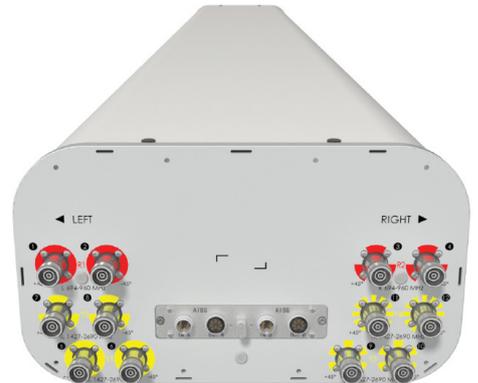


P2-BB4U26-J0

P2-BB4U26-J0N, P2-BB4U26-I0, P2-BB4U26-I0N

Features

- 4 ports / 2 cross pol systems in low band (694-960 MHz)
- 8 ports / 4 cross pol systems in very wide high band (1427-2690 MHz)
- Integrated and field replaceable SRET, site sharing support
- Optional with Site Sharing feature (Model name suffix -I0, -I0N)
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -J0N, -I0N)
- Compliant with AISG v2.0 and 3GPP
- Optimized radome for low windload



PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 694-960		(4x) 1427-2690			
	Array	■ R1	■ R2	■ Y1	■ Y2	■ Y3	■ Y4
	Connector	1-2	3-4	5-6	7-8	9-10	11-12
		12 PORTS					
	Polarization	XPOL					
	Azimuth Beamwidth (avg)	65°			65°		
	Electrical Downtilt	2-12°			2-12°		
Dimensions	2749 x 369 x 206 mm (108.2 x 14.5 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
P2-BB4U26-J0	ACU-X20N Internal RET Included	APM40-2 Beam Tilt Kit Included	60-120 mm (2.4-4.7 in)	51.3 kg (113.1 lbs)	3.9 kg (8.6 lbs)
P2-BB4U26-J0N	ACU-X20N Internal RET Included	APM40-1 Direct Pipe No Tilt Mounting Kit Included	60-120 mm (2.4-4.7 in)	50.6 kg (111.5 lbs)	3.2 kg (7 lbs)
P2-BB4U26-I0	ACU-X20 Internal RET for Site Sharing Included	APM40-2 Beam Tilt Kit Included	60-120 mm (2.4-4.7 in)	51.3 kg (113.1 lbs)	3.9 kg (8.6 lbs)
P2-BB4U26-I0N	ACU-X20 Internal RET for Site Sharing Included	APM40-1 Direct Pipe No Tilt Mounting Kit Included	60-120 mm (2.4-4.7 in)	50.6 kg (111.5 lbs)	3.2 kg (7 lbs)



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65°

2749 mm

INTEGRATED RET

SITE SHARING OPTIONAL

P2-BB4U26-J0

P2-BB4U26-J0N, P2-BB4U26-I0, P2-BB4U26-I0N

ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	694-960		
		MHz	694-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	15.1 ± 0.6	15.5 ± 0.5	16.1 ± 0.5
	Max Gain	dBi	15.7	16.0	16.6
Azimuth Beamwidth (3 dB)		degrees	67.3° ± 8.9°	63.9° ± 7°	55.8° ± 5.2°
Elevation Beamwidth (3 dB)		degrees	8.7° ± 0.7°	7.9° ± 0.5°	7.3° ± 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	-153		
Front-to-Back Ratio, Total Power, ± 30°		dB	19.5	22.4	22.8
First Upper Side Lobe Suppression		dB	17.2	19	17.2
Cross Polar Discrimination Over Sector		dB	10.5	9.5	8.6
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20.8	21	22.9
Maximum Effective Power Per Port		Watts	300 W		
Cross Polar Isolation		dB	25		
Interband Isolation		dB	25		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ R2

Frequency Range		MHz	694-960		
		MHz	694-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	15.1 ± 0.4	15.6 ± 0.5	16.2 ± 0.4
	Max Gain	dBi	15.5	16.1	16.6
Azimuth Beamwidth (3 dB)		degrees	68.6° ± 9.5°	64.3° ± 7.5°	55.9° ± 5.4°
Elevation Beamwidth (3 dB)		degrees	8.7° ± 0.6°	8.0° ± 0.5°	7.3° ± 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	-153		
Front-to-Back Ratio, Total Power, ± 30°		dB	19.6	22.8	23.1
First Upper Side Lobe Suppression		dB	17.8	20.2	19.7
Cross Polar Discrimination Over Sector		dB	11	10	8.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.5	20.8	21.5
Maximum Effective Power Per Port		Watts	300 W		
Cross Polar Isolation		dB	25		
Interband Isolation		dB	25		

Specifications follow BASTA guidelines.

