

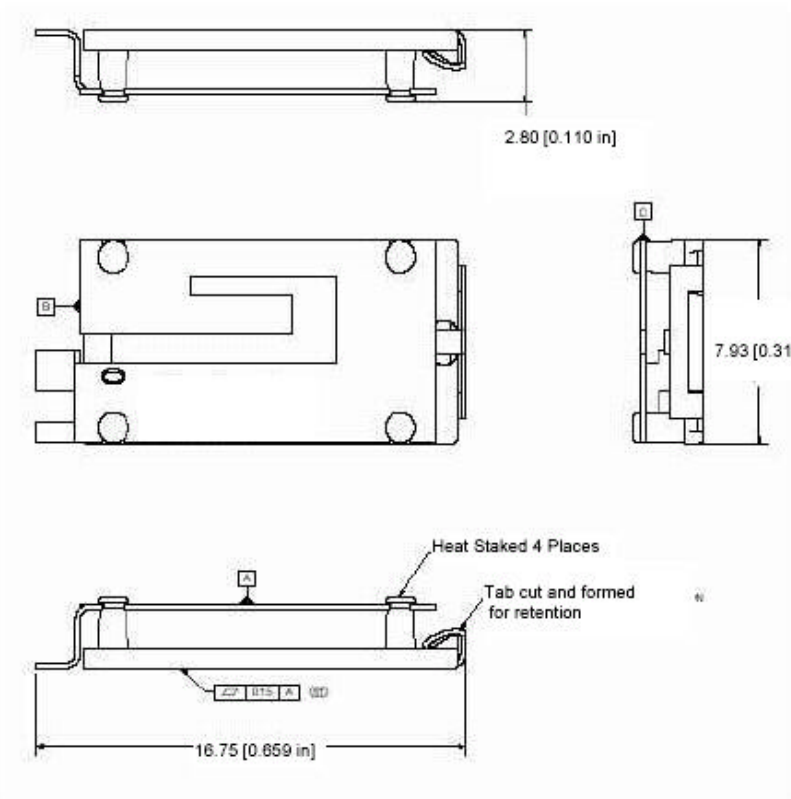
The antenna of AP21U Pure 5G

Manufacturer	Ethertronics
Model Name	GY01002-D
Feature	Appendix I
Type	Shaping
Frequency Range	5.150 ~ 5.825 GHz
Bandwidth	675 MHz
Gain (Max.)	ANT1 – Peak : 4.94 dBi / Ave.: -2.04 dBi ANT2 – Peak : 4.34 dBi / Ave.: -2.45 dBi
VSWR	< 2
Polarization	Linear
Impedance	50 ohm unbalanced
Detail drawing	Appendix II
Antenna Position	Appendix III
Antenna characteristic	Appendix IV
RL & Isolation	Appendix V
Radiation Pattern	Appendix VI

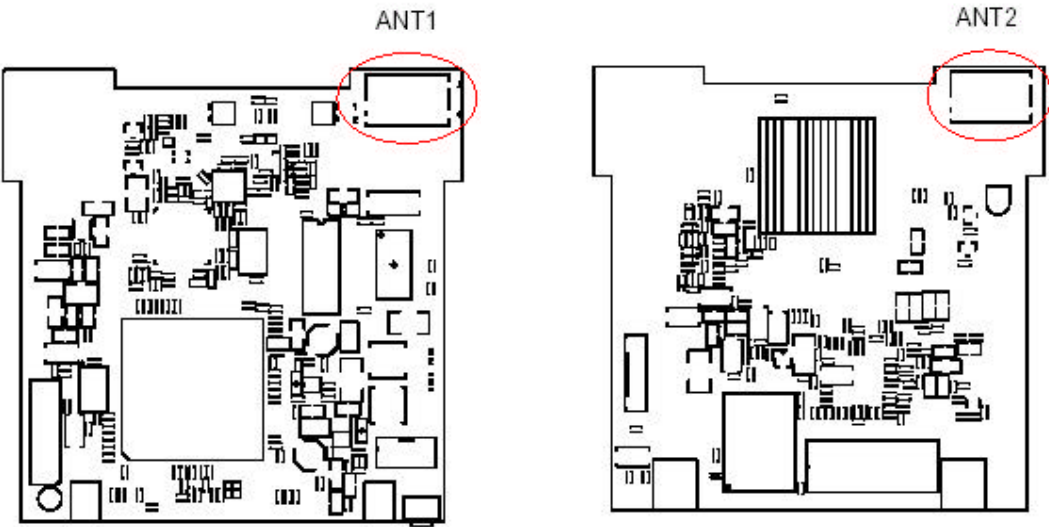
Appendix I : Feature



Appendix II : Detail Drawing



Appendix III : Antenna Position



Appendix IV : Antenna Characteristic

ANT1 :

