

**FEATURES / BENEFITS**

- 4 ports / 2 cross pol systems in low band (698-960MHz)
- 4 ports / 2 cross pol systems in high band (1710-2690MHz)
- Supporting 4x4 MIMO
- Integrated and field replaceable SRET
- ACU HW Version -2.02
- Optional with Direct Pipe no tilt mounting hardware (Model name Suffix -A-I20)
- Compliant with AISG V2.0 and 3GPP



**Technical features**

**ELECTRICAL SPECIFICATIONS**

Electrical Specification Header		Low Band Array (698-960 MHz) [R1]		
Frequency Band	MHz	698-806	790-894	880-960
Gain Typical	dBi	14.6	14.8	15
Gain Over all Tilts	dBi	13.6 +/- 1	14.4 +/- 0.4	14.7 +/- 0.3
Azimuth Beamwidth 3dB	Deg	62 +/- 5.1	60.7 +/- 2.8	62 +/- 3.1
Elevation Beamwidth 3dB	Deg	16.5 +/- 1.5	14.9 +/- 0.8	13.8 +/- 0.9
Cross Polar Discrimination at Boresight	dB	16.8	18.6	20.5
Cross Polar Discrimination over Sector	dB	6.5	11	7.8
F/B at +/-30deg Total Power	dB	19.3	22.1	22.7
First Upper Side Lobe Suppression	dB	17.8	19.5	17.7
Electrical Downtilt	Deg	2 to 15		
Cross Polar Isolation	dB	26		
Interband Isolation	dB	26		
VSWR	-	1.5		
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150		
Maximum Effective Power per Port	Watt	350		

**ELECTRICAL SPECIFICATIONS**

Electrical Specification Header		Low Band Array (698-960 MHz) [R2]		
Frequency Band	MHz	698-806	790-894	880-960
Gain Typical	dBi	14.6	14.8	15
Gain Over all Tilts	dBi	13.8 +/- 0.8	14.5 +/- 0.3	14.8 +/- 0.2
Azimuth Beamwidth 3dB	Deg	62.6 +/- 4.7	62.1 +/- 3.7	62.4 +/- 2.5
Elevation Beamwidth 3dB	Deg	16.2 +/- 1.4	14.8 +/- 0.9	13.6 +/- 0.8
Cross Polar Discrimination at Boresight	dB	16.6	18.4	22.5
Cross Polar Discrimination over Sector	dB	6.9	10.8	7.6
F/B at +/-30deg Total Power	dB	18.8	21.5	23.5
First Upper Side Lobe Suppression	dB	16.7	17.8	16.2
Electrical Downtilt	Deg	2 to 15		
Cross Polar Isolation	dB	26		
Interband Isolation	dB	26		
VSWR	-	1.5		
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150		
Maximum Effective Power per Port	Watt	350		

**ELECTRICAL SPECIFICATIONS**

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y1]				
<b>Frequency Band</b>	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
<b>Gain Typical</b>	dBi	17.3	17.5	18.1	18.1	18.9
<b>Gain Over all Tilts</b>	dBi	16.9 +/- 0.4	17.2 +/- 0.3	17.5 +/- 0.6	17.7 +/- 0.4	18.5 +/- 0.4
<b>Azimuth Beamwidth 3dB</b>	Deg	57.4 +/- 3.5	60.2 +/- 3.7	58.4 +/- 6.4	61.2 +/- 7.2	52.8 +/- 5.1
<b>Elevation Beamwidth 3dB</b>	Deg	6.8 +/- 0.5	6.3 +/- 0.3	5.8 +/- 0.6	5.1 +/- 0.2	4.7 +/- 0.4
<b>Cross Polar Discrimination at Boresight</b>	dB	14.4	16	15.6	17.4	22.1
<b>Cross Polar Discrimination over Sector</b>	dB	8.7	6.4	5.1	1.8	0.9
<b>F/B at +/-30deg Total Power</b>	dB	22.7	22.7	22.7	19.1	21.5
<b>First Upper Side Lobe Suppression</b>	dB	20.5	20.6	20.4	17.8	15.9
<b>Electrical Downtilt</b>	Deg	2 to 12				
<b>Cross Polar Isolation</b>	dB	26				
<b>Interband Isolation</b>	dB	26				
<b>VSWR</b>	-	1.5				
<b>Passive Intermodulation (3rd Order, 2 x 43dBm)</b>	dBc	-150				
<b>Maximum Effective Power per Port</b>	Watt	250				

