

### APXVBB26H2\_43-C-I20 APXVBB26H2 43-A-I20

### **Features**

- 4 ports / 2 cross pol systems in low band (698-960 MHz)
- Integrated and field replaceable SRET
- ACU HW version: HRLS200608H1.00
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -A-I20)
- Compliant with AISG v2.0 and 3GPP
- Optimized radome for low windload



	Frequency Range (MHz)	698-960					
>	Array	■ R1	■ R2				
VIEW	Consider	1-2	3-4				
OVERVIEW	Connector	4 PORTS					
	Polarization	XPOL					
PRODUCT	Azimuth Beamwidth (avg)	65°					
<u>a</u>	Electrical Downtilt	0-10°					
	Dimensions	2498 x 469 x 205 mm (98.4 x 18.5 x 8.1 in)					

### **ORDERING OPTIONS** Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
APXVBB26H2_43-C-I20	ACU-I20-H12I Internal RET Included	APM50-HS Beam Tilt Kit Included	50-125 mm (2.0-4.9 in)	42.6 kg (93.9 lbs)	9.0 kg (19.8 lbs)
APXVBB26H2_43-A-I20	ACU-I20-H12I Internal RET Included	APM50-HSN Direct Pipe No Tilt Mounting Kit Included	50-125 mm (2.0-4.9 in)	39.6 kg (87.3 lbs)	6.0 kg (13.2 lbs)





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ELECTRI	ICAL SPECIFICATIONS			■ R1		
Frequency Range		MHz		698-960		
		MHz	698-806	790-894	880-960	
Polarizatio	on		±45°			
Calla	Over all Tilts	dBi	15.5 ± 0.5	15.9 ± 0.5	16.0 ± 0.1	
Gain	Max Gain	dBi	16.0	16.4	16.1	
Azimuth B	Beamwidth (3 dB)	degrees	66.3° ± 3.5°	64.6° ± 3.5°	64.7° ± 4.7°	
Elevation	Beamwidth (3 dB)	degrees	8.7° ± 0.5°	7.9° ± 0.5°	7.0° ± 0.1°	
Electrical I	Downtilt	degrees	0-10°			
Impedance		Ohms	50Ω			
VSWR (Return Loss)			1.5:1 (-14 dB)			
	termodulation r for 2x20 W Carriers	dBc		-153		
Front-to-B	Back Ratio, Total Power, ± 30°	dB	23	22	22	
First Uppe	er Side Lobe Suppression	dB	17	19	22	
Cross Polar Discrimination Over Sector		dB	13 10		9	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19 20 23		23	
Maximum Effective Power Per Port Watts		Watts	250 W			
Cross Polar Isolation dB		dB	27			
Interband	Isolation	dB	27			

Specifications follow BASTA guidelines.

#### **ELECTRICAL SPECIFICATIONS**

	R2

Frequency Range		MHz		698-960		
		MHz	698-806	790-894	880-960	
Polarizatio	on		±45°			
Gain	Over all Tilts	dBi	15.6 ± 0.5	16.0 ± 0.1	16.3 ± 0.5	
	Max Gain	dBi	16.1	16.1	16.8	
Azimuth B	Beamwidth (3 dB)	degrees	66.6° ± 3.5°	64.3° ± 3.8°	64.9° ± 4.0°	
Elevation	Beamwidth (3 dB)	degrees	8.7° ± 0.5°	7.9° ± 0.5°	7.1° ± 0.1°	
Electrical I	Downtilt	degrees	0-10°			
Impedance		Ohms	50Ω			
VSWR (Return Loss)			1.5:1 (-14 dB)			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-153			
Front-to-B	Back Ratio, Total Power, ± 30°	dB	23	22	22	
First Uppe	er Side Lobe Suppression	dB	17	19.3	22	
Cross Pola	ar Discrimination Over Sector	dB	15	10	9	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	22.7 22		27	
Maximum Effective Power Per Port		Watts	250 W			
Cross Polar Isolation		dB	27			
Interband	Isolation	dB	27			

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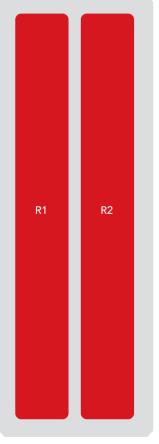
### **BOTTOM VIEW - LABELING**



#### **ARRAY LAYOUT**

AR	RAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
	R1	698-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxxxxR1
	R2	698-960 MHz	3-4	(2x) 4.3-10 Female	R2	RFxxxxxxxxxxx-R2

NOTE: RET MOTORS WILL TILT ONE AT A TIME, NOT SIMULTANEOUSLY.



The illustration is not shown to scale.



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#### **MECHANICAL SPECIFICATIONS**

Length		mm (in)	2498 (98.4)	
Width		mm (in)	469 (18.5)	
Depth		mm (in)	205 (8.1)	
Net Weight - Antenna Only		kg (lbs)	27.2 (60)	
	Rated Wind Speed	km/h (mph)	150 (93)	
	Frontal, Resultant	N (lbf)	693 (156)	
Wind	Side, Resultant	N (lbf)	720 (162)	
Load	Rear, Resultant	N (lbf)	723 (163)	
	Maximum Wind Load, Resultant	N (lbf)	1153 (259)	
	Maximum Wind Load, Drag Force	N (lbf)	916 (206)	
Survival / R	ated Wind Velocity	km/h (mph)	200 (150)	
Connector	Туре		(4x) 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)	2698 x 544 x 330 (106.2 x 21.4 x 13)	
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### **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

2498 mm

**INTEGRATED RET** 

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Amphenol ANTENNA SOLUTIONS

**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)  Refer to ordering options	APM50-HS	9.0 kg (19.8 lbs)
Direct Pipe No Tilt Mounting Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) Refer to ordering options	APM50-HSN	6.0 kg (13.2 lbs)

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

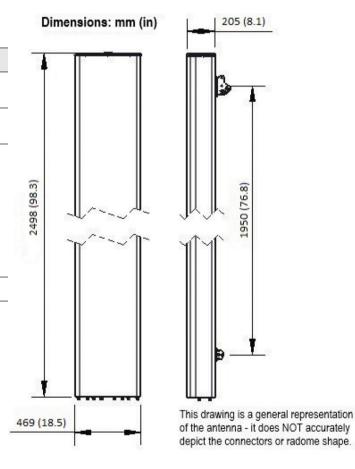


Always attach the antenna using all mounting points.

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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