

## APXVB3L26B\_43-C-I20

### Features

- 2 ports / 1 cross pol system in low band (698-960 MHz)
- 6 ports / 3 cross pol systems in high band (1710-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version: 2.02
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(1x) 698-960	(3x) 1710-2690		
	Array	■ R1	■ Y1	■ Y2	■ Y3
	Connector	1-2	3-4	5-6	7-8
		8 PORTS			
	Polarization	XPOL			
	Azimuth Beamwidth (avg)	65°	65°		
	Electrical Downtilt	2-11°	2-11°		
	Dimensions	2690 x 350 x 200 mm (105.9 x 13.8 x 7.9 in)			

### ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVB3L26B_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	43.5 kg (95.9 lbs)



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## APXVB3L26B\_43-C-I20

### ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	17.2 ± 0.3	17.2 ± 0.2	17.3 ± 0.3
	Max Gain	dBi	17.5	17.4	17.6
Azimuth Beamwidth (3 dB)		degrees	68.3° ± 1.7°	67.3° ± 1.3°	69.3° ± 0.8°
Elevation Beamwidth (3 dB)		degrees	7.8° ± 1.1°	7.7° ± 0.5°	6.9° ± 0.5°
Electrical Downtilt		degrees	2-11°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)		
Front-to-Back Ratio, Total Power, ± 30°		dB	25.1	24.6	24.6
First Upper Side Lobe Suppression		dB	16.7	17.7	15.4
Cross Polar Discrimination Over Sector		dB	12.3	11	12.6
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	27.2	26.7	27.2
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	26		
Interband Isolation		dB	26		

Specifications follow BASTA guidelines.

### ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.2 ± 0.5	17.3 ± 0.5	17.7 ± 0.7	17.2 ± 0.6	17.2 ± 0.9
	Max Gain	dBi	17.7	17.8	18.4	17.8	18.1
Azimuth Beamwidth (3 dB)		degrees	60.5° ± 5.5°	64.5° ± 2.9°	64.1° ± 5.4°	67.3° ± 6.3°	58.4° ± 4.5°
Elevation Beamwidth (3 dB)		degrees	8.1° ± 0.6°	7.4° ± 0.6°	7° ± 0.6°	6.1° ± 0.3°	5.6° ± 0.4°
Electrical Downtilt		degrees	2-11°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	20.2	23.8	24	25.4	23.6
First Upper Side Lobe Suppression		dB	17.6	16.4	16.4	17	13.6
Cross Polar Discrimination Over Sector		dB	7.7	8.9	7	7.3	0.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	21.6	22	18.2	14.3	15.8
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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### ELECTRICAL SPECIFICATIONS

■ Y2

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.0 ± 0.6	17.2 ± 0.4	17.4 ± 0.6	16.9 ± 0.6	17.1 ± 0.7
	Max Gain	dBi	17.6	17.6	18.0	17.5	17.8
Azimuth Beamwidth (3 dB)		degrees	63.8° ± 7°	66.5° ± 2.6°	66.7° ± 4.1°	67.2° ± 5.4°	60° ± 3°
Elevation Beamwidth (3 dB)		degrees	6.9° ± 0.4°	6.3° ± 0.4°	6° ± 0.6°	5.2° ± 0.3°	4.8° ± 0.3°
Electrical Downtilt		degrees	2-11°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	21.2	23.5	24.2	23.5	22.2
First Upper Side Lobe Suppression		dB	15.1	16.8	17.3	19.6	15.7
Cross Polar Discrimination Over Sector		dB	8.3	8.2	7.8	10.3	0.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.8	19.4	20.1	20.7	19.8
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

Specifications follow BASTA guidelines.

