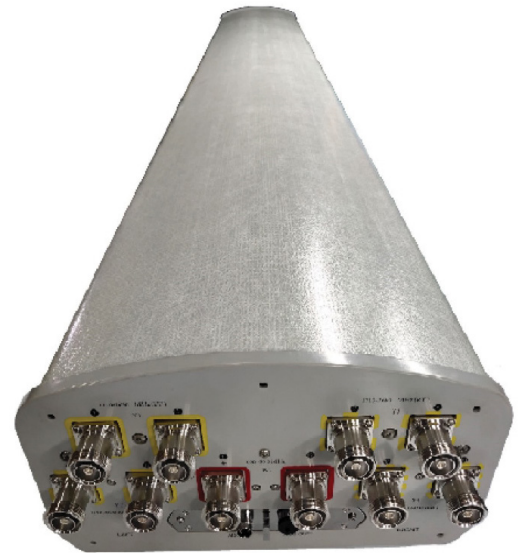


APXVB4L15B_43-C-I20

Features

- 2 ports / 1 cross pol system in low band (698-960 MHz)
- 8 ports / 4 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	(4x) 1710-2690			
	Array	■ R1	■ Y1	■ Y2	■ Y3	■ Y4
	Connector	1-2	3-4	5-6	7-8	9-10
		10 PORTS				
	Polarization	XPOL				
	Azimuth Beamwidth (avg)	65°	65°			
	Electrical Downtilt	2-15°	2-12°			
	Dimensions	1490 x 350 x 200 mm (58.7 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
APXVB4L15B_43-C-I20	ACU-I20-B5 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	29.2 kg (64.4 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.

APXVB4L15B_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	14 ± 0.4	14.3 ± 0.4	14.6 ± 0.5
	Max Gain	dBi	14.4	14.7	15.1
Azimuth Beamwidth (3 dB)		degrees	67.7° ± 1.5°	65.7° ± 1.9°	64.8° ± 2.6°
Elevation Beamwidth (3 dB)		degrees	18° ± 1.5°	16.1° ± 1.2°	14.7° ± 1°
Electrical Downtilt		degrees	2-15°		
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	23.7	23.7	20.8
First Upper Side Lobe Suppression		dB	21.5	18.2	12.3
Cross Polar Discrimination Over Sector		dB	10.1	7.8	7.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	21.7	20.2	21
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	25		
Interband Isolation		dB	25		

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	13.6 ± 0.6	14.2 ± 0.2	14.3 ± 0.3	13.9 ± 0.9	14.3 ± 0.7
	Max Gain	dBi	14.2	14.4	14.6	14.8	15.0
Azimuth Beamwidth (3 dB)		degrees	63.4° ± 4.3°	64.5° ± 4.3°	64.6° ± 3.3°	64.2° ± 2.7°	60.9° ± 4°
Elevation Beamwidth (3 dB)		degrees	13.4° ± 0.6°	12.3° ± 0.8°	11.7° ± 0.8°	10.6° ± 0.7°	9.6° ± 0.8°
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	21.9	22.7	23.2	22.4	20.5
First Upper Side Lobe Suppression		dB	12.5	13.1	12.3	10.6	10.8
Cross Polar Discrimination Over Sector		dB	11	8.9	7.8	6	4.9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.7	22.4	16.9	9.9	11.4
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

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.

APXVB4L15B_43-C-I20

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	13.7 ± 0.6	14.3 ± 0.5	14.3 ± 0.5	14.4 ± 0.6	15 ± 0.8
	Max Gain	dBi	14.3	14.8	14.8	15.0	15.8
Azimuth Beamwidth (3 dB)		degrees	69.3° ± 8.5°	68.5° ± 4.1°	66.4° ± 6°	62.8° ± 3.8°	58.5° ± 4.7°
Elevation Beamwidth (3 dB)		degrees	12.9° ± 0.5°	12.2° ± 0.7°	11.7° ± 0.7°	10.4° ± 0.8°	9.6° ± 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	22.1	22.5	22.9	23.4	23.2
First Upper Side Lobe Suppression		dB	14.8	14.5	13.3	13.5	12.5
Cross Polar Discrimination Over Sector		dB	11.2	8.3	8.6	10	6.6
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20.4	22.2	21.1	15.3	15.5
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

