

# DATA SHEET

## WIRELESS COMPONENTS

PCB type antenna  
ANTX100P120BUNVS3



**FEATURES & BENEFITS**

- The smallest PCB antenna in the market
- Miniature design allows users to save required space
- Double-side adhesive tape makes it easy to install in device
- Ranges of types of connector and cable provide a flexible
- Halogen free and RoHS compliant

**APPLICATIONS**

- Tablet / Desktop PC
- Internet TV / STB / Game console / Camera
- WiFi network devices (IEEE 802.11b/g/n)
- Bluetooth / ZigBee devices
- Car Infotainment
- Smart meter
- Lighting control
- POS terminal
- Wireless Industrial Control

**ORDERING INFORMATION - GLOBAL PART NUMBER , PHYCOMP CTC & I2NC**

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

**YAGEO BRAND ordering code**

**GLOBAL PART NUMBER (PREFERRED)**

**ANT X100 P 120 B UNVS 3**

(1) (2) (3) (4) (5) (6) (7)

---

**(1) FAMILY**

ANT= Antenna Products

---

**(2) CONNECTOR & CABLE LENGTH (MM)**

X=I-Pex

100=100mm

---

**(3) ANTENNA TYPE**

P=PCB

---

**(4) SERIAL NUMBER**

120=SERIAL NUMBER 120

---

**(5) PACKAGE TYPE**

B=Buck

---

**(6) WORKING FREQUENCY**

UNVS=700-6000MHz

---

**(7) CABLE TYPE**

3 = 1.13mm diameter Mini-Coaxial Cable

**SPECIFICATIONS**

Table 1

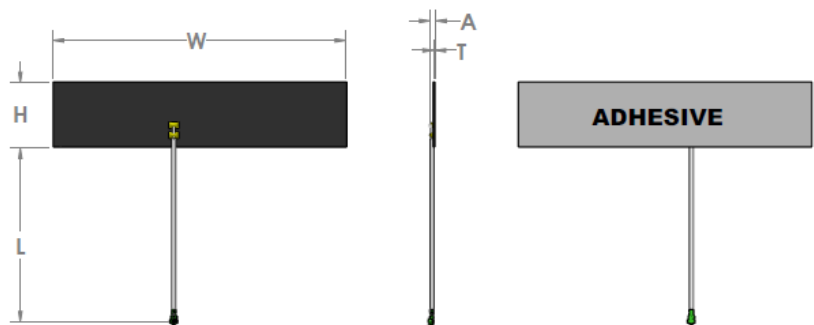
DESCRIPTION	VALUE
Working Frequency	700 ~ 6000 MHz
VSWR	4:1 max
Peak Gain	4.14 dBi
Polarization	Linear
Impedance	50 Ω Nominal
Operating Temperature	- 40 °C to 85 °C
Dimension	90mm x 20mm x 0.55mm
Radio Connector	I-PEX (20278-112R-13)
Cable Diameter / Length / Color	1.13mm / 100mm / Black
Mounting	Adhesive Tape (HF-DS)