Typical Characteristics ant1



802.11 a

Electrical characteristics:

Freq. Range: 5.15-5.825 GHz

Best Efficiency: 88%

Overall Efficiency: 73%

Gain max: 4.94dBi

Front to back ratio: 5 dB

Polarization: linear

VSWR: 2.0:1

Power Handling: 1 W cw

Feed point: 50Ω unbalanced

ANT2 :

Typical Characteristics ant2



802.11 a

Electrical characteristics:

Freq. Range: 5.15-5.825 GHz

Best Efficiency: 71%

Overall Efficiency: 61%

Gain max: 4.34dBi

Front to back ratio: 5 dB

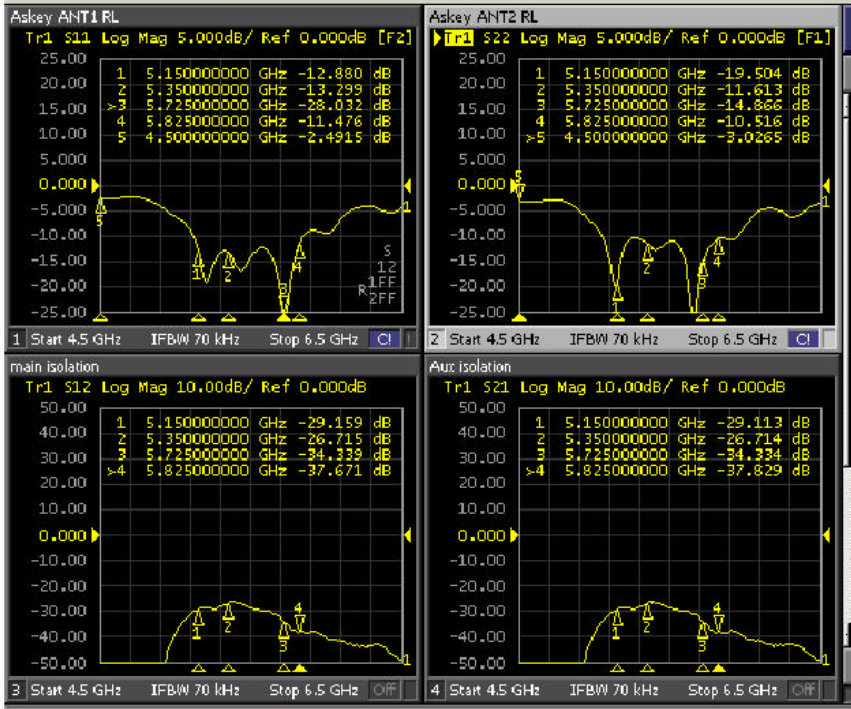
Polarization: linear

VSWR: 2.0:1

Power Handling: 1 W cw

Feed point: 50Ω unbalanced

RL and Isolation of ant1& ant2

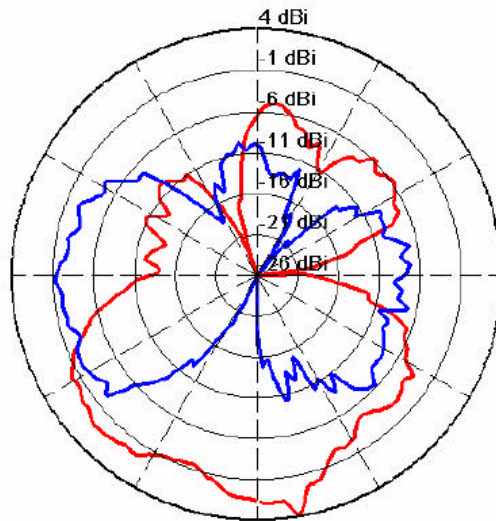


Appendix VI : Radiation Pattern

Ant1 up(H)



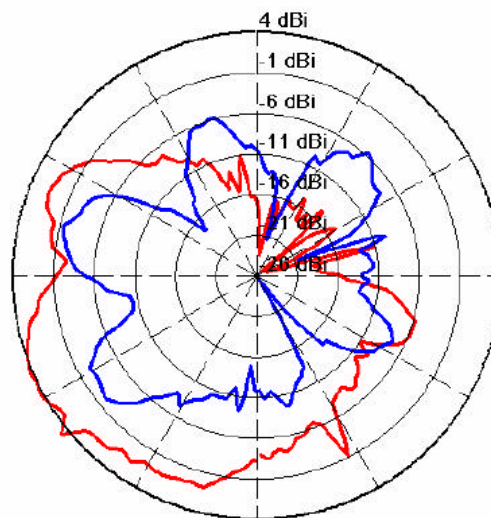
Frequency = 5.3 GHz Gain_{max} = 3.8431 dBi Gain_{avg.} = -2.3226 dBi



