Manufacturer:P2 Mobile Technologies Limited

Address: Unit D5, 19th Floor, TML Tower, No. 3, Hoi Shing Road, Tsuen Wan, New Territories, Hong Kong

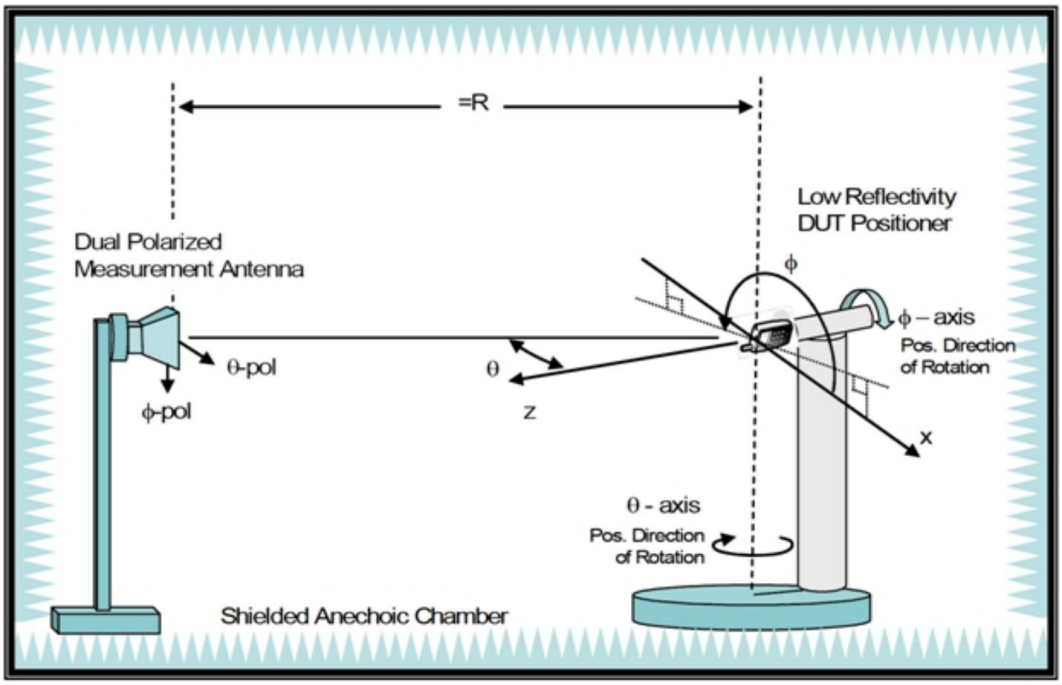
Equipment: AX52/AX52e Anywhere Network Node

Model No.: AX52, AX52e

Brand Name: Anywhere Networks

1. Test Configuration

Reference to CTIA "ctia-test-plan-for-wireless-device-over-the-air-performance-ver-3-7-1



2. Test Method

The EUT set on multi-axis positioner. Measurement antenna set at phi polarization and 1.5 meter height. Port 1 of Network analyzer connect to antenna of EUT. Record S21 value every 5 degree 0 to 355 degree on Phi angle and 0 to 180 on theta angle of multi-axis positioner. Then set measurement antenna to theta polarization and repeat process. Repeat process to each antenna of EUT

3. Summary of Test Result

Antenna Type	Frequency Band (MHz)	Antenna Gain (dBi)		Directional Gain (dBi)
		Ant 0	Ant 1	
Wi-Fi (2*2 MIMO) – AX52				
Panel Antenna	5150 ~ 5850	17 for Radio 0 19 for Radio 1	17 for Radio 0 19 for Radio 1	17 for Radio 0 19 for Radio 1
Wi-Fi (2*2 MIMO) – AX52e				
Panel Antenna	5150 ~ 5850	19 for Radio 0 19 for Radio 1	19 for Radio 0 19 for Radio 1	19 for Radio 0 19 for Radio 1

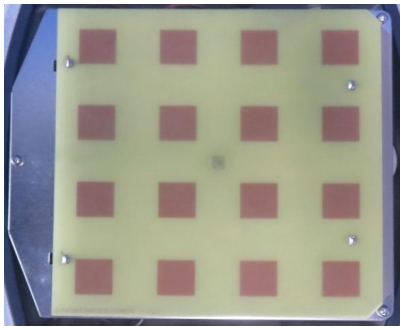
Remark:

1. The 19dBi panel antenna is the external panel antenna, the 17dBi panel antenna is the internal panel antenna.
2. Due to all antennas belong to Cross-Polarized Antenna, so for power and power spectral density (PSD) measurements, Directional Gain = Antenna Gain.
3. The EUT supports Cyclic Delay Diversity (CDD) mode on 802.11a/n/ac/ax.
4. The EUT also supports Beam Forming mode on 802.11n/ac/ax, not include 802.11a. Manufacturer automatically backs power down based on a 10log(N) factor based on CDD power.

5GHz 17dBi 2x2 Panel Antenna

Specifications

Electrical	
Frequency Range	4.9 – 5.875 GHz
Gain	17 dBi
Polarization	Dual Pole Linear, Vertical and Horizontal Dual Slant ±45° if mounted diagonally
Horizontal Beamwidth	16° (-3 dB)
Vertical Beamwidth	16° (-3 dB)
Side Lobes Level	ETSI TS2 (Min.)
VSWR	1.7 (Max.)
Front-to-back Ratio	-20 dB (Min.), ETSI TS2
Cross Polarization	-20 dB
Isolation	-30 dB
Impedance	50 Ω
Power Handling	10 W (Max.)
Lightning Protection	DC Grounded
Environmental	
Temperature	-40 °C to +65 °C
Humidity	ETS 300 019-1-4; EN 302 085 (Annex A.1.1)
Wind Loading	200 km/hr (Survival)
Vibration	IEC 60721-3-4
Flammability	UL94
Weatherproof	IP67
Salt Fog	IEC 68-2-11
Mechanical	
Radome Material	UV Protected Polycarbonate
Reflector Material	Aluminum, Protected Through Chemical Passivation
Mounting Material	Aluminum
Weight	200 g (Antenna)
Dimensions	260 x 260 x 33 mm
Connector	2 x SMA-female
Mounting Type	Internal Install
Pole Diameter	Ø25 to 120 mm (Screws supplied are 80 mm long)
Mechanical Movement	±45° (Azimuth); ±45° (Elevation)



Ordering Information
Part Number: GE.AN-5P17-01
5GHz 17dBi 2x2 Panel Antenna - Mounting Kit, 2 x N-female Connector