**DIMENSIONS**

Table 2 Mechanical Dimension

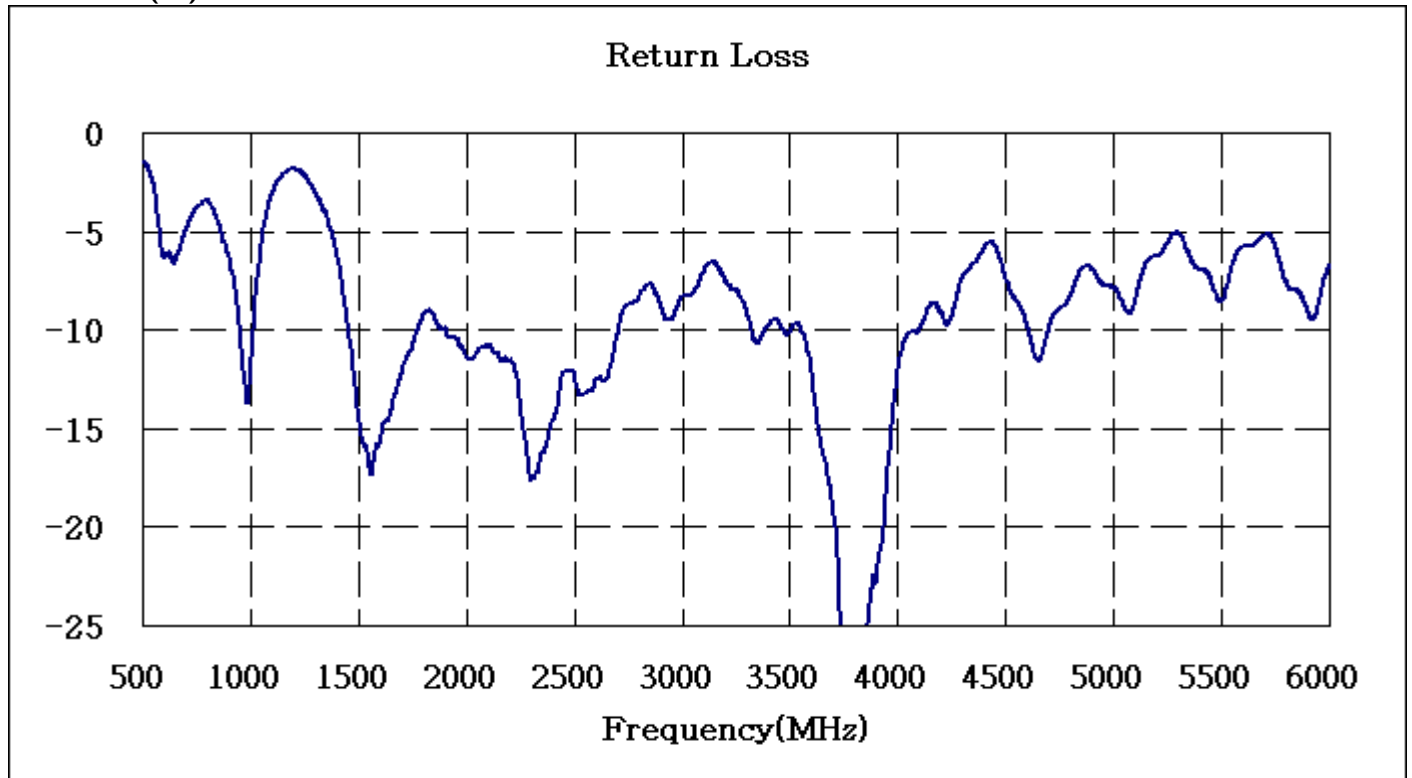
DIMENSION	VALUE
L (mm)	100 ±3.00
W (mm)	90 ± 0.30
H (mm)	20 ± 0.30
T (mm)	0.55 ± 0.15
A (mm)	2.30 Max