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65°

2749 mm

INTEGRATED RET

SITE SHARING OPTIONAL

P2-BB4U26-J0

P2-BB4U26-J0N, P2-BB4U26-I0, P2-BB4U26-I0N

ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range		MHz	1427-2690				
		MHz	1427-1518	1695-1880	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	15.3 ± 0.6	16.1 ± 0.8	17.3 ± 1.0	18 ± 0.5	18 ± 0.6
	Max Gain	dBi	15.9	16.9	18.3	18.5	18.6
Azimuth Beamwidth (3 dB)		degrees	63.1° ± 5.4°	62.1° ± 6.0°	60.8° ± 6.4°	52.3° ± 2.2°	53.1° ± 5.6°
Elevation Beamwidth (3 dB)		degrees	8.9° ± 0.8°	7.8° ± 0.8°	6.8° ± 0.7°	5.7° ± 0.4°	5.3° ± 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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	23.4	22.8	24	22.7	20.3
First Upper Side Lobe Suppression		dB	14.8	14.4	15	18	17.5
Cross Polar Discrimination Over Sector		dB	8.3	4.5	4.8	1.1	1
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.5	16.8	15.1	15.1	18.9
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y2

Frequency Range		MHz	1427-2690				
		MHz	1427-1518	1695-1880	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	15.5 ± 0.4	16 ± 0.8	16.9 ± 0.8	17.4 ± 0.4	17.6 ± 0.6
	Max Gain	dBi	15.9	16.8	17.7	17.8	18.2
Azimuth Beamwidth (3 dB)		degrees	62.2° ± 4.6°	63.3° ± 4.3°	59.4° ± 6.6°	53.4° ± 2.8°	56° ± 8.2°
Elevation Beamwidth (3 dB)		degrees	8.6° ± 0.6°	7.7° ± 0.6°	6.8° ± 0.8°	5.8° ± 0.3°	5.4° ± 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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	21.4	22.4	21.6	21.9	20.3
First Upper Side Lobe Suppression		dB	18.9	19.3	17	16.1	16.1
Cross Polar Discrimination Over Sector		dB	10.2	6.6	3.6	0.5	0.3
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	16.4	18.2	18.1	19	17.4
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

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65°

2749 mm

INTEGRATED RET

SITE SHARING OPTIONAL

P2-BB4U26-J0

P2-BB4U26-J0N, P2-BB4U26-I0, P2-BB4U26-I0N

ELECTRICAL SPECIFICATIONS

■ Y3

Frequency Range		MHz	1427-2690				
		MHz	1427-1518	1695-1880	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	15.4 ± 0.5	16 ± 1.1	17.4 ± 0.9	17.9 ± 0.6	18 ± 0.6
	Max Gain	dBi	15.9	17.1	18.3	18.5	18.6
Azimuth Beamwidth (3 dB)		degrees	64.7° ± 4.5°	65.7° ± 5.5°	59.7° ± 5.8°	52.9° ± 3.4°	52.6° ± 6.2°
Elevation Beamwidth (3 dB)		degrees	9.1° ± 0.7°	7.8° ± 0.7°	6.7° ± 0.6°	5.6° ± 0.4°	5.4° ± 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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	22	22.2	23.2	24.2	22.1
First Upper Side Lobe Suppression		dB	15.6	15.7	15.2	17.8	18.6
Cross Polar Discrimination Over Sector		dB	9.1	4.9	3.3	1.2	0.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.2	14.3	17.1	15.6	20.2
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y4

Frequency Range		MHz	1427-2690				
		MHz	1427-1518	1695-1880	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	15.3 ± 0.5	15.8 ± 0.9	16.8 ± 0.8	17.3 ± 0.5	17.6 ± 0.6
	Max Gain	dBi	15.8	16.7	17.6	17.8	18.2
Azimuth Beamwidth (3 dB)		degrees	63.6° ± 3.5°	63.5° ± 4.8°	58.8° ± 5.5°	54.1° ± 2.9°	56.2° ± 7.6°
Elevation Beamwidth (3 dB)		degrees	8.9° ± 0.8°	7.8° ± 0.6°	6.8° ± 0.8°	5.7° ± 0.3°	5.3° ± 0.3°
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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	19.3	22	23.4	21.5	20.9
First Upper Side Lobe Suppression		dB	19.1	19.7	16.5	16.4	16
Cross Polar Discrimination Over Sector		dB	8.8	5.9	4.5	0.9	0.5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.6	17.8	19.4	18.8	18.8
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

Specifications follow BASTA guidelines.