### ELECTRICAL SPECIFICATIONS

■ Y3

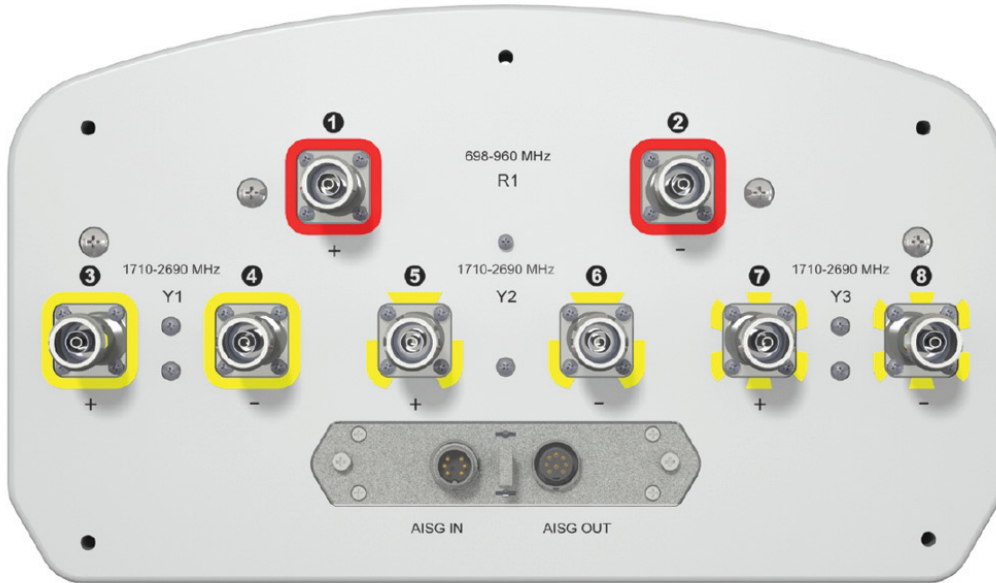
Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.0 ± 0.5	17.3 ± 0.4	17.8 ± 0.8	17.2 ± 0.8	17.2 ± 0.9
	Max Gain	dBi	17.5	17.7	18.6	18.0	18.1
Azimuth Beamwidth (3 dB)		degrees	60.1° ± 5°	64.6° ± 3.2°	63.4° ± 6.3°	67.6° ± 7.6°	58.3° ± 3.9°
Elevation Beamwidth (3 dB)		degrees	8.3° ± 0.6°	7.5° ± 0.6°	7° ± 0.6°	6.2° ± 0.3°	5.7° ± 0.4°
Electrical Downtilt		degrees	2-11°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	21.4	23	23.5	24.7	23.9
First Upper Side Lobe Suppression		dB	16.6	14.4	15.1	15.8	13.3
Cross Polar Discrimination Over Sector		dB	8.1	8.6	6.6	7.5	1.6
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20	19.2	17.6	17.4	18.1
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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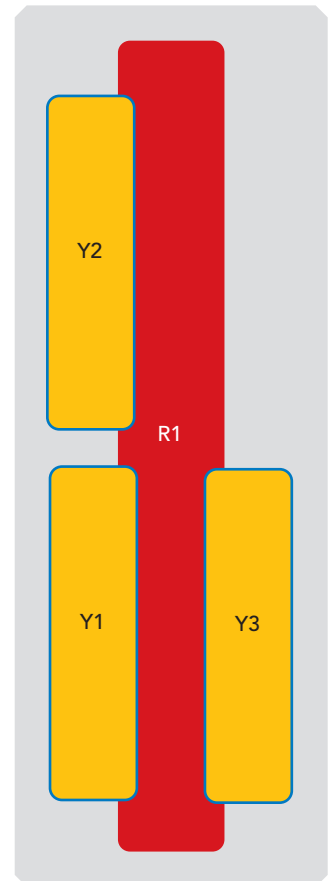
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## BOTTOM VIEW - LABELING



## ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
<span style="color: red;">■</span> R1	698-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
<span style="color: yellow;">■</span> Y1	1710-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
<span style="color: yellow;">■</span> Y2	1710-2690 MHz	5-6	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2
<span style="color: yellow;">■</span> Y3	1710-2690 MHz	7-8	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y3



The illustration is not shown to scale.

