

# 3FF6VV6SS-B-R3B



60 port multibeam ultra-high capacity antenna, 3 beams for 617-894 MHz, 6 beams for 1695-2690 MHz, 6 beams for 3300-4000 MHz, 4 ports for each beam, 1 RET per band

- Ultra-high capacity antenna provides increased throughput for special events or very high traffic locations
- Provides higher capacity than single radio massive MIMO solution
- Multi-beam antenna with 3x LB beams, 6x MB beams and 6x 3GHz beams
- All beams support 4T4R service or 2T2R service for 2 licensed bands
- 3.5 GHz beams aligned with mid band beams for use with 5G NSA or SA
- One RET and one SBT for LB , Two RET and One SBT Mid and High band for remote optimization and RET control

## General Specifications

Antenna Type	Multibeam
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	24
RF Connector Quantity, mid band	24
RF Connector Quantity, low band	12
RF Connector Quantity, total	60

## Remote Electrical Tilt (RET) Information


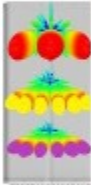
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female   8-pin DIN Male
RET Interface, quantity	2 female   2 male
Internal RET	High band (1)   Low band (1)   Mid band (1)

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## Dimensions

Width	1302 mm   51.26 in
Depth	236 mm   9.291 in
Length	2045 mm   80.512 in
Net Weight, antenna only	123 kg   271.168 lb

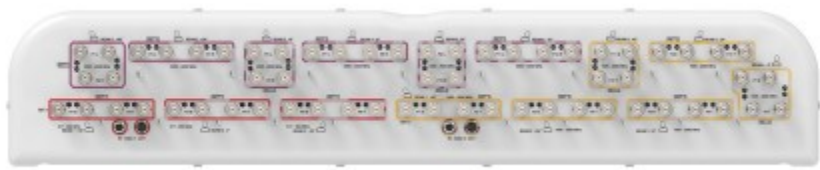
## Array Layout



Array ID	Frequency Range	RF Connector	BBT No.	ASG No.	SMT array	SMT No.	BBT UID
1	617-894	1-2	1	ASG1	1	1	AAAAAAAAAAAAA1
	617-894	3-4					
	617-894	5-6					
	617-894	7-8					
	617-894	9-10					
	617-894	11-12					
11	1695-2690	13-14	2	ASG2	1,2	2	AAAAAAAAAAAAAA2
12	1695-2690	15-16					
13	1695-2690	17-18					
14	1695-2690	19-20					
15	1695-2690	21-22					
16	1695-2690	23-24					
17	1695-2690	25-26					
18	1695-2690	27-28					
19	1695-2690	29-30					
20	1695-2690	31-32					
21	1695-2690	33-34					
22	1695-2690	35-36					
3	3300-4000	37-38	3	ASG3	1,3	2	AAAAAAAAAAAAA3
	3300-4000	39-40					
	3300-4000	41-42					
	3300-4000	43-44					
	3300-4000	45-46					
	3300-4000	47-48					
	3300-4000	49-50					
	3300-4000	51-52					
	3300-4000	53-54					
	3300-4000	55-56					
	3300-4000	57-58					
	3300-4000	59-60					

(One of several feeds shown (see diagram of array side))

## Port Configuration



## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz   3300 – 4000 MHz   617 – 894 MHz
Polarization	±45°
Total Input Power, maximum	3,840 W

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## Electrical Specifications

	R1-R4	R1-R4	Y1-Y12	Y1-Y12	Y1-Y12	P1-P12	P1-P12
Frequency Band, MHz	617–728	814–894	1695–1990	1920–2180	2300–2690	3300–3700	3700–4000
RF Port	1-12	1-12	13-36	13-36	13-36	37-60	37-60
Gain, dBi	14.8	15.6	20.2	20.7	21.2	19.6	19.7
Beam Centers, Horizontal, degrees	±0 ±30	±0 ±30	±8 ±24 ±40	±8 ±24 ±40	±8 ±24 ±40	±8 ±24 ±40	±8 ±24 ±40
Beamwidth, Horizontal, degrees	25	22	11	11	9	12	11
Beamwidth, Vertical, degrees	30	27	13.4	12.3	10.1	14	12.8
Beam Tilt, degrees	6–14	6–14	4–10	4–10	4–10	4–10	4–10
Front-to-Back Ratio at 180°, dB	28	32	31	29	27	28	27
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB	15	16	19	19	18	15	15
VSWR   Return loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-145	-145
Input Power per Port, maximum, watts	120	120	120	120	120	40	40

## Mechanical Specifications

Wind Loading @ Velocity, frontal	3,486.0 N @ 150 km/h (783.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	769.0 N @ 150 km/h (172.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	3,486.0 N @ 150 km/h (783.7 lbf @ 150 km/h)

## Packaging and Weights

Width, packed	1615 mm   63.583 in
Depth, packed	650 mm   25.591 in
Length, packed	2570 mm   101.181 in
Weight, gross	345 kg   760.594 lb

## Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

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## Included Products

- BSAMNT-8
- Wide Profile Antenna Down tilt Mounting Kit for 3.0 - 4.5 in (75 - 115mm) OD round members.  
Kit contains one scissor top bracket set and one bottom bracket set.

## \* Footnotes

**Performance Note**

Severe environmental conditions may degrade optimum performance