(2x) 698-960 | (2x) 1710-2690 MHz

2690 mm INTEGRATED RET SITE SHARING OPTIONAL

# B3-BBLL26-N0

### B3-BBLL26-NON, B3-BBLL26-S0, B3-BBLL26-S0N

#### **Features**

- 4 ports / 2 cross pol systems in low band (698-960 MHz), 33°
- 4 ports / 2 cross pol systems in high band (1710-2690 MHz), 33°
- Supporting 4x4 MIMO
- Integrated and field replaceable SRET
- Optional with Site Sharing feature (Model name suffix -S0, -S0N)
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -N0N, -S0N)
- Compliant with AISG v2.0 and 3GPP



	Frequency Range (MHz)	(2x) 69	98-960	(2x) 1710-2690				
<u>&gt;</u>	Array	■ R1	■ R2	Y1	■ Y2			
RVIE	Consider	1-2	3-4	5-6	7-8			
OVERVIEW	Connector	8 PORTS						
UCT	Polarization	XPOL						
PRODL	Azimuth Beamwidth (avg)	3.	3°	33°				
PR	Electrical Downtilt	2-10° 2-10°						
	Dimensions	2690 x 585 x 155 mm (105.9 x 23.0 x 6.1 in)						

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

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
B3-BBLL26-N0	ACU-I20-B4 Internal RET Included	APM50-B2 Beam Tilt Kit Included	60-110 mm (2.4-4.3 in)	58.4 kg (128.7 lbs)	6.3 kg (13.9 lbs)
B3-BBLL26-N0N	ACU-I20-B4 Internal RET Included	APM50-B2N Direct Pipe No Tilt Mounting Kit Included	60-110 mm (2.4-4.3 in)	55.7 kg (122.8 lbs)	3.6 kg (7.9 lbs)
B3-BBLL26-S0	ACU-X20-B4 Internal RET for Site Sharing Included	APM50-B2 Beam Tilt Kit Included	60-110 mm (2.4-4.3 in)	58.4 kg (128.7 lbs)	6.3 kg (13.9 lbs)
B3-BBLL26-S0N	ACU-X20-B4 Internal RET for Site Sharing Included	APM50-B2N Direct Pipe No Tilt Mounting Kit Included	60-110 mm (2.4-4.3 in)	55.7 kg (122.8 lbs)	3.6 kg (7.9 lbs)





(2x) 698-960 | (2x) 1710-2690 MHz

2690 mm

**R2** 698-960

350 W

26

26

INTEGRATED RET SITE SHARING OPTIONAL

# B3-BBLL26-N0

## B3-BBLL26-NON, B3-BBLL26-SO, B3-BBLL26-SON

ELECTRI	CAL SPECIFICATIONS			■ R1			
Frequency Range		MHz	698-960				
		MHz	698-806 790-894 880				
Polarizatio	on			±45°			
Cain	Over all Tilts	dBi	16.5 ± 0.5	16.8 ± 0.3	16.9 ± 0.4		
Gain	Max Gain	dBi	17	17.1	17.3		
Azimuth B	Beamwidth (3 dB)	degrees	36.8° ± 3°	32.3° ± 2.6°	29.5° ± 1.2°		
Elevation l	Beamwidth (3 dB)	degrees	18.1° ± 1.4°	16.3° ± 1.2°	14.5° ± 0.6°		
Electrical [	Downtilt	degrees	2-10°				
Impedance	e	Ohms	50Ω				
VSWR (Ret	turn Loss)			1.5:1 (-14 dB)			
	termodulation for 2x20 W Carriers	dBc		-153			
Front-to-B	Back Ratio, Total Power, ± 30°	dB	21.9 23.5		23.4		
First Uppe	er Side Lobe Suppression	dB	18.2	18	15.6		
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	16 17.3		17.9		
Maximum Effective Power Per Port Watt		Watts	350 W				
Cross Polar Isolation		dB	26				
Interband	Isolation	dB	26				

Specifications follow BASTA guidelines.

#### **ELECTRICAL SPECIFICATIONS**

Maximum Effective Power Per Port

Cross Polar Isolation

Interband Isolation

 $\mathsf{MHz}$ 

Watts

dB

dB

Frequency Range

		MHz	698-806	790-894	880-960		
Polarization			±45°				
C :	Over all Tilts	dBi	16.5 ± 0.5	16.8 ± 0.3	16.9 ± 0.4		
Gain	Max Gain	dBi	17	17.1	17.3		
Azimuth Bea	mwidth (3 dB)	degrees	37.3° ± 3.4°	32.3° ± 2.5°	29.6° ± 1.2°		
Elevation Beamwidth (3 dB)		degrees	17.1° ± 1.3°	15.4° ± 1.1°	13.8° ± 0.5°		
Electrical Downtilt		degrees	2-10°				
Impedance		Ohms	50Ω				
VSWR (Retur	n Loss)		1.5:1 (-14 dB)				
Passive Inter 3rd Order fo	modulation r 2x20 W Carriers	dBc	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	23	23.2	22.7		
First Upper Side Lobe Suppression		dB	16.4	14.8	14.2		
	Discrimination (XPD) al Boresight (0°)	dB	15.8	16.9	17.1		

Specifications follow BASTA guidelines.

