PRODUCT DATASHEET

P3-BBUU4L26-N0

16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

FEATURES / BENEFITS

- 4 ports / 2 cross pol system in low band (694-960MHz)
- 4 ports / 2 cross pol systems in high band (1427-2690MHz)
- 8 ports / 4 cross pol systems in high band (1695-2690MHz)
- Supports 4x4 MIMO
- Integrated and field replaceable SRET
- ACU HW Version: HRLS200608H1.00
- Compliant with AISG V2.0 and 3GPP
- Optimized radome for low windload

Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (694-960 MHZ) [R1]		
Frequency Band	MHz	694-806	790-894	880-960
Gain Typical	dBi	15.7	16.1	16.8
Gain Over all Tilts	dBi	15.3 +/- 0.4	15.7 +/- 0.4	16.2 +/- 0.6
Azimuth Beamwidth 3dB	Deg	79.6 +/- 9.7	69.1 +/- 13.7	58.2 +/- 6.3
Elevation Beamwidth 3dB	Deg	9.3 +/- 0.9	8.2 +/- 0.7	7.3 +/- 0.5
Cross Polar Discrimination at Boresight	dB	24.8	24.9	25
Cross Polar Discrimination over Sector	dB	11.7	8.8	7
F/B at +/-30deg Total Power	dB	20.5	21.9	22.5
First Upper Side Lobe Suppression	dB	17.1	17.4	15.6
Electrical Downtilt	Deg	2 to 12		
Cross Polar Isolation	dB	26		
Interband Isolation	dB	25		
VSWR	-	1.5		
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153		
Maximum Effective Power per Port	Watt	250		

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16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (694-960 MHZ) [R2]		
Frequency Band	MHz	694-806	790-894	880-960
Gain Typical	dBi	15.8	16	16.2
Gain Over all Tilts	dBi	15.5 +/- 0.3	15.7 +/- 0.3	15.9 +/- 0.3
Azimuth Beamwidth 3dB	Deg	71 +/- 6.1	63.9 +/- 7.4	58.8 +/- 7.1
Elevation Beamwidth 3dB	Deg	8.7 +/- 0.4	8 +/- 0.6	7.3 +/- 0.4
Cross Polar Discrimination at Boresight	dB	24.6	30.9	25.6
Cross Polar Discrimination over Sector	dB	10.3	8.2	6.2
F/B at +/-30deg Total Power	dB	19.9	21.4	22.2
First Upper Side Lobe Suppression	dB	13.9	16.7	17.7
Electrical Downtilt	Deg	2 to 12		
Cross Polar Isolation	dB	26		
Interband Isolation	dB	25		
VSWR	-	1.5		
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153		
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16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND ARRAY (1695-2690 MHZ) [Y1]				
Frequency Band	MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	17.1	17.6	18.3	17.9	18.3
Gain Over all Tilts	dBi	16.5 +/- 0.6	17 +/- 0.6	17.4 +/- 0.9	17.4 +/- 0.5	17.7 +/- 0.6
Azimuth Beamwidth 3dB	Deg	67.2 +/- 6.6	61.9 +/- 7	57.6 +/- 6.2	60.8 +/- 6.7	59.2 +/- 8
Elevation Beamwidth 3dB	Deg	6.7 +/- 0.5	6.1 +/- 0.3	5.8 +/- 0.4	5.3 +/- 0.3	4.8 +/- 0.3
Cross Polar Discrimination at Boresight	dB	24.7	25.2	17	15.8	17.7
Cross Polar Discrimination over Sector	dB	7.6	5.6	2.6	5	1.3
F/B at +/-30deg Total Power	dB	21	19.4	20.4	20.8	21.2
First Upper Side Lobe Suppression	dB	18.2	17.9	18.1	18.8	20.2
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	-153				
Maximum Effective Power per Port	Watt	200				

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16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND ARRAY (1695-2690 MHZ) [Y2]				
Frequency Band	MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	17	17.1	17.8	17.4	18.2
Gain Over all Tilts	dBi	16.2 +/- 0.8	16.7 +/- 0.4	17.1 +/- 0.7	17.1 +/- 0.3	17.7 +/- 0.5
Azimuth Beamwidth 3dB	Deg	69.4 +/- 7.7	62.8 +/- 5.3	57.7 +/- 6.5	60.9 +/- 4.6	59.2 +/- 5.7
Elevation Beamwidth 3dB	Deg	6.6 +/- 0.5	6.1 +/- 0.3	5.7 +/- 0.4	5.3 +/- 0.2	4.8 +/- 0.4
Cross Polar Discrimination at Boresight	dB	18.7	19.7	19.3	20.9	23.1
Cross Polar Discrimination over Sector	dB	6.1	2.7	1.2	4.1	1.3
F/B at +/-30deg Total Power	dB	19.2	21.9	22.5	23.6	23
First Upper Side Lobe Suppression	dB	16.9	17.8	17.9	19.1	19.8
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	-153				
Maximum Effective Power per Port	Watt	200				