**ELECTRICAL SPECIFICATIONS**

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y2]				
Frequency Band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	17.3	17.5	18	18.2	19
Gain Over all Tilts	dBi	16.9 +/- 0.4	17.2 +/- 0.3	17.5 +/- 0.5	17.8 +/- 0.4	18.5 +/- 0.5
Azimuth Beamwidth 3dB	Deg	56.7 +/- 3.8	58.5 +/- 3	58 +/- 5.8	59.5 +/- 4.4	52.4 +/- 4.6
Elevation Beamwidth 3dB	Deg	6.9 +/- 0.5	6.3 +/- 0.4	5.9 +/- 0.6	5.1 +/- 0.2	4.7 +/- 0.4
Cross Polar Discrimination at Boresight	dB	13.7	15.9	14.2	15.4	21.7
Cross Polar Discrimination over Sector	dB	8.3	5.2	5.6	1.1	0.8
F/B at +/-30deg Total Power	dB	22.3	22.7	22.6	19.4	20.7
First Upper Side Lobe Suppression	dB	19.3	21.5	20.1	15.1	13.9
Electrical Downtilt	Deg	2 to 12				
Cross Polar Isolation	dB	26				
Interband Isolation	dB	26				
VSWR	-	1.5				
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150				
Maximum Effective Power per Port	Watt	250				

**ELECTRICAL SPECIFICATIONS**

Impedance	Ohm	50
Polarization	Deg	±45°

**MECHANICAL SPECIFICATIONS**

Dimensions - H x W x D	mm (in)	1588 x 499 x 199 (62.5 x 19.6 x 7.8)
Weight (Antenna Only)	kg (lb)	27 (59.5)
Packing size- HxWxD	mm (in)	1840 x 595 x 295 (72.4 x 23.4 x 11.6)
Connector type		8 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiber Glass / Light Grey RAL7035

**TESTING AND ENVIRONMENTAL**

Temperature Range	°C (°F)	-40 to 60 (-40 to 140 )
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	200 (150 )
Wind Load @Rated Wind Front	N	534
Wind Load @Rated Wind Side	N	424
Wind Load @Rated Wind Rear	N	634

**APXVBLL15B\_43-C-I20, -A-I20**

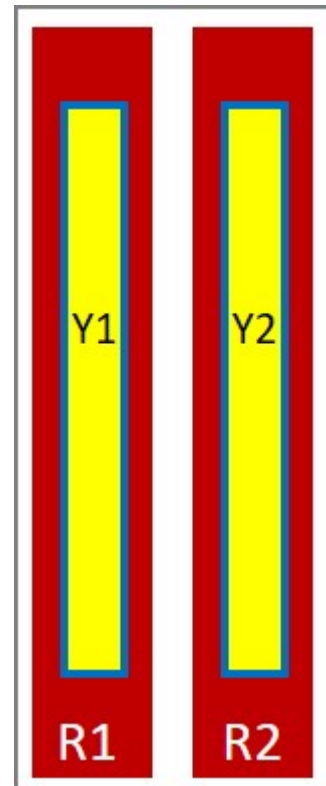
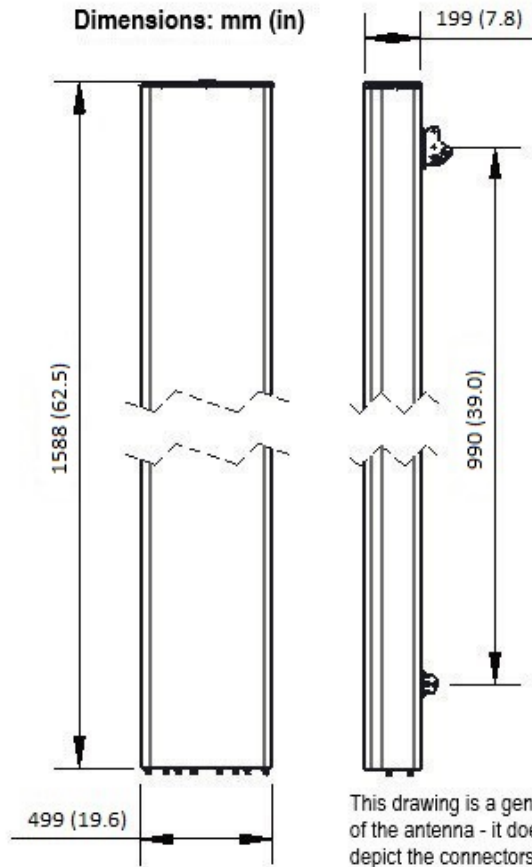
8-Ports, X-Pol, Panel Antenna, 1.5m, 2x 698-960/2x 1710-2690MHz, 65deg, Integrated RET

**ORDERING INFORMATION**

Order No.	Configuration	Mounting Hardware	Mounting Pipe Diameter	Shipping Weight kg(lb)	Mounting Hardware Weight kg(lb)
<b>APXVBLL15B_43-C-I20</b>	Internal RET (ACU-I20-B4)	APM50-B1	50-110mm	37.0 (81.6)	4.5 (9.9)
<b>APXVBLL15B_43-A-I20</b>	Internal RET (ACU-I20-B4)	APM50-B1N (Direct Pipe no tilt)	50-110mm	35.9 (79.1)	3.4 (7.5)



**Dimensions: mm (in)**



[External Document Links](#)

[APM50\\_Series\\_Installation\\_Instructions](#)

Notes

- All electrical parameters are compliant with BASTA NGMN 11.1 requirements.
- For additional mounting information please click "External Document Links".

- **Radiating patterns:** [Request pattern files](#)