**OUTLINES**

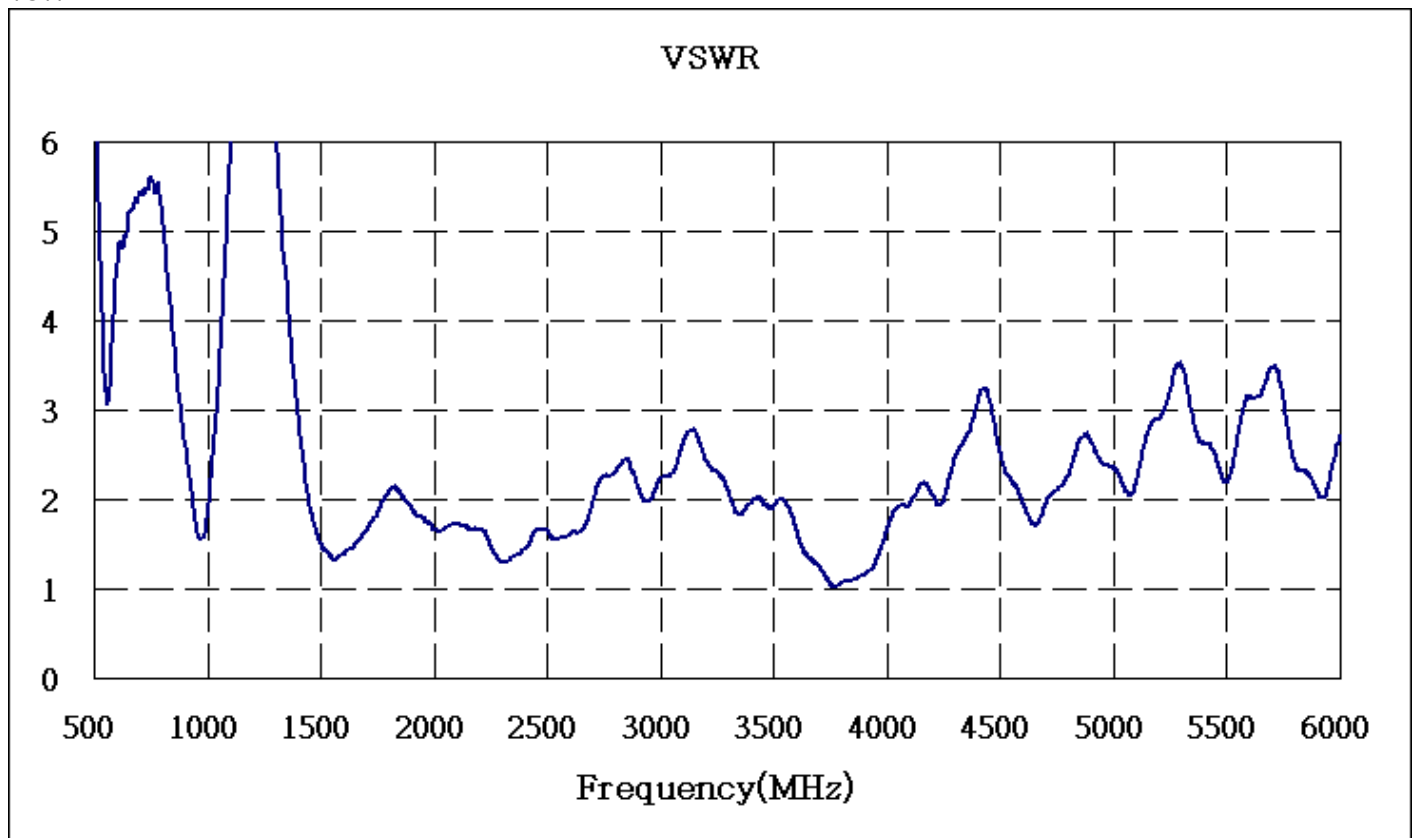


RETURN LOSS & VSWR

Return Loss (dB)



