

## APXVBLL26H\_43-C-I20 APXVBLL26H\_43-A-I20

### Features

- 2 ports / 1 cross pol system in low band (690-960 MHz)
- 4 ports / 2 cross pol systems in high band (1695-2690 MHz)
- Supporting 4x4 MIMO in high band
- Integrated and field replaceable SRET
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -A-I20)
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(1x) 690-960	(2x) 1695-2690		
	Array	■ R1	■ Y1	■ Y2	
	Connector	1-2	3-4	5-6	
		6 PORTS			
	Polarization	XPOL			
	Azimuth Beamwidth (avg)	65°	65°	65°	
	Electrical Downtilt	2-12°	2-12°		
	Dimensions	2498 x 378 x 158 mm (98.3 x 14.9 x 6.2 in)			

### ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
APXVBLL26H_43-C-I20	ACU-I20-H12I Internal Field Replaceable RET Included	APM50-H1 Beam Tilt Kit Included	50-125 mm (2.0-4.9 in)	34.0 kg (74.9 lbs)	4.0 kg (8.8 lbs)
APXVBLL26H_43-A-I20	ACU-I20-H12I Internal Field Replaceable RET Included	APM50-H1N Direct Pipe No Tilt Mounting Kit Included	50-125 mm (2.0-4.9 in)	33.0 kg (72.7 lbs)	3.0 kg (6.6 lbs)



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#### ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range	MHz	690-960			
	MHz	690-806	790-894	880-960	
Polarization	---	±45°			
Gain	Over all Tilts	dBi	16.9 ± 0.3	17.2 ± 0.2	17.4 ± 0.3
	Max Gain	dBi	17.2	17.4	17.7
Azimuth Beamwidth (3 dB)	degrees	69.0° ± 1.5°	67.0° ± 2.3°	64.4° ± 1.3°	
Elevation Beamwidth (3 dB)	degrees	8.5° ± 0.5°	7.8° ± 0.5°	7.1° ± 0.3°	
Electrical Downtilt	degrees	2-12°			
Impedance	Ohms	50Ω			
VSWR (Return Loss)	---	1.5:1 (-14 dB)			
Passive Intermodulation	dBc	-153 (3rd Order for 2x20 W Carriers)			
Front-to-Back Ratio, Total Power, ± 30°	dB	26.7	27.4	27.9	
First Upper Side Lobe Suppression	dB	18.1	18.9	18.2	
Cross Polar Discrimination Over Sector	dB	14.2	13.2	8.9	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)	dB	20.9	20.8	20.1	
Maximum Effective Power Per Port	Watts	300 W			
Cross Polar Isolation	dB	28			
Interband Isolation	dB	28			

Specifications follow BASTA guidelines.

#### ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range	MHz	1695-2690					
	MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690	
Polarization	---	±45°					
Gain	Over all Tilts	dBi	17.2 ± 0.6	17.4 ± 0.3	17.5 ± 0.4	17.9 ± 0.4	18.2 ± 0.4
	Max Gain	dBi	17.8	17.7	17.9	18.3	18.6
Azimuth Beamwidth (3 dB)	degrees	64.8° ± 4.5°	66.0° ± 3.4°	64.1° ± 5.0°	57.8° ± 3.3°	59.8° ± 3.7°	
Elevation Beamwidth (3 dB)	degrees	6.3° ± 0.4°	5.9° ± 0.3°	5.6° ± 0.4°	5.0° ± 0.2°	4.7° ± 0.3°	
Electrical Downtilt	degrees	2-12°					
Impedance	Ohms	50Ω					
VSWR (Return Loss)	---	1.5:1 (-14 dB)					
Passive Intermodulation	dBc	-153 (3rd Order for 2x20 W Carriers)					
Front-to-Back Ratio, Total Power, ± 30°	dB	23.3	24.4	24.4	23.3	22.9	
First Upper Side Lobe Suppression	dB	17.2	21.4	21.7	23.0	19.5	
Cross Polar Discrimination Over Sector	dB	9.0	9.8	10.2	11.2	11.5	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)	dB	16.2	20.9	22.5	18.8	17.6	
Maximum Effective Power Per Port	Watts	250 W					
Cross Polar Isolation	dB	28					
Interband Isolation	dB	28					

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### ELECTRICAL SPECIFICATIONS

