

## APXVB20B\_43-C-I20

### APXVB20B\_43-A-I20



### Features

- 2 ports / 1 cross pol system in low band (698-960 MHz)
- Integrated and field replaceable SRET
- ACU HW version -2.02
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -A-I20)
- Compliant with AISG v2.0 and 3GPP

<b>PRODUCT OVERVIEW</b>	Frequency Range (MHz)	698-960
	Array	■ R1
	Connector	1-2
		2 PORTS
	Polarization	XPOL
	Azimuth Beamwidth (avg)	65°
	Electrical Downtilt	2-12°
	Dimensions	2005 x 320 x 140 mm (78.9 x 12.6 x 5.5 in)

### ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
APXVB20B_43-C-I20	ACU-I20-B1 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	26.0 kg (57.3 lbs)	4.5 kg (9.9 lbs)
APXVB20B_43-A-I20	ACU-I20-B1 Internal RET Included	APM50-B1N Direct Pipe No Tilt Mounting Kit Included	50-110 mm (2.0-4.3 in)	24.9 kg (54.9 lbs)	3.4 kg (7.5 lbs)



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#### ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	15.1 ± 1.0	16.0 ± 1.0	16.5 ± 0.5
	Max Gain	dBi	16.1	17.0	17.0
Azimuth Beamwidth (3 dB)		degrees	68.4° ± 1.5°	66.0° ± 2.0°	63.5° ± 1.5°
Elevation Beamwidth (3 dB)		degrees	11.8° ± 1.0°	10.3° ± 1.0°	9.0° ± 1.0°
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	25.9	25
First Upper Side Lobe Suppression		dB	22	21	17
Cross Polar Discrimination Over Sector		dB	13	12	11
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	30	28	30
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	26		

Specifications follow BASTA guidelines.

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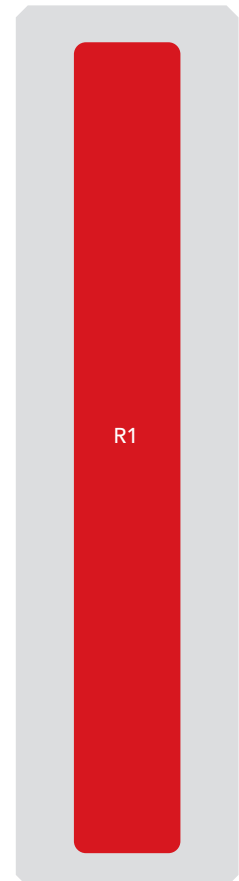
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### BOTTOM VIEW - LABELING



### 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



The illustration is not shown to scale.

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### MECHANICAL SPECIFICATIONS

Length		mm (in)	2005 (78.9)
Width		mm (in)	320 (12.6)
Depth		mm (in)	140 (5.5)
Net Weight - Antenna Only		kg (lbs)	18.5 (40.8)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	432 (97)
	Side	N (lbf)	377 (85)
	Rear	N (lbf)	513 (115)
Survival Wind Speed		km/h (mph)	200 (124)
Connector Type		--	(2x) 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)	2285 x 415 x 235 (90.0 x 16.3 x 9.3)

### 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 50-110 mm (2.0-4.3 in) <i>Refer to ordering options</i>	APM50-B1	4.5 kg (9.9 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 50-110 mm (2.0-4.3 in) <i>Refer to ordering options</i>	APM50-B1N	3.4 kg (7.5 lbs)

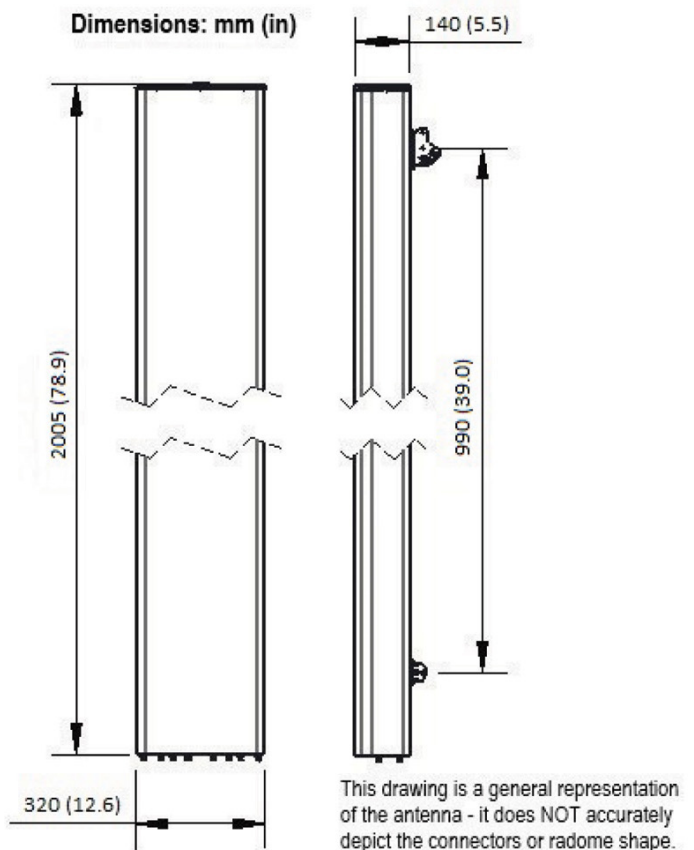
**INSTALLATION** Please read all installation notes before installing product.



- 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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