

65°

1950 mm

INTEGRATED RET

SITE SHARING OPTIONAL

APXVB3L20B_43-C-I20 APXVB3L20B_43-C-I20S

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
- Optional with Site Sharing feature (Model name suffix -I20S)
- 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	2-12°	2-11°		
	Dimensions	1950 x 350 x 200 mm (76.8 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	MOUNTING HARDWARE WEIGHT
APXVB3L20B_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	31.5 kg (69.4 lbs)	4.5 kg (9.9 lbs)
APXVB3L20B_43-C-I20S	ACU-X20-B4 Internal RET for Site Sharing Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	31.5 kg (69.4 lbs)	4.5 kg (9.9 lbs)



Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

65°

1950 mm

INTEGRATED RET

SITE SHARING OPTIONAL

APXVB3L20B_43-C-I20

APXVB3L20B_43-C-I20S

ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	15.4 ± 0.6	16.0 ± 0.6	16.6 ± 0.3
	Max Gain	dBi	16.0	16.6	16.9
Azimuth Beamwidth (3 dB)		degrees	67.9° ± 1.6°	66.5° ± 1.7°	65.6° ± 0.6°
Elevation Beamwidth (3 dB)		degrees	11.9° ± 0.9°	10.6° ± 0.7°	9.3° ± 0.6°
Electrical Downtilt		degrees	2-12°		
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	24.4	25.1	25.7
First Upper Side Lobe Suppression		dB	15.0	17.1	16.1
Cross Polar Discrimination Over Sector		dB	11.3	10.2	10.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	27.1	26.8	24.6
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	15.2 ± 0.6	15.8 ± 0.3	15.9 ± 0.3	15.0 ± 0.8	15.8 ± 0.6
	Max Gain	dBi	15.8	16.1	16.2	15.8	16.4
Azimuth Beamwidth (3 dB)		degrees	62.5° ± 4.4°	65.5° ± 4.1°	65.2° ± 4.6°	67.4° ± 6.1°	61.3° ± 2.7°
Elevation Beamwidth (3 dB)		degrees	9.9° ± 0.6°	9.1° ± 0.4°	8.6° ± 0.6°	7.8° ± 0.7°	7.3° ± 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	19.8	21.5	20.6	19.6	20.5
First Upper Side Lobe Suppression		dB	13.1	11.9	12.0	12.0	14.3
Cross Polar Discrimination Over Sector		dB	10.5	10.1	7.3	8.5	5.9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.8	22.1	22.0	14.2	15.5
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

Specifications follow BASTA guidelines.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

65°

1950 mm

INTEGRATED RET

SITE SHARING OPTIONAL

APXVB3L20B_43-C-I20

APXVB3L20B_43-C-I20S

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	14.9 ± 0.5	15.6 ± 0.4	15.8 ± 0.5	14.7 ± 0.8	15.6 ± 0.6
	Max Gain	dBi	15.4	16.0	16.3	15.5	16.2
Azimuth Beamwidth (3 dB)		degrees	62° ± 7.9°	67.5° ± 4.7°	66.6° ± 6.3°	71.1° ± 5°	62.1° ± 3°
Elevation Beamwidth (3 dB)		degrees	10.2° ± 0.7°	9.3° ± 0.5°	8.8° ± 0.6°	7.9° ± 0.5°	7.5° ± 0.6°
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	20.3	21.1	21	18.7	20.3
First Upper Side Lobe Suppression		dB	14.3	13.6	13.3	10.8	14.3
Cross Polar Discrimination Over Sector		dB	10.3	9.7	8.2	6.3	3.1
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	21.8	23.9	17.5	13.5	12.7
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	15.1 ± 0.7	15.9 ± 0.3	15.9 ± 0.3	14.9 ± 0.6	15.7 ± 0.7
	Max Gain	dBi	15.8	16.2	16.2	15.5	16.4
Azimuth Beamwidth (3 dB)		degrees	61° ± 2.5°	63.4° ± 4.5°	63.8° ± 6.4°	67.3° ± 5.4°	61.4° ± 3.1°
Elevation Beamwidth (3 dB)		degrees	10° ± 0.6°	9.2° ± 0.5°	8.7° ± 0.7°	7.8° ± 0.6°	7.3° ± 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	19.8	21.6	21.7	19.1	19.2
First Upper Side Lobe Suppression		dB	12.6	12	11.9	10.6	12.7
Cross Polar Discrimination Over Sector		dB	9.2	9.5	5.7	7	6.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20	19	18.3	15	15.3
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