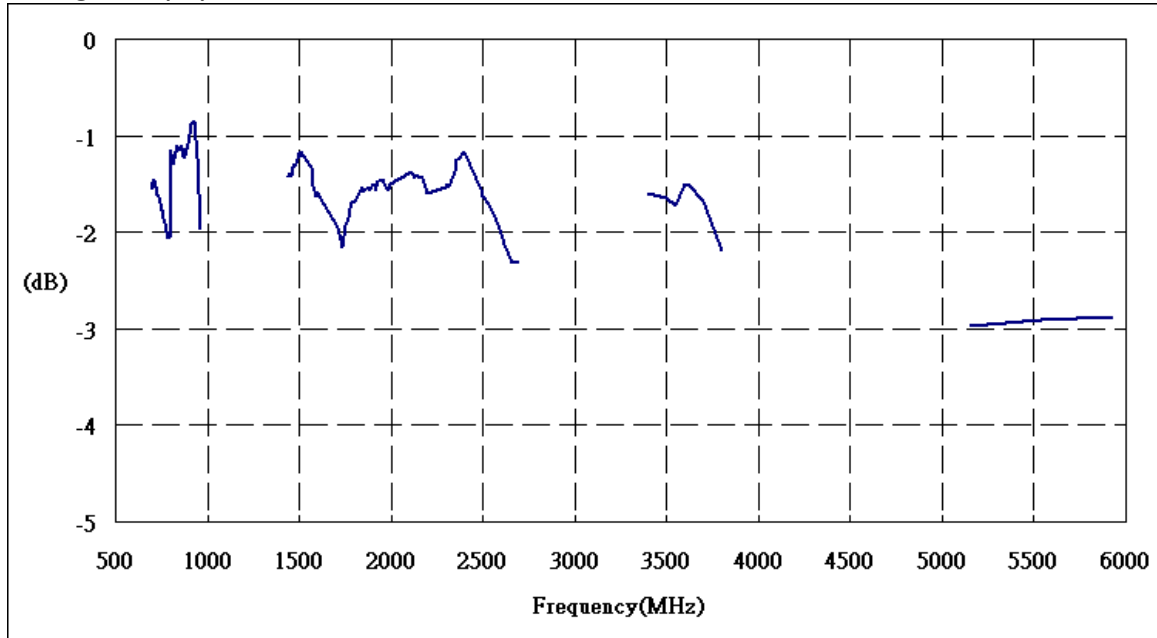
VSWR



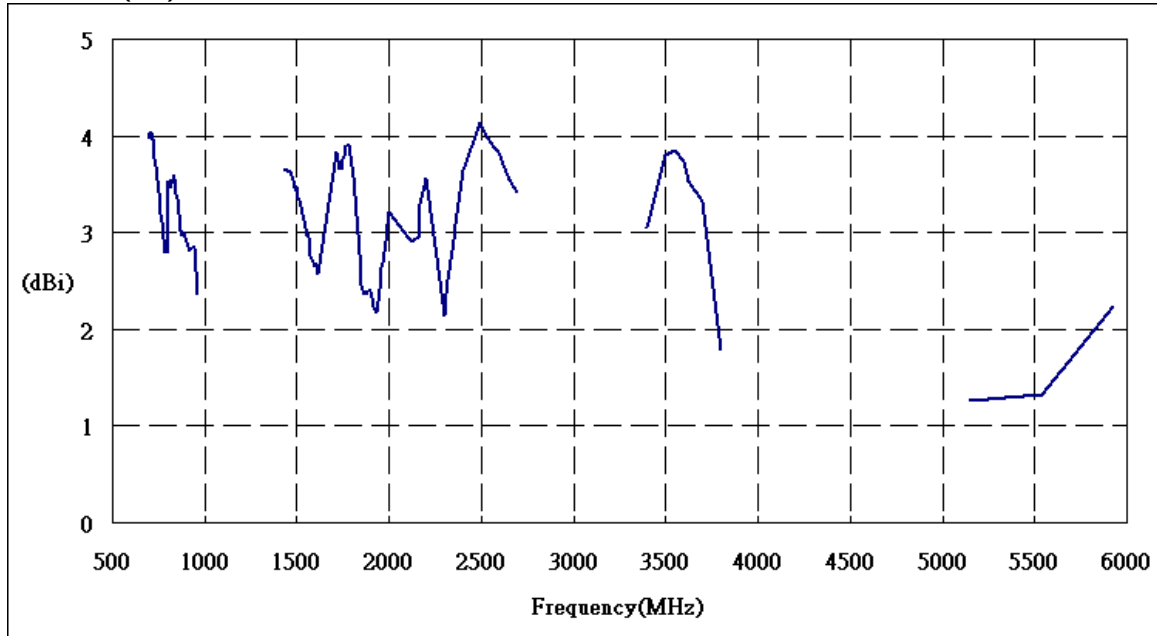
**ANTENNA GAIN & EFFICIENCY**

Frequency(MHz)	698~960	1390~1435	1575.42	1710~1990	1755~2170	2400~2450	2500~2700	3400~3600	4800~6000
Efficiency(%)	82.22	72.15	70.79	71.29	72.91	76.44	68.75	70.81	51.57
Peak Gain(dBi)	4.04	3.65	2.76	3.83	2.93	4.14	4.09	3.74	2.24