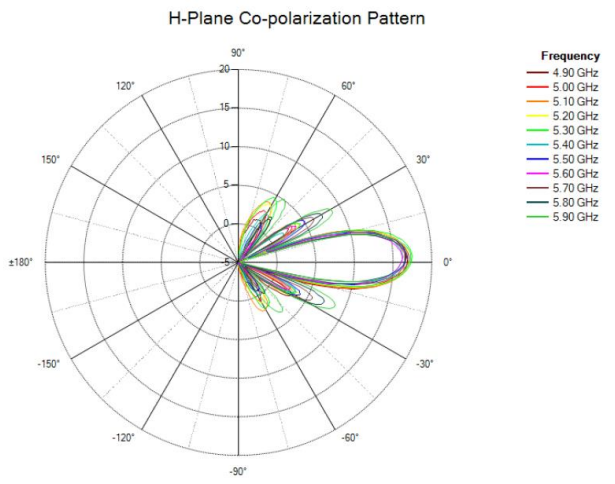
Version: 26 Oct 2021

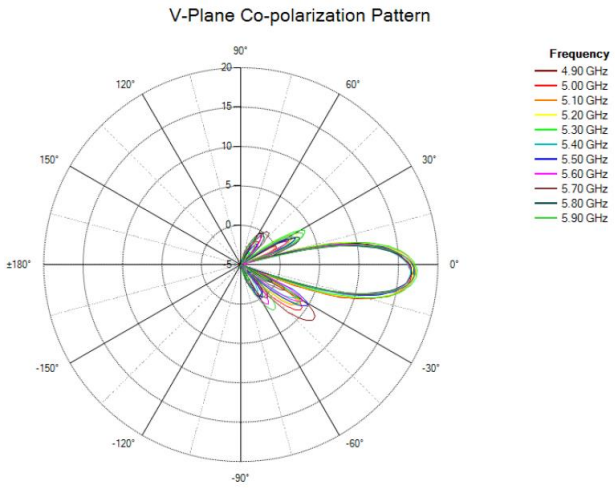
Built-in 5GHz 17dBi 2x2 Panel Antenna

For AX51 and AX52

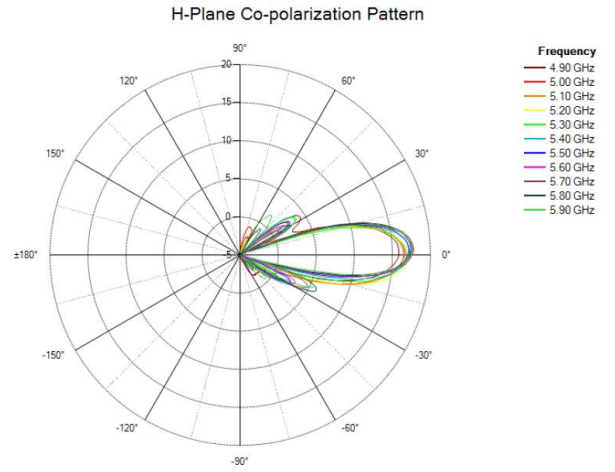
Antenna Patterns

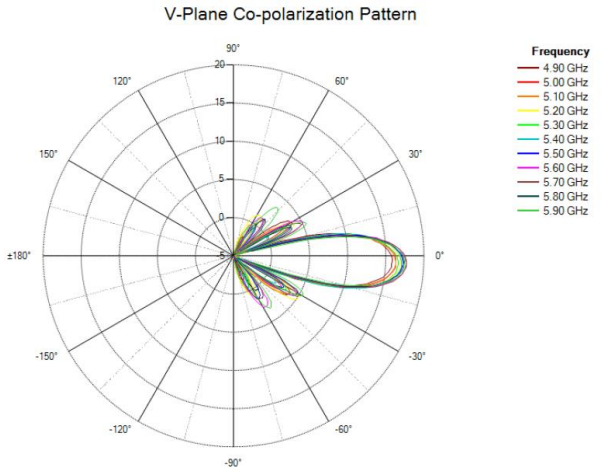
Vertical Polarization





Horizontal Polarization





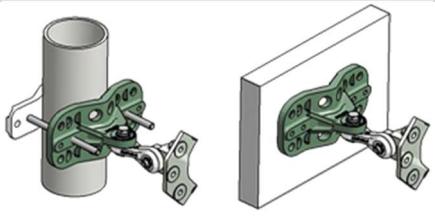
Version: 18 Apr 2023

5GHz 19dBi 2x2 Panel Antenna

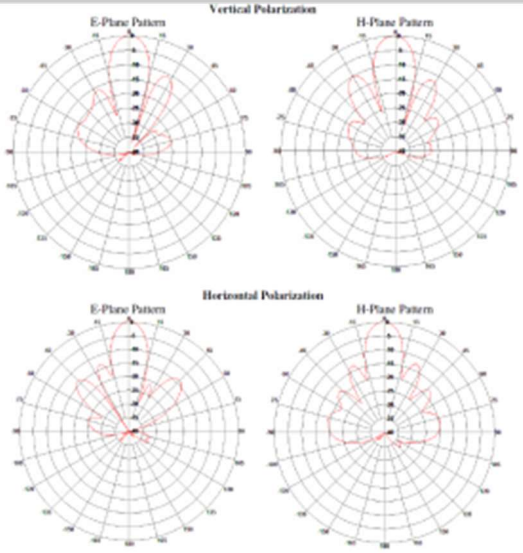
Specifications

Electrical	
Frequency Range	4.9 – 5.875 GHz
Gain	19 dBi
Polarization	Dual Pole Linear, Vertical and Horizontal Dual Slant ±45° if mounted diagonally
Horizontal Beamwidth	16° (-3 dB)
Vertical Beamwidth	16° (-3 dB)
Side Lobes Level	ETSI TS2 (Min.)
VSWR	1.7 (Max.)
Front-to-back Ratio	-20 dB (Min.), ETSI TS2
Cross Polarization	-20 dB
Isolation	-30 dB
Impedance	50 Ω
Power Handling	10 W (Max.)
Lightning Protection	DC Grounded
Environmental	
Temperature	-40 °C to +65 °C
Humidity	ETS 300 019-1-4; EN 302 085 (Annex A.1.1)
Wind Loading	200 km/hr (Survival)
