

NNSS-65B-R1BT4



8- Port sector antenna, 4x 698-896 and 4x 3100-4200MHz, 65° HPBW, 1x RET and 1x SBT

- Excellent wind loading characteristics
- Features broadband Low Band (698-896 MHz) array for 4T4R (4X MIMO) capability for Band 14
- Perfect antenna to add 3.5GHz CBRS to macro sites

This product will be discontinued on: December 31, 2025

General Specifications

Antenna Type	Sector
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	Aluminum Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1
Internal RET	Low band (1)

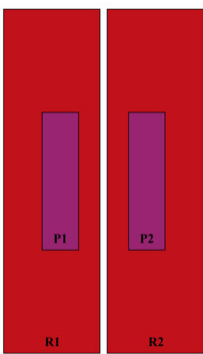
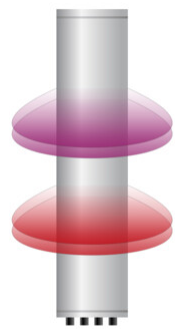
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Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	1848 mm 72.756 in
Net Weight, antenna only	30.5 kg 67.241 lb

Array Layout

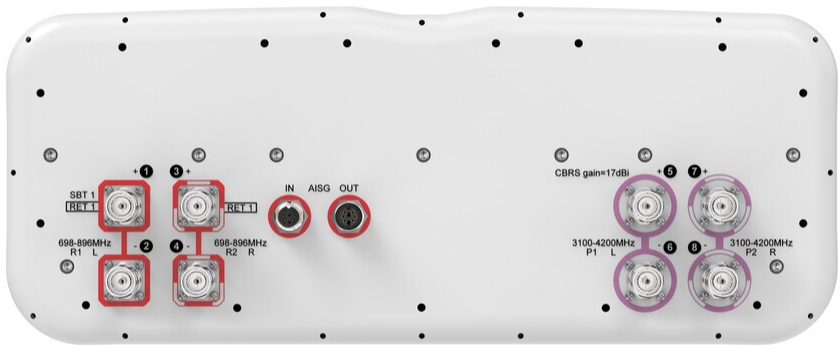


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
R2	698-896	3 - 4					
P1	3100-4200	5 - 6	N/A	NA			N/A
P2	3100-4200	7 - 8					

(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	3100 – 4200 MHz 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698–806	806–896	3100–3550	3550–3700	3700–4200
RF Port	1-4	1-4	5-8	5-8	5-8
Gain, dBi	14.3	14.9	15.8	16.4	16.9
Beamwidth, Horizontal, degrees	74	63	77	69	63
Beamwidth, Vertical, degrees	11.4	10	7.6	7	6.6
Beam Tilt, degrees	2–14	2–14	4	4	4
USLS (First Lobe), dB	17	16	18	18	16
Front-to-Back Ratio at 180°, dB	31	32	30	30	29

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CPR at Boresight, dB	28	27	17	18	17
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25
VSWR Return loss, dB	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	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	300	300	100	100	100

Mechanical Specifications

Wind Loading @ Velocity, frontal	629.0 N @ 150 km/h (141.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	191.0 N @ 150 km/h (42.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	755.0 N @ 150 km/h (169.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	433.0 N @ 150 km/h (97.3 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2035 mm 80.118 in
Weight, gross	45 kg 99.208 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Included Products

BSAMNT-3	–	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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