(2x) 698-960 | (2x) 1710-2690 MHz

INTEGRATED RET SITE SHARING OPTIONAL

# B3-BBLL26-N0

## B3-BBLL26-NON, B3-BBLL26-SO, B3-BBLL26-SON

ELECTRICAL SPECIFICATIONS Y1								
Frequency Ra	nge	MHz			1710-2690			
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690	
Polarization					±45°			
Cain	Over all Tilts	dBi	19.9 ± 0.5	19.9 ± 0.4	19.9 ± 0.5	19.2 ± 0.5	18.9 ± 0.8	
Gain	Max Gain	dBi	20.4	20.3	20.4	19.7	19.7	
Azimuth Bean	nwidth (3 dB)	degrees	30.8° ± 1.3°	32.2° ± 1.2°	33.6° ± 2.4°	35.2° ± 1.2°	29.3° ± 4.5°	
Elevation Beamwidth (3 dB)		degrees	7° ± 0.4°	6.5° ± 0.4°	6.2° ± 0.4°	5.6° ± 0.3°	5° ± 0.3°	
Electrical Dov	vntilt	degrees	2-10°					
Impedance		Ohms	50Ω					
VSWR (Return	Loss)				1.5:1 (-14 dB)			
Passive Intern 3rd Order for	nodulation 2x20 W Carriers	dBc			-153			
Front-to-Back	Ratio, Total Power, ± 30°	dB	23.9	23.2	24.2	22	21.9	
First Upper Si	de Lobe Suppression	dB	17.3	16.7	16.5	20.2	16.9	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	21.5	19.1	20.1	24.2	19.1	
Maximum Effective Power Per Port Watts			250 W					
Cross Polar Isolation dB			26					
Interband Isol	lation	dB			26			

Specifications follow BASTA guidelines.

#### **ELECTRICAL SPECIFICATIONS**

Frequency Range		MHz			1710-2690			
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690	
Polarization			±45°					
Gain	Over all Tilts	dBi	19.4 ± 0.4	19.3 ± 0.4	19.2 ± 0.4	18.5 ± 0.5	18.3 ± 0.9	
Gain	Max Gain	dBi	19.8	19.7	19.6	19	19.2	
Azimuth Bea	mwidth (3 dB)	degrees	31.1° ± 1.8°	33.1° ± 0.8°	34.1° ± 1.6°	35.2° ± 1.7°	29.5° ± 5.5°	
Elevation Be	amwidth (3 dB)	degrees	7.1° ± 0.5°	6.4° ± 0.3°	6.1° ± 0.5°	5.5° ± 0.3°	5° ± 0.3°	
Electrical Do	wntilt	degrees	2-10°					
Impedance		Ohms	50Ω					
VSWR (Return Loss)				1.5:1 (-14 dB)				
Passive Inter 3rd Order fo	modulation r 2x20 W Carriers	dBc	-153					
Front-to-Bac	k Ratio, Total Power, ± 30°	dB	22.5	23.2	23.3	22	20.2	
First Upper S	Side Lobe Suppression	dB	16.8	15.6	15	13.8	13.2	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	22.8	21.1	21.3	21.1	17.4	
Maximum Ef	fective Power Per Port	Watts	250 W					
Cross Polar Isolation		dB	26					
Interband Iso	olation	dB	26					

Specifications follow BASTA guidelines.



2690 mm INTEGRATED RET SITE SHARING OPTIONAL

# B3-BBLL26-N0

B3-BBLL26-NON, B3-BBLL26-SO, B3-BBLL26-SON

#### **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	RFxxxxxxxxxxx-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	RFxxxxxxxxxxx-Y1
■ Y2	1710-2690 MHz	7-8	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxxx-Y2

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



The illustration is not shown to scale.



(2x) 698-960 | (2x) 1710-2690 MHz

INTEGRATED RET SITE SHARING OPTIONAL

# B3-BBLL26-N0

## B3-BBLL26-NON, B3-BBLL26-SO, B3-BBLL26-SON

#### **MECHANICAL SPECIFICATIONS**

Length			mm (in)	2690 (105.9)			
Width			mm (in)	585 (23.0)			
Depth			mm (in)	155 (6.1)			
Net Weight	- Antenna Only		kg (lbs)	44.2 (94.4)			
Wind Load	Wind Load Front  Rated at Side		N (lbf)	1842 (414)			
Rated at			N (lbf)	820 (184)			
150 km/h (9	'3 mph)	Rear	N (lbf)	1402 (315)			
Survival Wir	nd Speed		km/h (mph)	200 (124)			
Connector	Гуре			(8x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom			
Radome Co	lor			Light Grey RAL7035			
Radome Material			Fiberglass				
Lightning Protection			Direct Ground				
Shipping	Packing Size (Le	ength x Width x Depth)	mm (in)	2940 x 680 x 250 (115.8 x 26.8 x 9.8)			

#### **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		

(2x) 698-960 | (2x) 1710-2690 MHz

2690 mm INTEGRATED RET SITE SHARING OPTIONAL

## **B3-BBLL26-N0**

## B3-BBLL26-NON, B3-BBLL26-SO, B3-BBLL26-SON

**ACCESSORIES** Accessories may be ordered separately unless otherwise indicated.

ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 60-110 mm (2.4-4.3 in) Refer to ordering options	APM50-B2	6.3 kg (13.9 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 60-110 mm (2.4-4.3 in) Refer to ordering options	APM50-B2N	3.6 kg (7.9 lbs)

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

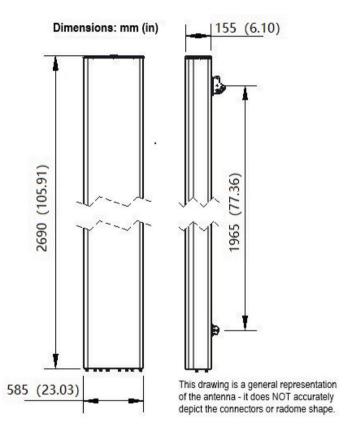


Always attach the antenna using all mounting points.

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