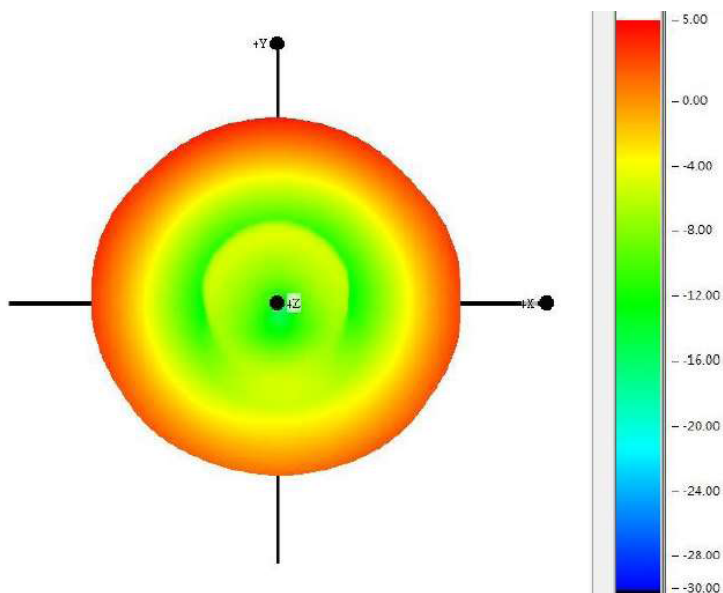
2400-2500MHz



Frequency	2400	2450	2500
Efficiency	75.6	74.5	73.1
Peak Gain	2.44	2.15	2.21

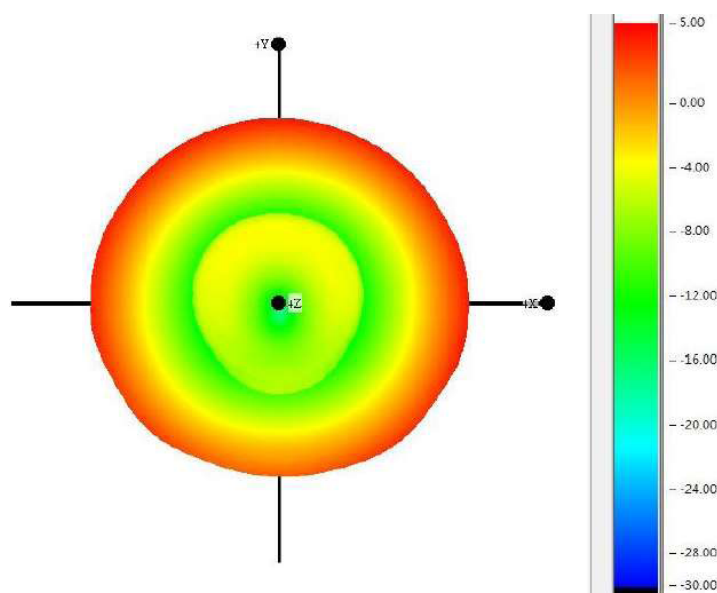
3D Radiation Pattern (Unit: dBi)

5150MHz



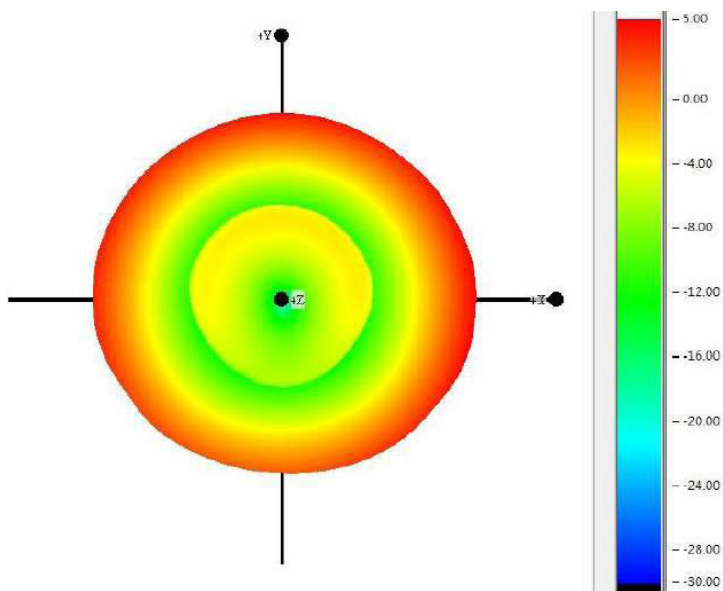
3D Radiation Pattern (Unit: dBi)