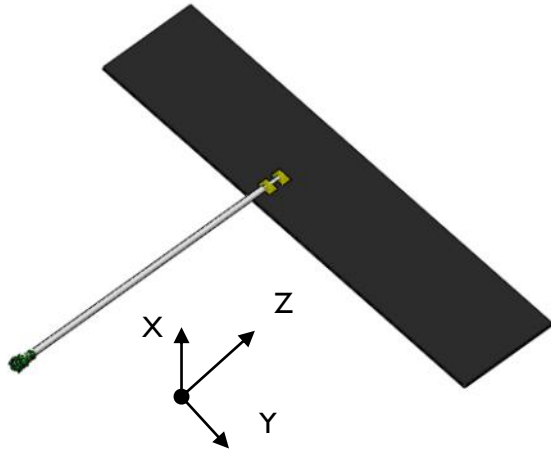
**Average Gain(dB)**



**Peak Gain(dBi)**



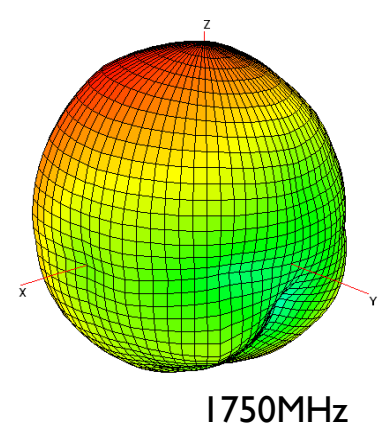
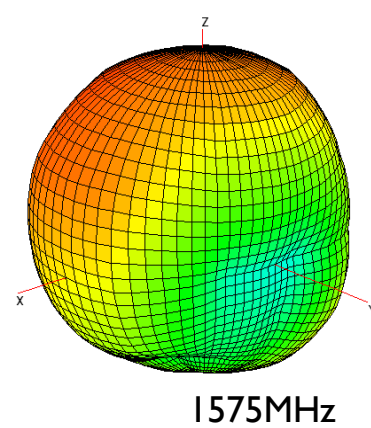
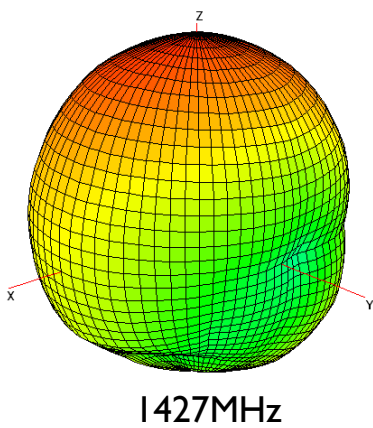
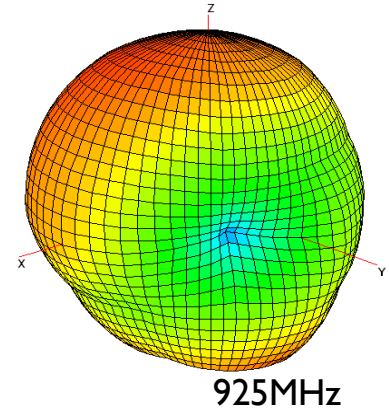
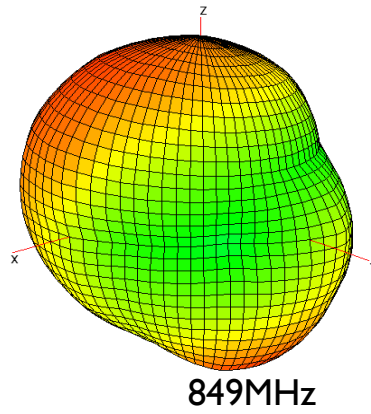
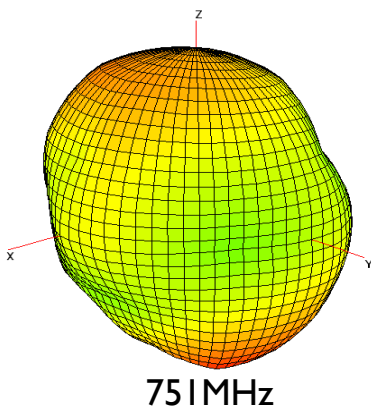
ANTENNA RADIATION PATTERNS

