

APXVBBLL26B_43-C-I20

APXVBBLL26B_43-A-I20

Features

- 4 ports / 2 cross pol systems in low band (698-960 MHz)
- 4 ports / 2 cross pol systems in high band (1710-2690 MHz)
- Supporting 4x4 MIMO
- 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



PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 698-960		(2x) 1710-2690	
	Array	■ R1	■ R2	■ Y1	■ Y2
	Connector	1-2	3-4	5-6	7-8
		8 PORTS			
	Polarization	XPOL			
	Azimuth Beamwidth (avg)	65°		65°	
	Electrical Downtilt	2-12°		2-12°	
	Dimensions	2690 x 499 x 199 mm (105.9 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
APXVBBLL26B_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	59.0 kg (130 lbs)	4.5 kg (9.9 lbs)
APXVBBLL26B_43-A-I20	ACU-I20-B4 Internal RET Included	APM50-B1N Direct Pipe No Tilt Mounting Kit Included	50-110 mm (2.0-4.3 in)	57.9 kg (127.6 lbs)	3.4 kg (7.5 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.

APXVBBLL26B_43-C-I20

APXVBBLL26B_43-A-I20

ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	16.1 ± 0.7	16.6 ± 0.3	16.5 ± 0.6
	Max Gain	dBi	16.8	16.9	17.1
Azimuth Beamwidth (3 dB)		degrees	75.4° ± 4.7°	70.3° ± 3.4°	67.7° ± 3.2°
Elevation Beamwidth (3 dB)		degrees	8.3° ± 0.8°	7.6° ± 0.6°	7.1° ± 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	18.9	21	22
First Upper Side Lobe Suppression		dB	16.8	18.3	18.5
Cross Polar Discrimination Over Sector		dB	9.8	11	9.2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	22.1	23.1	26.1
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	26		
Interband Isolation		dB	26		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ R2

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	15.9 ± 0.6	16.4 ± 0.4	16.3 ± 0.6
	Max Gain	dBi	16.5	16.8	16.9
Azimuth Beamwidth (3 dB)		degrees	75.1° ± 6.3°	69.6° ± 3.4°	66.8° ± 2.4°
Elevation Beamwidth (3 dB)		degrees	8.7° ± 0.7°	8° ± 0.6°	7.3° ± 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	20	24.4	21.6
First Upper Side Lobe Suppression		dB	18.7	18.7	18
Cross Polar Discrimination Over Sector		dB	9.4	11.5	10.1
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.5	22.3	24.7
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	26		
Interband Isolation		dB	26		

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.

APXVBBLL26B_43-C-I20

APXVBBLL26B_43-A-I20

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	17.5 ± 0.9	17.9 ± 1.0	18.2 ± 1.2	17.9 ± 0.6	17.5 ± 0.4
	Max Gain	dBi	18.4	18.9	19.4	18.5	17.9
Azimuth Beamwidth (3 dB)		degrees	61.6° ± 7.5°	60.1° ± 7.3°	58.8° ± 9.4°	60.9° ± 10.2°	55.5° ± 6.6°
Elevation Beamwidth (3 dB)		degrees	5.2° ± 0.6°	4.8° ± 0.5°	4.5° ± 0.6°	4° ± 0.5°	3.8° ± 0.4°
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	21.9	23.7	21.9	21.7	20.8
First Upper Side Lobe Suppression		dB	17.7	17.2	17.1	18.3	16.9
Cross Polar Discrimination Over Sector		dB	6.5	5.7	3.2	1.6	0.9
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	12.6	13	10.5	9.4	13.9
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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	17.6 ± 1.0	17.9 ± 1.0	18.3 ± 1.2	18 ± 0.6	17.5 ± 0.5
	Max Gain	dBi	18.6	18.9	19.5	18.6	18.0
Azimuth Beamwidth (3 dB)		degrees	61.4° ± 5.8°	59.3° ± 5.2°	57.3° ± 7.8°	61.5° ± 8.5°	55.5° ± 6.8°
Elevation Beamwidth (3 dB)		degrees	5.1° ± 0.7°	4.7° ± 0.5°	4.4° ± 0.7°	3.9° ± 0.5°	3.7° ± 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	21.3	22.4	22.4	20	20.8
First Upper Side Lobe Suppression		dB	17.2	16.1	15	17.2	16.2
Cross Polar Discrimination Over Sector		dB	8.9	6.9	5.3	1.1	0.5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.5	17.5	11.2	11.2	16.1
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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.