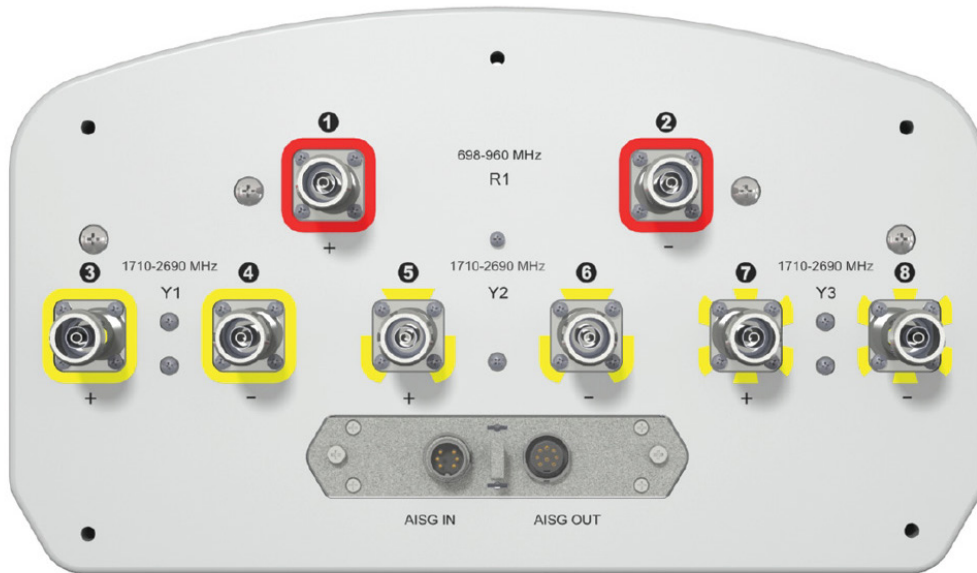
Specifications follow BASTA guidelines.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

APXVB3L20B_43-C-I20

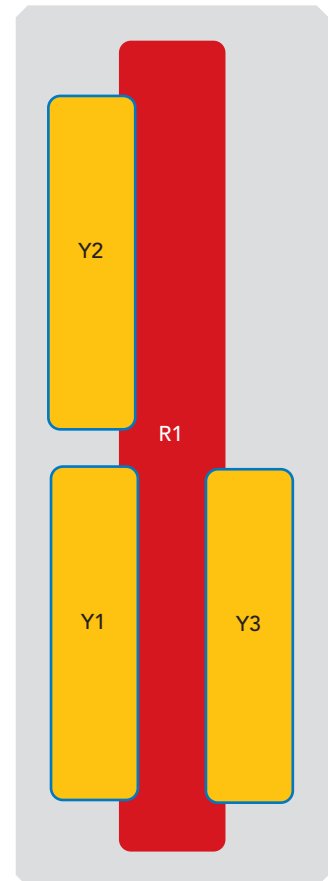
APXVB3L20B_43-C-I20S

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	698-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
■ Y1	1710-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1710-2690 MHz	5-6	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2
■ Y3	1710-2690 MHz	7-8	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y3



The illustration is not shown to scale.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

65°

1950 mm

INTEGRATED RET

SITE SHARING OPTIONAL

APXVB3L20B_43-C-I20

APXVB3L20B_43-C-I20S

MECHANICAL SPECIFICATIONS

Length	mm (in)	1950 (76.8)
Width	mm (in)	350 (13.8)
Depth	mm (in)	200 (7.9)
Net Weight - Antenna Only	kg (lbs)	22.5 (49.6)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 842 (189)
	Side	N (lbf) 481(108)
	Rear	N (lbf) 1025 (230)
Survival Wind Speed	km/h (mph)	200 (124)
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
Shipping	Packing Size (Length x Width x Depth)	mm (in) 2200 x 445 x 295 (86.6 x 17.5 x 11.6)

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

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

65°

1950 mm

INTEGRATED RET

SITE SHARING OPTIONAL

APXVB3L20B_43-C-I20

APXVB3L20B_43-C-I20S

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.

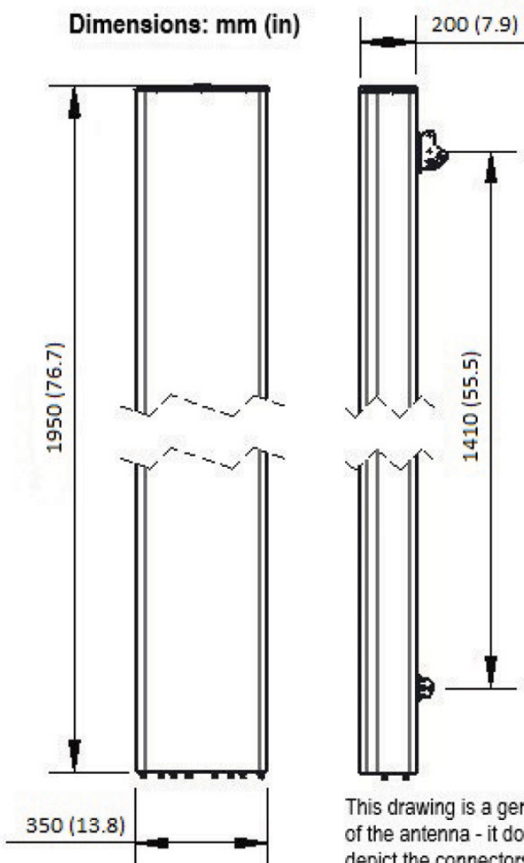


Always attach the antenna using all mounting points.

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](#)