Ant1 (E)



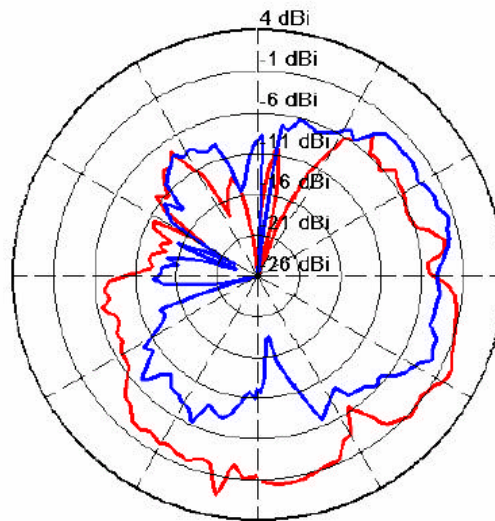
Frequency = 5.75 GHz Gain_{max} = 4.9417 dBi Gain_{avg.} = -1.3027 dBi



Ant1 (EE)



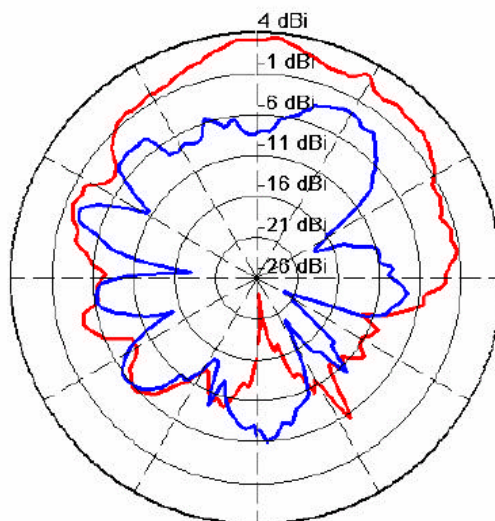
Frequency = 5.8 GHz Gain_{max} = 1.4231 dBi Gain_{avg.} = -2.4996 dBi



Ant2 up(H)



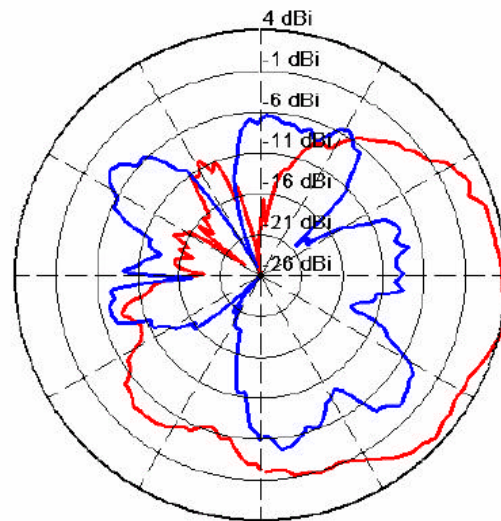
Frequency = 5.5 GHz Gain_{max} = 3.5761 dBi Gain_{avg.} = -1.2419 dBi



Ant2 (E)



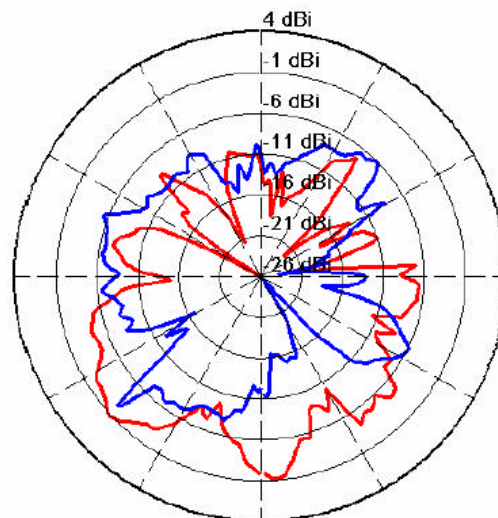
Frequency = 5.45 GHz Gain_{max} = 4.3407 dBi Gain_{avg.} = -0.91614 dBi



Ant2 down(EE)



Frequency = 5.85 GHz Gain_{max} = -0.84115 dBi Gain_{avg.} = -5.2295 dBi



Test position



Test position : H



Test position : E



Test position : EE