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16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND ARRAY (1427-2690 MHZ) [Y3]				
Frequency Band	MHz	1427-1518	1695-1880	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	16.4	18	18.6	17.9	17.8
Gain Over all Tilts	dBi	15.8 +/- 0.6	17.3 +/- 0.7	17.8 +/- 0.8	17.5 +/- 0.4	17.3 +/- 0.5
Azimuth Beamwidth 3dB	Deg	54.3 +/- 6	56.4 +/- 7.3	60.1 +/- 6.2	61.8 +/- 2.9	61.6 +/- 6.6
Elevation Beamwidth 3dB	Deg	8.4 +/- 0.5	6.8 +/- 0.4	6 +/- 0.4	5.4 +/- 0.2	5 +/- 0.3
Cross Polar Discrimination at Boresight	dB	20.9	18.9	16.3	21.5	20.5
Cross Polar Discrimination over Sector	dB	8.3	12.8	6.6	0.5	0.7
F/B at +/-30deg Total Power	dB	20.4	26	26.8	27.4	27.2
First Upper Side Lobe Suppression	dB	16.4	15.4	15	15.3	12.9
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	-153				
Maximum Effective Power per Port	Watt	200				

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16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND ARRAY (1427-2690 MHZ) [Y4]				
Frequency Band	MHz	1427-1518	1695-1880	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	16.3	17.7	18.1	17.6	17.4
Gain Over all Tilts	dBi	16 +/- 0.3	16.9 +/- 0.8	17.5 +/- 0.6	17.2 +/- 0.4	17 +/- 0.4
Azimuth Beamwidth 3dB	Deg	55.3 +/- 3.1	62.3 +/- 9.3	58.3 +/- 4.2	61.5 +/- 3.2	64.7 +/- 4.1
Elevation Beamwidth 3dB	Deg	8 +/- 0.4	6.6 +/- 0.4	5.9 +/- 0.3	5.4 +/- 0.2	5.1 +/- 0.3
Cross Polar Discrimination at Boresight	dB	23.1	20.5	18.8	22.1	22.9
Cross Polar Discrimination over Sector	dB	10.2	14	7.8	0.6	0.7
F/B at +/-30deg Total Power	dB	22.2	27.3	27.7	26.4	26.3
First Upper Side Lobe Suppression	dB	13	15.8	16.5	15.3	15.2
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	-153				
Maximum Effective Power per Port	Watt	200				

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16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND ARRAY (1695-2690 MHZ) [Y5]				
Frequency Band	MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	16.9	17.6	18.1	17.6	18.1
Gain Over all Tilts	dBi	16.4 +/- 0.5	17.1 +/- 0.5	17.4 +/- 0.7	17.3 +/- 0.3	17.7 +/- 0.4
Azimuth Beamwidth 3dB	Deg	69.3 +/- 5.6	63 +/- 7.8	58.1 +/- 6.5	64.6 +/- 7.5	60.3 +/- 6.1
Elevation Beamwidth 3dB	Deg	6.8 +/- 0.4	6.3 +/- 0.4	5.8 +/- 0.5	5.3 +/- 0.3	4.8 +/- 0.3
Cross Polar Discrimination at Boresight	dB	26.7	24.1	18.5	17.1	17.4
Cross Polar Discrimination over Sector	dB	8.5	6.9	1.8	3	1.2
F/B at +/-30deg Total Power	dB	22.2	22.7	22.4	20.5	22.1
First Upper Side Lobe Suppression	dB	18	16.3	15.3	18.5	19.3
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	-153				
Maximum Effective Power per Port	Watt	200				