■ Y2

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.3 ± 0.6	17.1 ± 0.6	17.2 ± 0.4	17.7 ± 0.3	18.2 ± 0.3
	Max Gain	dBi	17.9	17.7	17.6	18.0	18.5
Azimuth Beamwidth (3 dB)		degrees	62.3° ± 5.5°	66.2° ± 3.6°	64.5° ± 4.6°	57.3° ± 2.4°	59.9° ± 3.1°
Elevation Beamwidth (3 dB)		degrees	6.3° ± 0.5°	5.8° ± 0.3°	5.6° ± 0.4°	5.1° ± 0.3°	4.7° ± 0.2°
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-153 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	23.3	23.4	23.6	23.8	22.6
First Upper Side Lobe Suppression		dB	16.4	18.2	20.5	19.8	19.9
Cross Polar Discrimination Over Sector		dB	10.6	8.9	9.3	10.9	11.0
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.4	20.1	20.1	16.9	18.4
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

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## APXVBLL26H\_43-C-I20

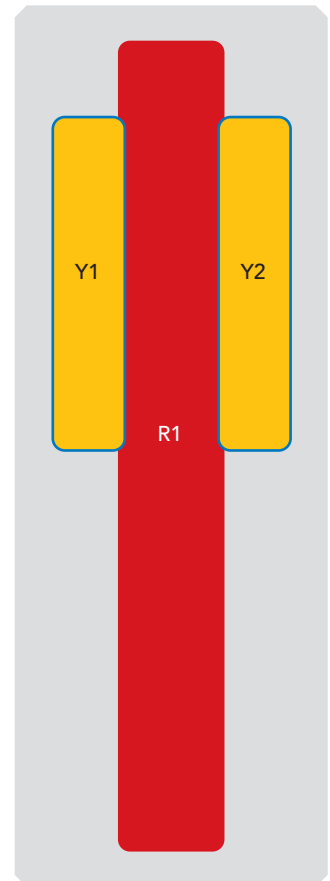
### APXVBLL26H\_43-A-I20

#### BOTTOM VIEW - LABELING



#### ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	690-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
■ Y1	1695-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1695-2690 MHz	5-6	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2



The illustration is not shown to scale.

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#### MECHANICAL SPECIFICATIONS

Length	mm (in)	2498 (98.3)
Width	mm (in)	378 (14.9)
Depth	mm (in)	158 (6.2)
Net Weight - Antenna Only	kg (lbs)	25.3 (55.8)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 635 (143)
	Side	N (lbf) 529 (119)
	Rear	N (lbf) 754 (170)
Survival Wind Speed	km/h (mph)	200 (124)
Connector Type	--	(6x) 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) 2698 x 473 x 278 (106.2 x 18.6 x 10.9)

#### 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

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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 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1	4.0 kg (8.8 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1N	3.0 kg (6.6 lbs)

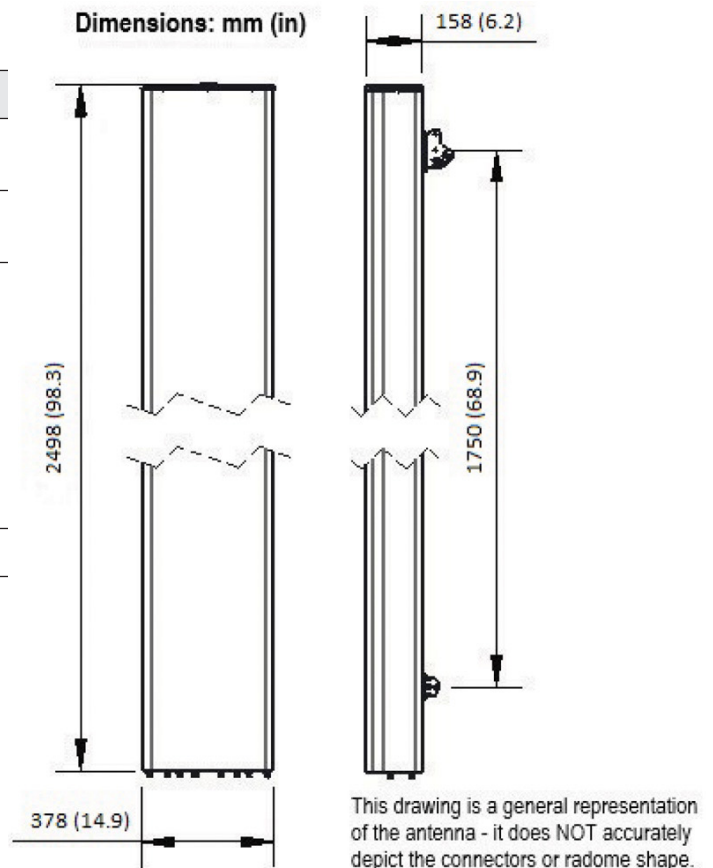
**INSTALLATION** Please read all installation notes before installing product.



- 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](#)

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