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### MECHANICAL SPECIFICATIONS

Length	mm (in)	2690 (105.9)
Width	mm (in)	350 (13.8)
Depth	mm (in)	200 (7.9)
Net Weight - Antenna Only	kg (lbs)	32.5 (71.7)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 1550 (348)
	Side	N (lbf) 1003 (225)
	Rear	N (lbf) 1923 (432)
Survival Wind Speed / Rated Wind Speed	km/h (mph)	200 (150)
Connector Type	--	(8x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color	---	Light Grey RAL7035
Radome Material	---	Fiberglass
Lightning Protection	---	DC Ground
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in) 2940 x 445 x 295 (115.7 x 17.5 x 11.6)
	Shipping Weight	kg (lbs) 43.5 (95.9)

### ENVIRONMENTAL SPECIFICATIONS

Environmental Standard	---	ETS 300 019
Operating Temperature	degrees	-40° to +60° C (-40° to +140° F)
Product Environmental Compliance	---	Product is RoHS Compliant

## APXVB3L26B\_43-C-I20

### ACCESSORIES

Accessories may be ordered separately unless otherwise indicated.

ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-110 mm (2.0-4.3 in) <i>Shipped with antenna</i>	APM50-B1	4.5 kg (9.9 lbs)

### INSTALLATION

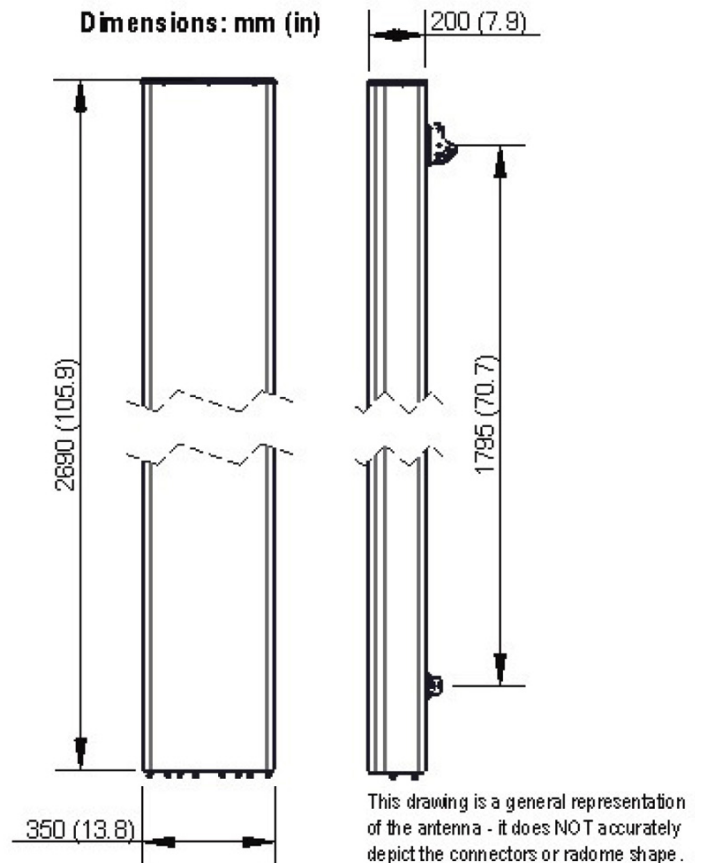
Please read all installation notes before installing product.



- Always attach the antenna using all mounting points.
- Do not install antenna with the connectors facing upwards.

### EXTERNAL DOCUMENT LINKS

[APM50 Mounting Kit Series Installation Instructions](#)



### NOTES

- Specifications follow BASTA guidelines.
- For additional mounting information, please check **External Document Links**.
- For Radiating Patterns: [Request pattern files](#)