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P2-BB4U26-J0

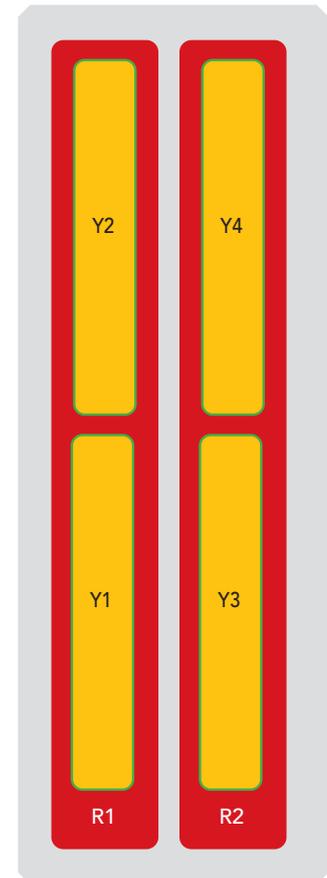
P2-BB4U26-J0N, P2-BB4U26-I0, P2-BB4U26-I0N

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	694-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
■ R2	694-960 MHz	3-4	(2x) 4.3-10 Female	R2	RFxxxxxxxxxx-R2
■ Y1	1427-2690 MHz	5-6	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1427-2690 MHz	7-8	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2
■ Y3	1427-2690 MHz	9-10	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y3
■ Y4	1427-2690 MHz	11-12	(2x) 4.3-10 Female	Y4	RFxxxxxxxxxx-Y4



The illustration is not shown to scale.

NOTE: RET motors will tilt one at a time, not simultaneously

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65°

2749 mm

INTEGRATED RET

SITE SHARING OPTIONAL

P2-BB4U26-J0

P2-BB4U26-J0N, P2-BB4U26-I0, P2-BB4U26-I0N

MECHANICAL SPECIFICATIONS

Length	mm (in)	2749 (108.2)
Width	mm (in)	369 (14.5)
Depth	mm (in)	206 (8.1)
Net Weight - Antenna Only	kg (lbs)	41.3 (91)
Wind Load Rated at 150 km/h (93 mph)	Frontal, Resultant	N (lbf) 487 (109)
	Side, Resultant	N (lbf) 604 (136)
	Rear, Resultant	N (lbf) 618 (139)
	Maximum, Resultant	N (lbf) 990 (223)
Survival Wind Speed	km/h (mph)	220 (137)
Connector Type	--	(12x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom Site Sharing: (4x) AISG Connectors (2 Male, 2 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) 2982 x 442 x 340 (117.4 x 17.4 x 13.4)

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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P2-BB4U26-J0

P2-BB4U26-J0N, P2-BB4U26-I0, P2-BB4U26-I0N

ACCESSORIES

Accessories may be ordered separately unless otherwise indicated.

ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 60-120 mm (2.4-4.7 in) <i>Refer to ordering options</i>	APM40-2	3.9 kg (8.6 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 60-120 mm (2.4-4.7 in) <i>Refer to ordering options</i>	APM40-1	3.2 kg (7 lbs)

INSTALLATION

Please read all installation notes before installing product.

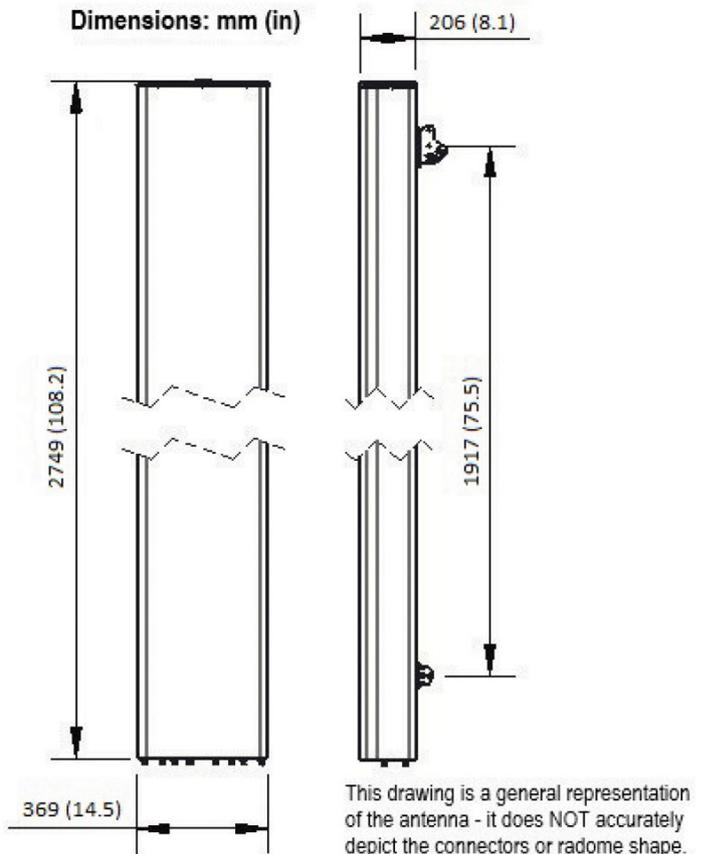


Always attach the antenna using all mounting points.

Do not install antenna with the connectors facing upwards.

EXTERNAL DOCUMENT LINKS

[APM40 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](#)