5550MHz



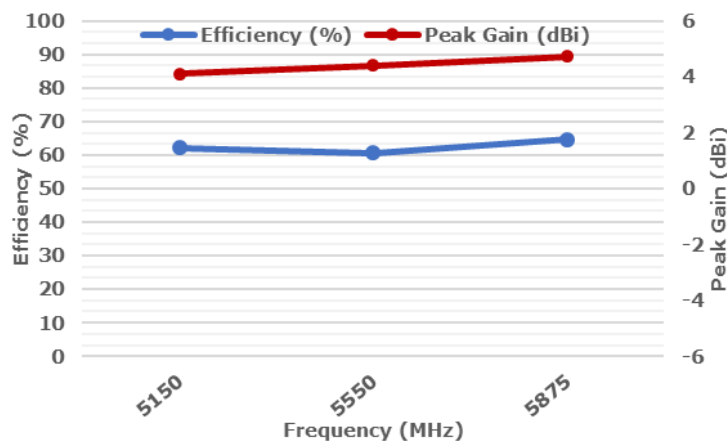
3D Radiation Pattern (Unit: dBi)

5875MHz



Efficiency vs Frequency

5150-5875MHz

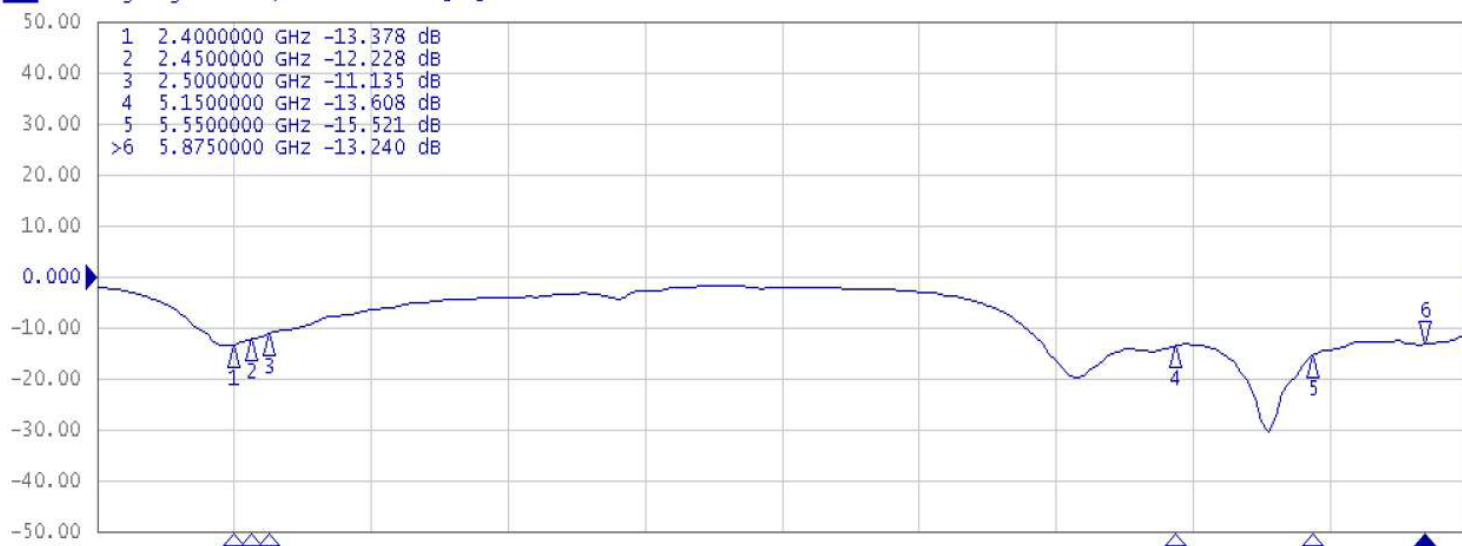


Frequency	5150	5550	5875
Efficiency	62.2	60.6	64.6
Peak Gain	4.1	4.41	4.73

Electrical Test

Return Loss

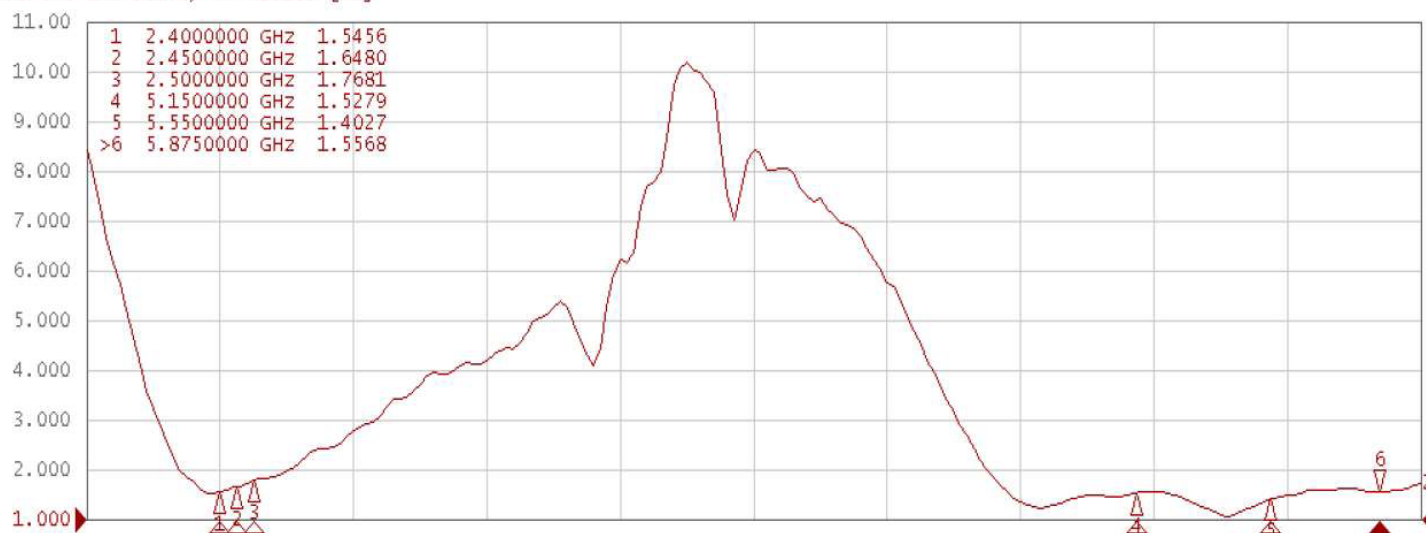
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F2]



Electrical Test

VSWR

Tr2 S11 SWR 1.000/ Ref 1.000 [F2]



Environmental & Mechanical Specifications

High Temperature Test	70°C for 48 hours, and then to normal temperature/humidity High Temperature Test for 24hours.
Low Temperature Test	-20°C for 48 hours, and then to normal temperature/humidity for 24hours.
Humidity Test	65°C / 90%RH for 48 hours, and then to normal temperature/humidity for 24hours.
Thermal Shock Test	-20°C for 30 min and +70°C for 30 min. 48 cycles, then expose to normal temperature/humidity for 24 hours or more.