Vibration	IEC 60721-3-4
Flammability	UL94
Weatherproof	IP67
Salt Fog	IEC 68-2-11
Mechanical	
Radome Material	UV Protected Polycarbonate
Reflector Material	Aluminum, Protected Through Chemical Passivation
Mounting Material	Aluminum
Weight	400 g (Antenna) 760 g (Mounting Kit)
Dimensions	200 x 200 x 33 mm
Connector	2 x N-female
Mounting Type	Pole or Wall Mounting
Pole Diameter	Ø25 to 120 mm (Screws supplied are 80 mm long)
Mechanical Movement	±45° (Azimuth); ±45° (Elevation)

Mounting Diagram



Antenna Pattern



Ordering Information
Part Number: GE.AN-5P19-02
5GHz 19dBi 2x2 Panel Antenna - Mounting Kit, 2 x N-female Connector

Version: 26 Oct 2021

Part No.: GE.AN-5P19-02

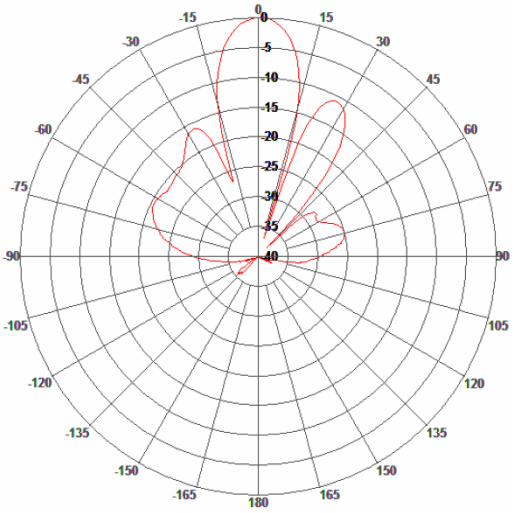
4.9-6.1 GHz Dual Polarization/ Dual Slant Subscriber Antenna

Radiations Patterns

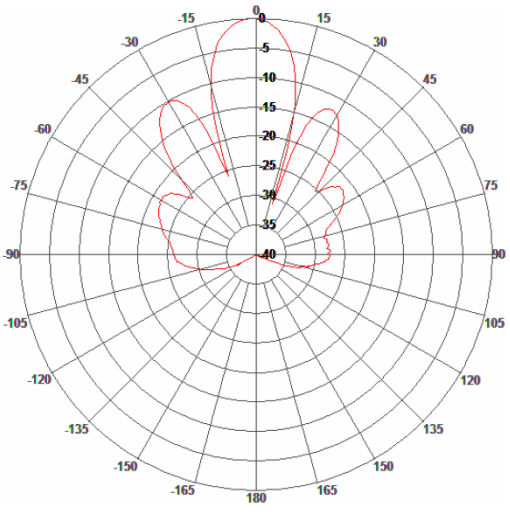
Frequency	5600 MHz
Gain, typ.	19 dBi

Vertical Polarization

E-Plane Pattern

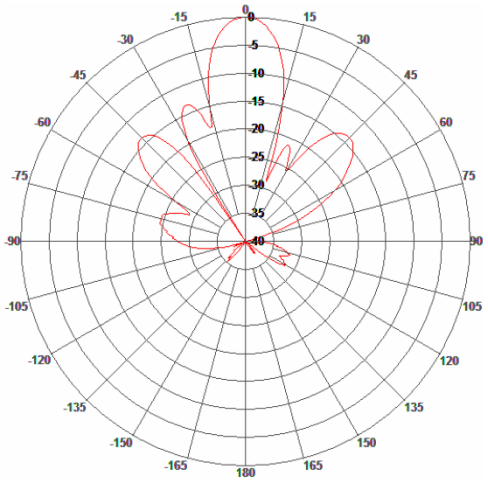


H-Plane Pattern



Horizontal Polarization

E-Plane Pattern



H-Plane Pattern