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16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND ARRAY (1695-2690 MHZ) [Y6]				
Frequency Band	MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	16.8	17.3	17.8	17.4	18.2
Gain Over all Tilts	dBi	16.2 +/- 0.6	16.7 +/- 0.6	17.1 +/- 0.7	17.1 +/- 0.3	17.7 +/- 0.5
Azimuth Beamwidth 3dB	Deg	70.9 +/- 5.5	63.8 +/- 5.4	58 +/- 7.3	61.7 +/- 3.7	59.7 +/- 4.1
Elevation Beamwidth 3dB	Deg	6.6 +/- 0.5	6.1 +/- 0.3	5.7 +/- 0.4	5.3 +/- 0.2	4.8 +/- 0.3
Cross Polar Discrimination at Boresight	dB	21.1	21.7	22.8	28.9	25
Cross Polar Discrimination over Sector	dB	7.8	6	1.8	4.5	0.6
F/B at +/-30deg Total Power	dB	20.5	22	22.1	22.9	23.5
First Upper Side Lobe Suppression	dB	16.1	16.2	17.9	18.3	21.1
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	-153				
Maximum Effective Power per Port	Watt	200				

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	2750 x 469 x 205 (108.3 x 18.5 x 8.1)
Weight (Antenna Only)	kg (lb)	42 (92.6)
Weight (Mounting Hardware only)	kg (lb)	9 (19.8)
Packing size- HxWxD	mm (in)	2930 x 544 x 330 (115.4 x 21.4 x 13)
Shipping Weight	kg (lb)	58.4 (128.7)
Connector type		16x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiberglass / Light Gray

TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		DC Ground
Survival/Rated Wind Velocity	km/h	200 (150)

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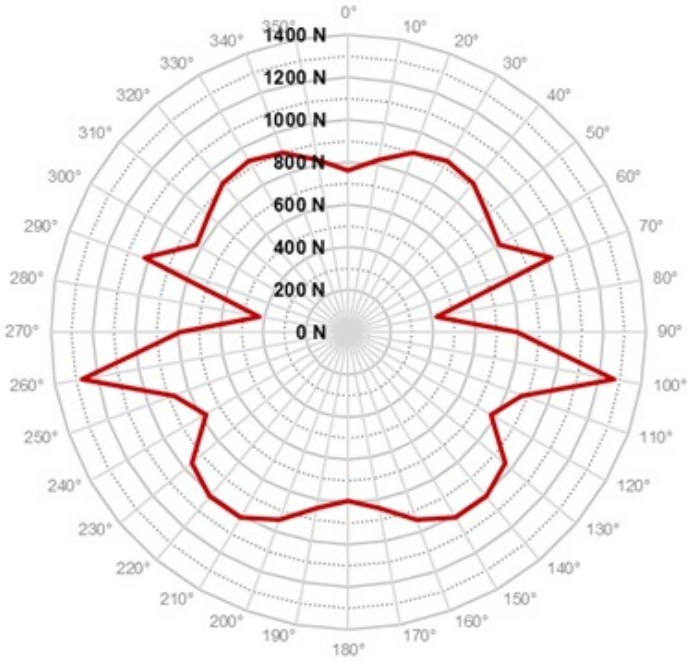
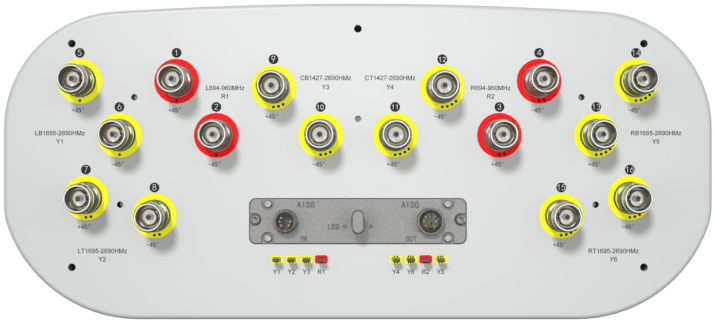
16-Ports, X-Pol, Panel Antenna, 2.6m, 2x 694-960/2x 1427-2690/4x 1695-2690MHz, 65deg, Integrated RET

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
P3-BBUU4L26-N0 (Material Code: 500xxxxx)	Internal RET (ACU-I20-H12K)	APM50-HS	50-125 mm	58.4 kg
P3-BBUU4L26-S0 (Material Code: 50016117)	Internal RET (ACU-X20) Dynamic Site Sharing mode	APM50-HS	50-125 mm	58.4 kg
P3-BBUU4L26-S0 (Material Code: 50016477)	Internal RET (ACU-X20) Static Site Sharing mode	APM50-HS	50-125 mm	58.4 kg



