NNSS-45B-R1BT4

8-Port sector antenna, 4x698-896 and 4x3300-4000MHz, 45° HPBW, 1xRET and 1xSBT

- 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
- Excellent wind loading characteristics
- Internal SBT on low band allow remote RET control from the radio over the RF jumper cable

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	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, mid band	0
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

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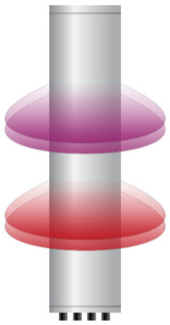
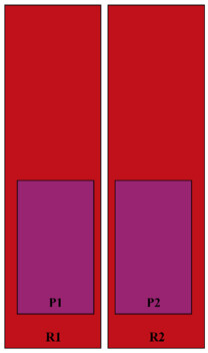
Internal RET	Low band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	640 mm | 25.197 in
Depth	235 mm | 9.252 in
Length	1828 mm | 71.969 in
Net Weight, antenna only	44.2 kg | 97.444 lb

Array Layout





Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	45°	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	698-896	3 - 4	45°			
P1	3300-4000	5 - 6	45°	N/A	NA	N/A
P2	3300-4000	7 - 8	45°			

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

Port Configuration

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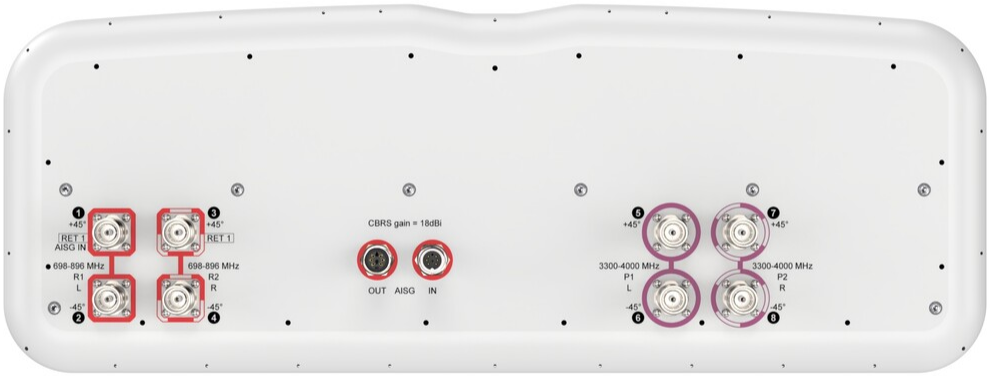

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	3300 – 4000 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	**698–806**	**806–896**	**3300–3550**	**3550–3700**	**3700–4000**
RF Port	1,2,3,4	1,2,3,4	5,6,7,8	5,6,7,8	5,6,7,8
Gain, dBi	15.5	16.2	16.7	16.6	17.3
Beamwidth, Horizontal,	51	43	43	44	42

degrees					
Beamwidth, Vertical, degrees	11.9	10.6	9.3	9	8.9
Beam Tilt, degrees	2–14	2–14	4	4	4
USLS (First Lobe), dB	12	15	16	16	15
Front-to-Back Ratio at 180°, dB	32	34	33	32	30
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	715.0 N @ 150 km/h (160.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	206.0 N @ 150 km/h (46.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	911.0 N @ 150 km/h (204.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	446.0 N @ 150 km/h (100.3 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm | 29.606 in
Depth, packed	387 mm | 15.236 in
Length, packed	1982 mm | 78.032 in
Weight, gross	60 kg | 132.277 lb

Regulatory Compliance/Certifications

Agency	**Classification**
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

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Included Products

BSAMNT-4	–	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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance