

FT-BB4LTM26-N0

FT-BB4LTM26-S0

Features

- Hybrid FDD + TDD beamforming within a radome
- 4 ports / 2 cross pol systems in low band (698-960 MHz)
- 8 ports / 4 cross pol systems in high band (1710-2690 MHz)
- TDD 8 ports + 1 calibration port in 2300-2690 MHz
- Integrated and field replaceable SRET
- Optional with Site Sharing feature (Model name suffix -S0)
- Compliant with AISG v2.0 and 3GPP

PRODUCT OVERVIEW		FDD		TDD
	Frequency Range (MHz)	(2x) 698-960	(4x) 1710-2690	(8T8R) 2300-2690
	Array	■ R1 ■ R2	■ Y1 ■ Y2 ■ Y3 ■ Y4	■ Y5
	CONNECTORS	4 PORTS	8 PORTS	2 CLUSTER CONNECTORS - 8 PORTS
		4.3-10 Female	4.3-10 Female	MQ4/MQ5
	Polarization	XPOL	XPOL	XPOL
	Azimuth Beamwidth (avg)	65°	65°	90° Unit Beam
	Electrical Downtilt	2-12°	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
FT-BB4LTM26-N0	ACU-I20-B7 Internal RET Included	APM50-B2 Beam Tilt Kit Included	60-110 mm (2.4-4.3 in)	62.3 kg (137.3 lbs)	4.5 kg (9.9 lbs)
FT-BB4LTM26-S0	ACU-X20-B7 Internal Site Sharing RET Included	APM50-B2 Beam Tilt Kit Included	60-110 mm (2.4-4.3 in)	62.3 kg (137.3 lbs)	4.5 kg (9.9 lbs)



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HYBRID FDD/TDD

2690 mm

INTEGRATED RET

SITE SHARING OPTIONAL

FT-BB4LTM26-N0

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ELECTRICAL SPECIFICATIONS

■ R1 ■ R2

Frequency Range		MHz	698-960		
		MHz	698-806	790-894	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	16.8 ± 0.5	16.8 ± 0.5	16.9 ± 0.4
	Max Gain	dBi	17.3	17.3	17.3
Azimuth Beamwidth (3 dB)		degrees	65.9° ± 8.3°	72.0° ± 5.9°	74.6° ± 3.9°
Elevation Beamwidth (3 dB)		degrees	8.4° ± 0.6°	7.7° ± 0.4°	7.0° ± 0.4°
Electrical Downtilt		degrees	2-12°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)		
Front-to-Back Ratio, Total Power, ± 30°		dB	23.0	24.0	23.7
First Upper Side Lobe Suppression		dB	18.9	18.4	15.7
Cross-Pol Over Sector		dB	12.6	12.7	10.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	23.5	23.5	25.1
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	26		
Interband Isolation		dB	26		

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2 ■ Y3 ■ Y4

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.1 ± 0.7	17.1 ± 0.6	17.3 ± 0.6	17.0 ± 0.6	17.4 ± 0.7
	Max Gain	dBi	17.8	17.7	17.9	17.6	18.1
Azimuth Beamwidth (3 dB)		degrees	69.0° ± 8.2°	66.8° ± 5.7°	67.0° ± 5.4°	61.1° ± 6.9°	57.3° ± 6.5°
Elevation Beamwidth (3 dB)		degrees	6.6° ± 0.4°	6.0° ± 0.3°	5.8° ± 0.5°	5.3° ± 0.2°	4.8° ± 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	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	23.8	23.2	23.1	22.9	22.1
First Upper Side Lobe Suppression		dB	15.2	16.7	17.2	19.6	16.9
Cross-Pol Over Sector		dB	9.7	9.0	8.2	5.7	1.7
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20.9	23.7	21.4	21.5	19.3
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	25				
Interband Isolation		dB	25				

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HYBRID FDD/TDD

2690 mm

INTEGRATED RET

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■ Y5

ELECTRICAL SPECIFICATIONS

Cal. Board and S Parameter

Frequency Range	MHz	2300-2690	
	MHz	2300-2400	2490-2690
Coupling Between Cal. Port to Input Port	dB	-26 ± 2	
Coupling Amplitude Accuracy	dB	≤ 0.9	
Coupling Phase Accuracy	degrees	≤ 9.0°	
VSWR	---	≤ 1.5	
Maximum Power	Watts	80 W	
ISO Co-Polar	dB	≥ 19	
ISO Cross-Polar	dB	≥ 24	

Specifications follow BASTA guidelines.

■ Y5

ELECTRICAL SPECIFICATIONS

Radiation Parameter - Unit Beam

Frequency Range	MHz	2300-2690		
	MHz	2300-2400	2490-2690	
Polarization	---	±45°		
Gain	Over all Tilts	dBi	15.5 ± 0.7	15.7 ± 0.7
	Max Gain	dBi	16.2	16.4
Azimuth Beamwidth (3 dB)	degrees	97.6° ± 4.0°		91.0° ± 9.3°
Elevation Beamwidth (3 dB)	degrees	6.0° ± 0.4°		5.3° ± 0.4°
Electrical Downtilt	degrees	2-12°		
Impedance	Ohms	50Ω		
VSWR	---	1.5:1		
Front-to-Back Ratio, Total Power, ± 30°	dB	21.0		20.9
First Upper Side Lobe Suppression	dB	14.4		13.1
Cross-Pol Over Sector	dB	12.5		8.5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)	dB	14.3		15.8

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■ Y5

ELECTRICAL SPECIFICATIONS

Radiation Parameter - Broadcasting Beam

Frequency Range		MHz	2300-2690	
		MHz	2300-2400	2490-2690
Polarization		---	±45°	
Gain	Over all Tilts	dBi	16.0 ± 0.4	16.5 ± 0.8
	Max Gain	dBi	16.4	17.3
Azimuth Beamwidth (3 dB)		degrees	70.9° ± 2.9°	61.1° ± 5.9°
Elevation Beamwidth (3 dB)		degrees	6.2° ± 0.3°	5.4° ± 0.3°
Electrical Downtilt		degrees	2-12°	
Impedance		Ohms	50Ω	
VSWR		---	1.5:1	
Front-to-Back Ratio, Total Power, ± 30°		dB	22.6	22.5
First Upper Side Lobe Suppression		dB	15.8	13.4

Specifications follow BASTA guidelines.

■ Y5

ELECTRICAL SPECIFICATIONS

Radiation Parameter - Working Beam

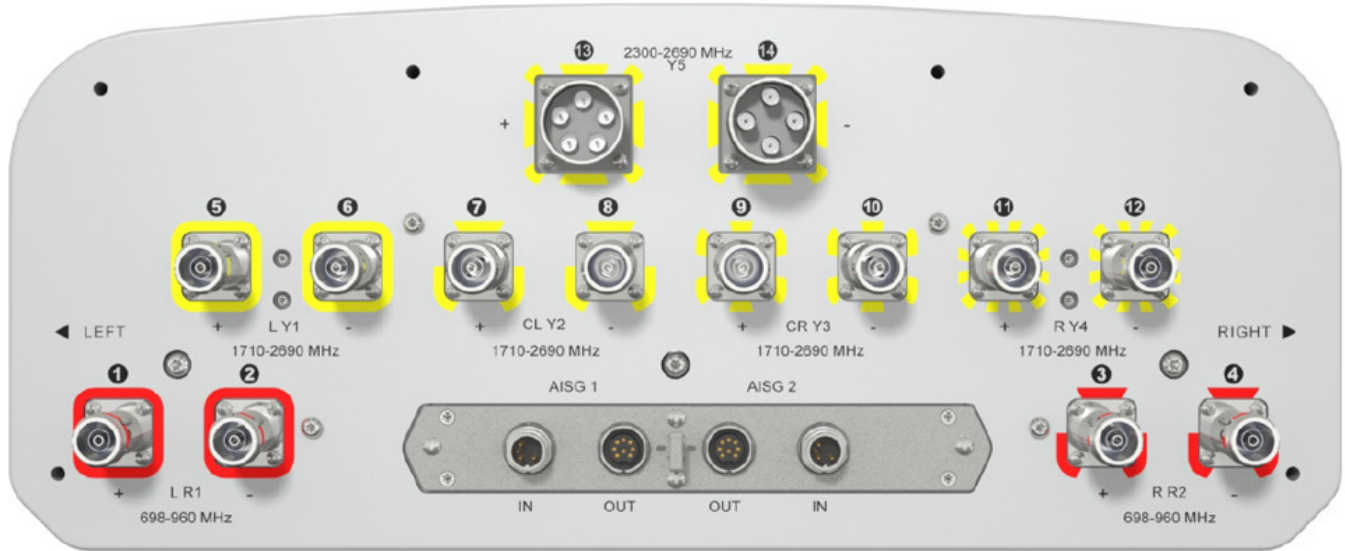
Frequency Range		MHz	2300-2690	
		MHz	2300-2400	2490-2690
Polarization		---	±45°	
Gain	Over all Tilts	dBi	19.9 ± 0.4	20.8 ± 0.6
	Max Gain	dBi	20.3	21.4
Azimuth Beamwidth (3 dB)		degrees	25.2° ± 1.0°	20.7° ± 1.7°
Elevation Beamwidth (3 dB)		degrees	6.0° ± 0.3°	5.3° ± 0.3°
Electrical Downtilt		degrees	2-12°	
Impedance		Ohms	50Ω	
VSWR		---	1.5:1	
Front-to-Back Ratio, Total Power, ± 30°		dB	28.6	27.4
First Upper Side Lobe Suppression		dB	14.4	13.1

Specifications follow BASTA guidelines.