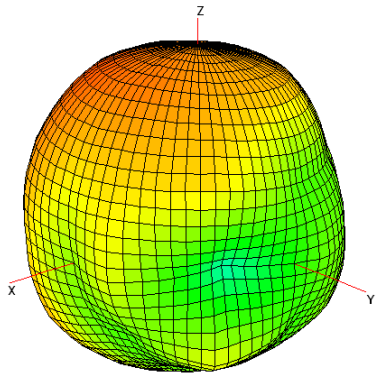


Scale: 4 dBi / div

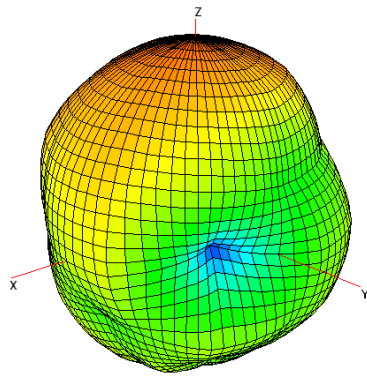
Max : 4 dBi

Min : -28 dBi

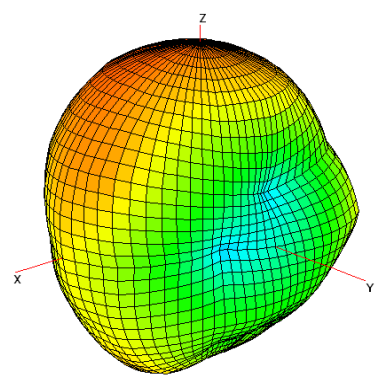




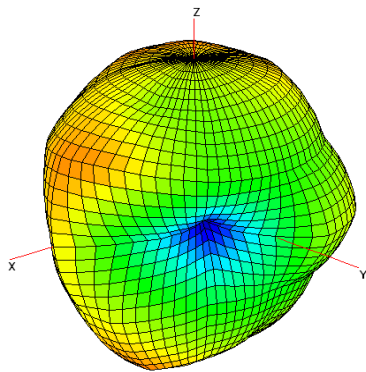
1850MHz



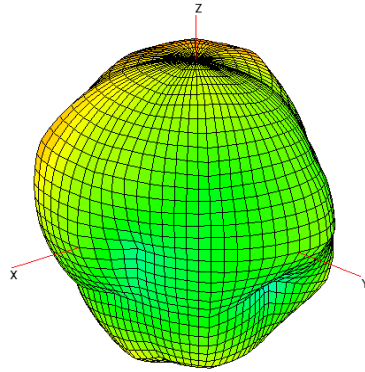
1950MHz



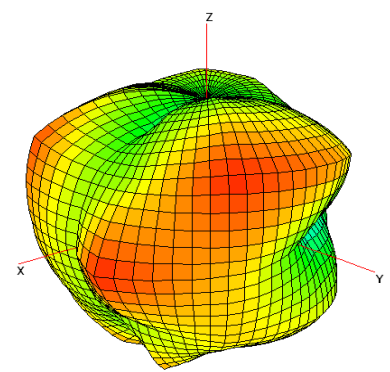
2110MHz



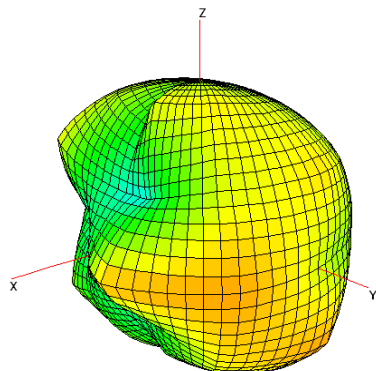
2400MHz



2600MHz



3600MHz



5537MHz

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Jan. 18, 2019	-	- New data sheet for PCB type antenna,