

## APXVLLLL15B2\_43-C-I20

### APXVLLLL15B2\_43-C-I20S

#### Features

- 8 ports / 4 cross pol systems in high band (1710-2690 MHz)
- Integrated and field replaceable SRET
- Optional with site sharing feature (Model name suffix -C-120S)
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(4x) 1710-2690			
	Array	■ Y1	■ Y2	■ Y3	■ Y4
	Connector	1-2	3-4	5-6	7-8
		8 PORTS			
	Polarization	XPOL			
	Azimuth Beamwidth (avg)	65°			
	Electrical Downtilt	2-12°			
	Dimensions	1485 x 499 x 199 mm (58.5 x 19.6 x 7.8 in)			

#### ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
APXVLLLL15B2_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	34.6 kg (76.3 lbs)	4.5 kg (9.9 lbs)
APXVLLLL15B2_43-C-I20S	ACU-X20-B4 Internal Site Sharing RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	34.6 kg (76.3 lbs)	4.5 kg (9.9 lbs)

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### 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	16.8 ± 0.5	17.5 ± 0.5	17.7 ± 0.5	18.0 ± 0.1	18.2 ± 0.5
	Max Gain	dBi	17.3	18.0	18.2	18.1	18.7
Azimuth Beamwidth (3 dB)		degrees	68.1° ± 4.5°	63.9° ± 4.5°	64.1° ± 4.1°	63.6° ± 3.9°	61.0° ± 6.6°
Elevation Beamwidth (3 dB)		degrees	6.7° ± 0.5°	6.0° ± 0.1°	5.8° ± 0.5°	5.0° ± 0.1°	4.8° ± 0.5°
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	22	23	24	24	20
First Upper Side Lobe Suppression		dB	19	18	18	19	17
Cross Polar Discrimination Over Sector		dB	15	15	15	12.2	10
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	24	27	27	27	20
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

### 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	16.9 ± 0.5	17.7 ± 0.5	17.9 ± 0.5	18.0 ± 0.1	18.0 ± 0.1
	Max Gain	dBi	17.4	18.2	18.4	18.1	18.1
Azimuth Beamwidth (3 dB)		degrees	67.0° ± 8.1°	58.0° ± 4.9°	55.5° ± 5.5°	63.5° ± 2.0°	60.4° ± 5.5°
Elevation Beamwidth (3 dB)		degrees	6.8° ± 0.5°	6.0° ± 0.1°	5.8° ± 0.5°	5.0° ± 0.1°	4.7° ± 0.5°
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	23	25	24	24	20
First Upper Side Lobe Suppression		dB	18	17	16.1	18	14
Cross Polar Discrimination Over Sector		dB	17	16	17	15	8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	23.9	24	25	26.1	19
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

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.

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### 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 ± 1.0	17.8 ± 0.5	18.0 ± 0.1	18.0 ± 0.1	18.1 ± 0.5
	Max Gain	dBi	18.0	18.3	18.1	18.1	18.6
Azimuth Beamwidth (3 dB)		degrees	66.5° ± 7.5°	57.8° ± 4.5°	56.0° ± 5.0°	63.5° ± 2.5°	60.6° ± 5.1°
Elevation Beamwidth (3 dB)		degrees	6.8° ± 0.5°	6.1° ± 0.1°	5.8° ± 0.5°	5.0° ± 0.1°	4.7° ± 0.5°
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	24	24.9	24	23.6	22
First Upper Side Lobe Suppression		dB	19	17	17	20	17.4
Cross Polar Discrimination Over Sector		dB	17	16	16.5	14	9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	23	24	24	28	21
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

### 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	17.0 ± 0.1	17.7 ± 0.5	17.8 ± 0.5	18.0 ± 0.1	18.2 ± 0.5
	Max Gain	dBi	17.1	18.2	18.3	18.1	18.7
Azimuth Beamwidth (3 dB)		degrees	67.7° ± 5.1°	63.6° ± 4.6°	63.5° ± 4.0°	64.2° ± 3.0°	61.0° ± 5.0°
Elevation Beamwidth (3 dB)		degrees	6.7° ± 0.5°	6.0° ± 0.1°	5.8° ± 0.5°	5.0° ± 0.1°	4.8° ± 0.5°
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	23	25	24	23	20
First Upper Side Lobe Suppression		dB	18	17	17	18	16
Cross Polar Discrimination Over Sector		dB	15	13	14	14	9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	23	24	23	24	21
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