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	13.7 ± 0.6	14.2 ± 0.4	14.3 ± 0.4	14.2 ± 0.8	14.7 ± 0.7
	Max Gain	dBi	14.3	14.6	14.7	15.0	15.4
Azimuth Beamwidth (3 dB)		degrees	62.8° ± 4.6°	63.9° ± 4.2°	64.1° ± 3.5°	64.1° ± 3.5°	59.7° ± 3.7°
Elevation Beamwidth (3 dB)		degrees	13.4° ± 1°	12.3° ± 0.6°	11.8° ± 0.8°	10.5° ± 0.6°	9.5° ± 0.9°
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	20.8	22.3	23	23.8	20.7
First Upper Side Lobe Suppression		dB	13.7	14.7	14.2	11.6	12
Cross Polar Discrimination Over Sector		dB	9.1	8.4	9.2	7.2	6.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	23.1	23.2	17.7	11.4	12.9
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

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.

APXVB4L15B_43-C-I20

ELECTRICAL SPECIFICATIONS

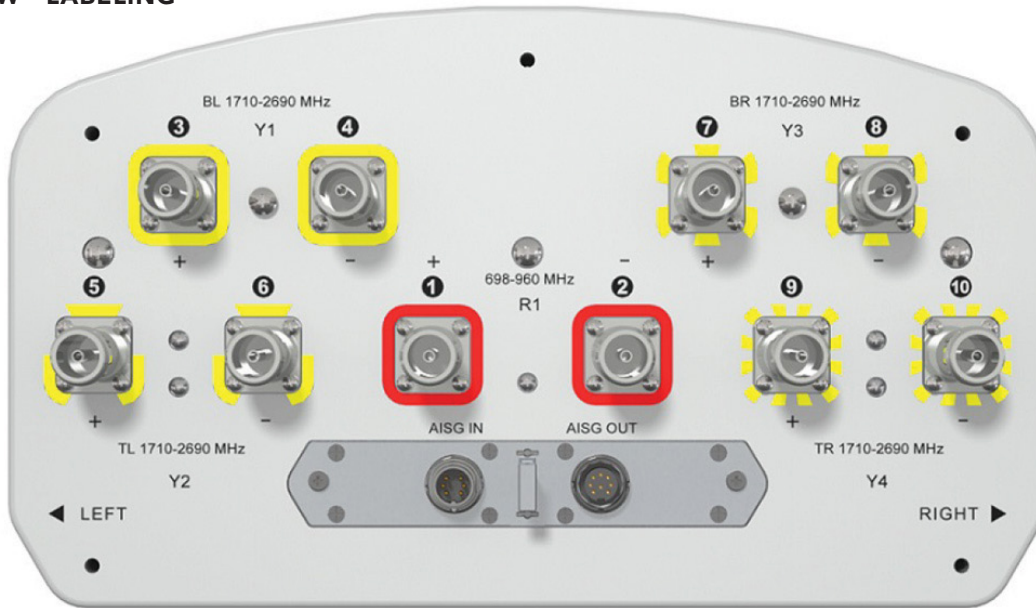
■ Y4

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	13.8 ± 0.6	14.4 ± 0.3	14.4 ± 0.3	14.3 ± 0.7	14.7 ± 0.8
	Max Gain	dBi	14.4	14.7	14.7	15.0	15.5
Azimuth Beamwidth (3 dB)		degrees	68.8° ± 8.5°	67.7° ± 2.1°	65.6° ± 5.4°	62.4° ± 2.9°	58.7° ± 4.4°
Elevation Beamwidth (3 dB)		degrees	12.9° ± 0.7°	12.2° ± 0.6°	11.6° ± 0.7°	10.5° ± 0.7°	9.6° ± 0.7°
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	21.1	20.9	21.1	22.4	20.6
First Upper Side Lobe Suppression		dB	13.8	13.8	12.3	13.1	13.5
Cross Polar Discrimination Over Sector		dB	9.6	9.5	9.3	9.6	7.2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	25.6	24.9	18.8	13	12.3
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

Specifications follow BASTA guidelines.