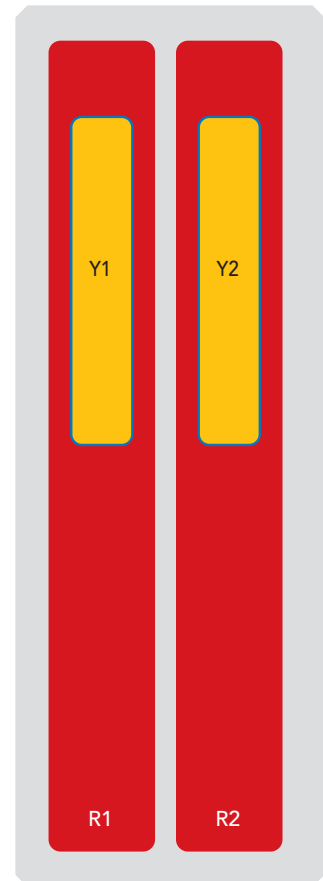
APXVBBLL26B_43-C-I20
APXVBBLL26B_43-A-I20

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
■ R2	698-960 MHz	3-4	(2x) 4.3-10 Female	R2	RFxxxxxxxxxx-R2
■ Y1	1710-2690 MHz	5-6	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1710-2690 MHz	7-8	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2



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.

APXVBBLL26B_43-C-I20

APXVBBLL26B_43-A-I20

MECHANICAL SPECIFICATIONS

Length	mm (in)	2690 (105.9)
Width	mm (in)	499 (19.6)
Depth	mm (in)	199 (7.8)
Net Weight - Antenna Only	kg (lbs)	46.5 (102.5)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 903 (203)
	Side	N (lbf) 717 (161)
	Rear	N (lbf) 1072 (241)
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
Shipping	Packing Size (Length x Width x Depth)	mm (in) 2940 x 595 x 295 (115.7 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

APXVBBLL26B_43-C-I20

APXVBBLL26B_43-A-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>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)

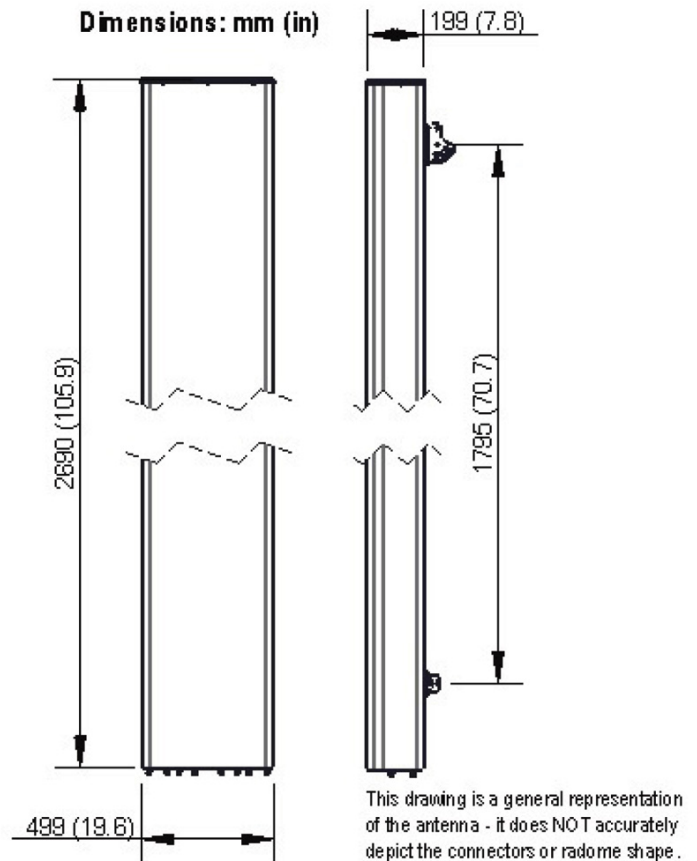
INSTALLATION Please read all installation notes before installing product.



- 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](#)