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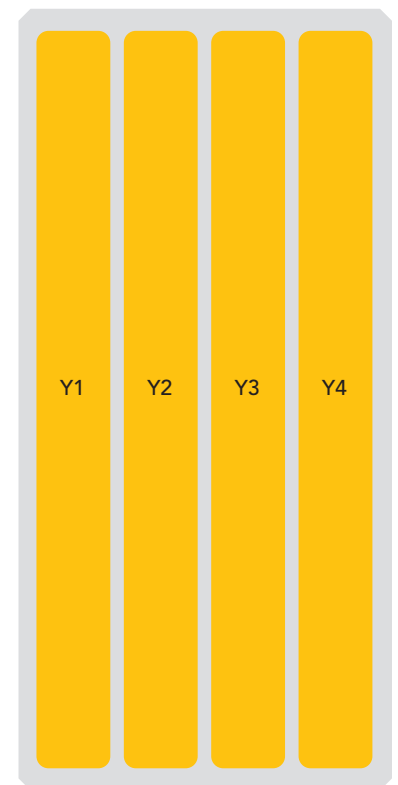
## APXVLLLL15B2\_43-C-I20S

### BOTTOM VIEW - LABELING



### ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ Y1	1710-2690 MHz	1-2	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1710-2690 MHz	3-4	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2
■ Y3	1710-2690 MHz	5-6	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y3
■ Y4	1710-2690 MHz	7-8	(2x) 4.3-10 Female	Y4	RFxxxxxxxxxx-Y4



The illustration is not shown to scale.

65°

1485 mm

INTEGRATED RET

OPTIONAL SITE SHARING

## APXVLLLLL15B2\_43-C-I20

### APXVLLLLL15B2\_43-C-I20S

#### MECHANICAL SPECIFICATIONS

Length		mm (in)	1485 (58.5)
Width		mm (in)	499 (19.6)
Depth		mm (in)	199 (7.8)
Net Weight - Antenna Only		kg (lbs)	24.1 (53.4)
Wind Load  Rated at 150 km/h (93 mph)	Front	N (lbf)	494 (111)
	Side	N (lbf)	430 (97)
	Rear	N (lbf)	573 (129)
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		---	Direct Ground
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in)	1730 x 595 x 295 (68.1 x 23.4 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

65°

1485 mm

INTEGRATED RET

OPTIONAL SITE SHARING

## APXVLLLLL15B2\_43-C-I20

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#### 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.

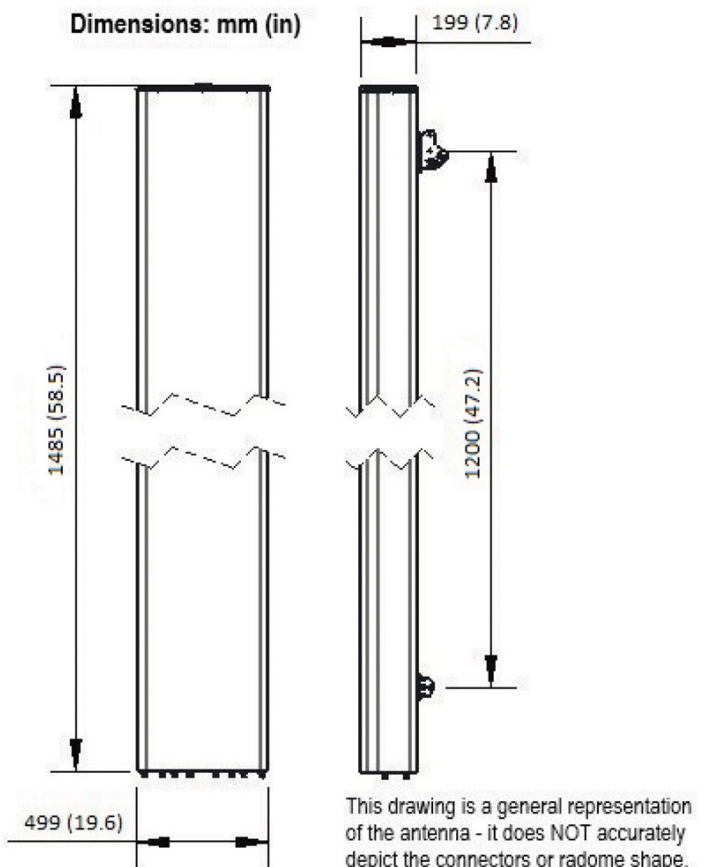


Always attach the antenna using all mounting points.

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](#)