Rated Wind Speed, Km/h	150
Wind Load Frontal, Resultant, N	763
Wind Load Side, Resultant, N	792
Wind Load Rear, Resultant, N	795
Maximum Wind Load, Resultant, N	1269
Maximum Wind Load, Drag Force, N	1009



Port	Array	Frequency	RET	AISG RET UID
1	R1	694-960 MHz	R1	RFxxxxxxxxxxx-R1
2				
3	R2	694-960 MHz	R2	RFxxxxxxxxxxx-R2
4				
5	Y1	1695-2690 MHz	Y1	RFxxxxxxxxxxx-Y1
6				
7	Y2	1695-2690 MHz	Y2	RFxxxxxxxxxxx-Y2
8				
9	Y3	1427-2690 MHz	Y3	RFxxxxxxxxxxx-Y3
10				
11	Y4	1427-2690 MHz	Y4	RFxxxxxxxxxxx-Y4
12				
13	Y5	1695-2690 MHz	Y5	RFxxxxxxxxxxx-Y5
14				
15	Y6	1695-2690 MHz	Y6	RFxxxxxxxxxxx-Y6
16				

NOTE: RET motors will tilt one at a time, not simultaneously

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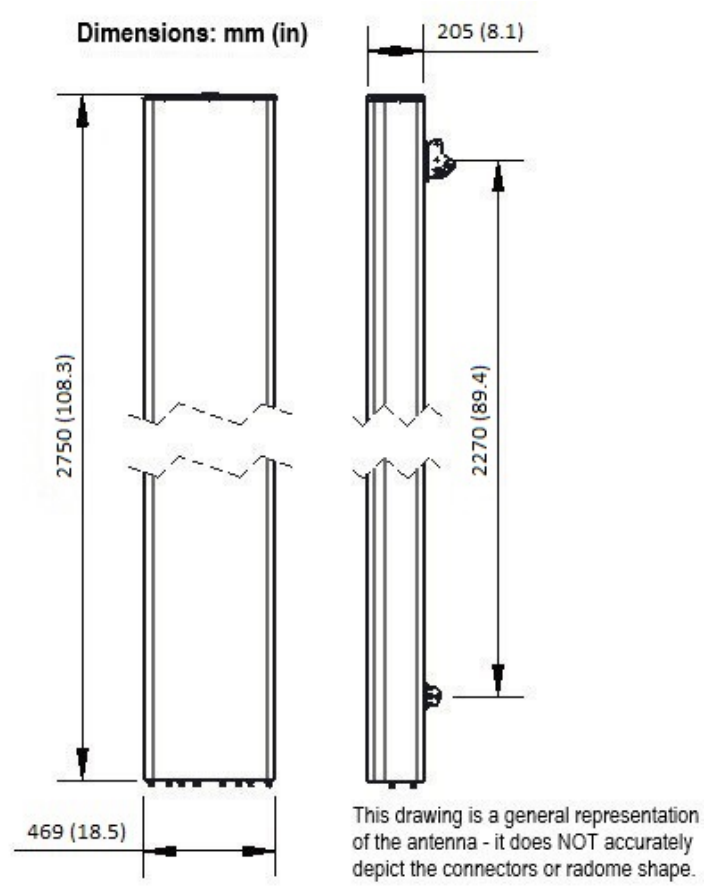

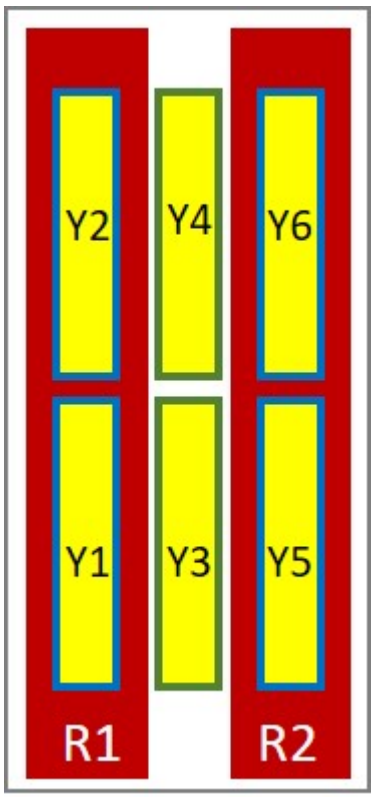

External Document Links

APM50_Series_Installation_Instructions

Notes

- All electrical parameters are compliant with NGMN P-BASTA 12 requirements.
- For additional mounting information please click "External Document Links".
- **Radiating patterns:** Request pattern files