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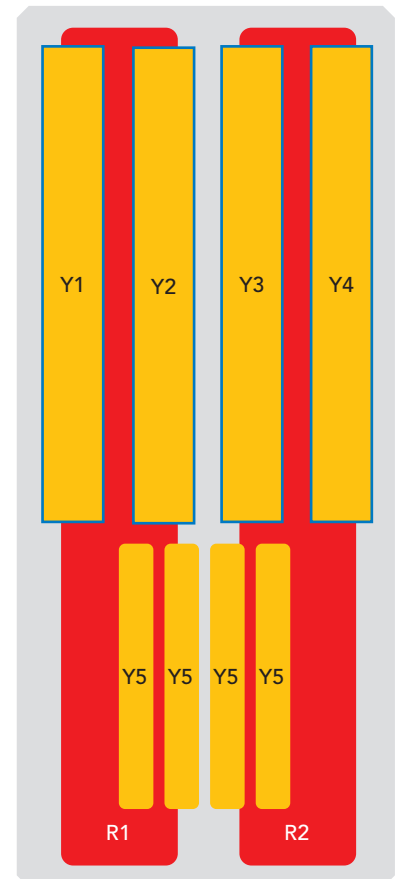
FT-BB4LTM26-S0

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR TYPE
■ R1	698-960 MHz	(2x) 4.3-10 Female
■ R2	698-960 MHz	(2x) 4.3-10 Female
■ Y1	1710-2690 MHz	(2x) 4.3-10 Female
■ Y2	1710-2690 MHz	(2x) 4.3-10 Female
■ Y3	1710-2690 MHz	(2x) 4.3-10 Female
■ Y4	1710-2690 MHz	(2x) 4.3-10 Female
■ Y5	2300-2690 MHz	(2x) Cluster Connectors MQ4/MQ5
	2300-2690 MHz	
	2300-2690 MHz	
	2300-2690 MHz	



The illustration is not shown to scale.

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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)	48.1 (106)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
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	--	(12x) 4.3-10 Female, (2x) Cluster Connectors MQ4/MQ5, (2x) AISG Connectors (1 Male, 1 Female) at Bottom Site Sharing Support: (4x) AISG Connectors (2 Male, 2 Female) at Bottom
Radome Color	---	Light Grey RAL7035
Radome Material	---	Fiberglass
Lightning Protection	---	DC Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in) 2940 x 570 x 275 (115.7 x 22.4 x 10.8)
	Shipping Weight	kg (lbs) 62.3 (137.3)

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

HYBRID FDD/TDD

2690 mm

INTEGRATED RET

SITE SHARING OPTIONAL

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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 60-110 mm (2.4-4.3 in) <i>Shipped with antenna</i>	APM50-B2	4.5 kg (9.9 lbs)

INSTALLATION

Please read all installation notes before installing product.

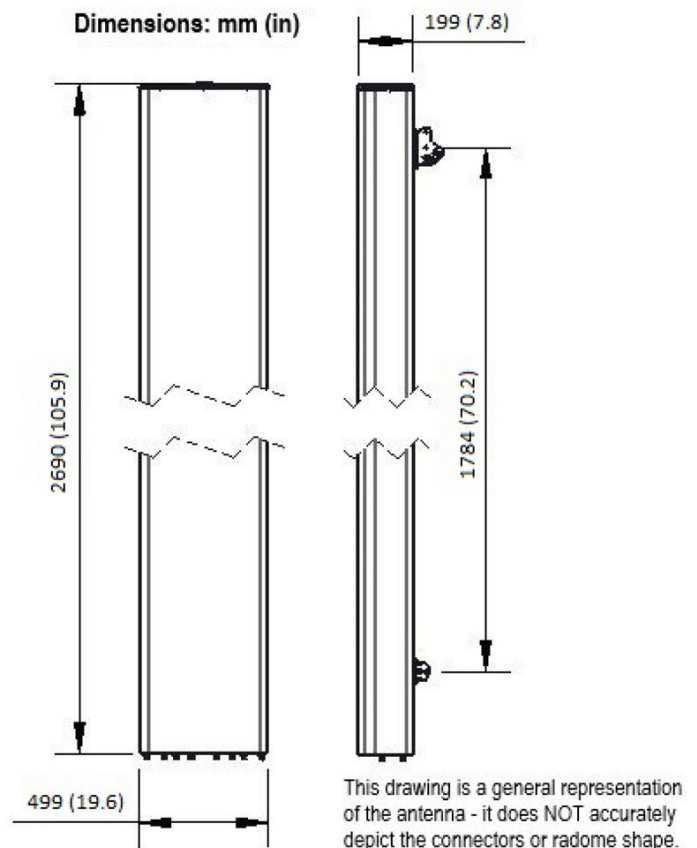


Always attach the antenna using all mounting points.

Do not install antenna with the connectors facing upwards.

EXTERNAL DOCUMENT LINKS

[APM50 Mounting Kit Series Installation Instructions](#)



NOTES

Specifications follow BASTA guidelines.

Horizontal dipole column spacing for the 8T8R beamforming is 70 mm (2.8 in)

For additional mounting information, please check **External Document Links**.

For Radiating Patterns: [Request pattern files](#)