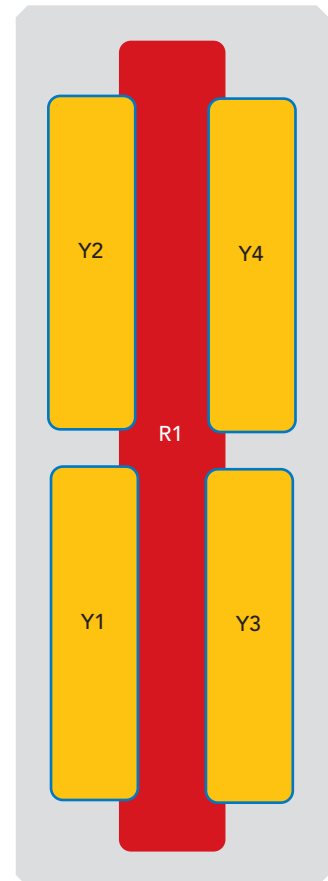
APXVB4L15B_43-C-I20

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
■ Y4	1710-2690 MHz	9-10	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y4



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.

APXVB4L15B_43-C-I20

MECHANICAL SPECIFICATIONS

Length	mm (in)	1490 (58.7)
Width	mm (in)	350 (13.8)
Depth	mm (in)	200 (7.9)
Net Weight - Antenna Only	kg (lbs)	20.9 (46.1)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 661 (149)
	Side	N (lbf) 378 (85)
	Rear	N (lbf) 760 (171)
Survival Wind Speed / Rated Wind Speed	km/h (mph)	200 (150)
Connector Type	--	(10x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color	---	Light Grey RAL7035
Radome Material	---	Fiberglass
Lightning Protection	---	Direct Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in) 1780 x 445 x 295 (70.1 x 17.5 x 11.6)
	Shipping Weight	kg (lbs) 29.2 (64.4)

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

APXVB4L15B_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.

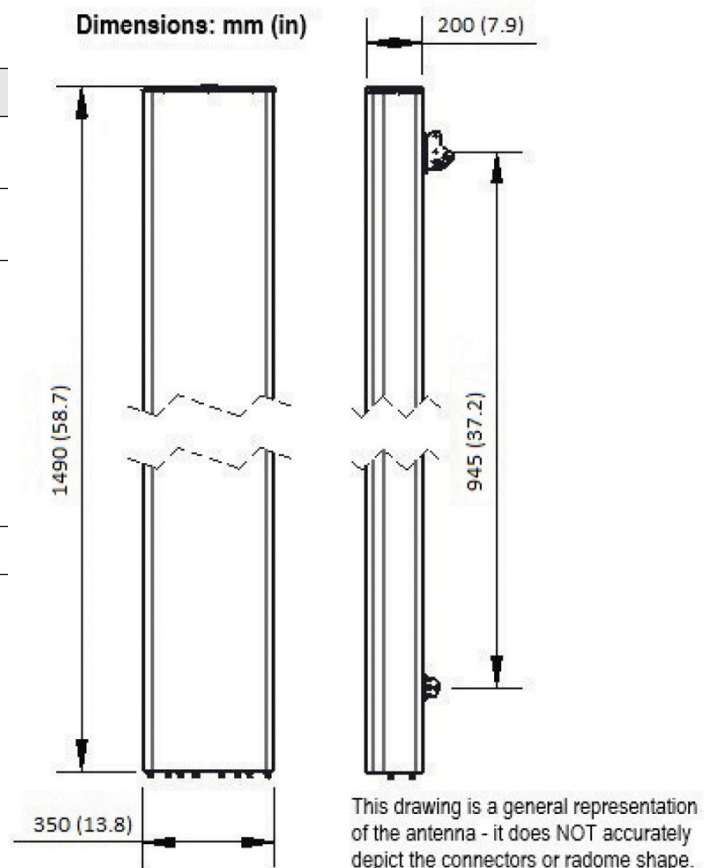


Always attach the antenna using all mounting points.

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](#)