

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

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, 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)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W

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Protocol 3GPP/AISG 2.0

Dimensions

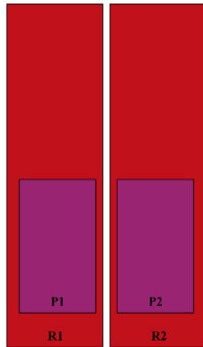
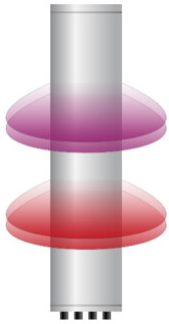
Width 640 mm | 25.197 in

Depth 235 mm | 9.252 in

Length 1828 mm | 71.969 in

Net Weight, antenna only 44.2 kg | 97.444 lb

Array Layout

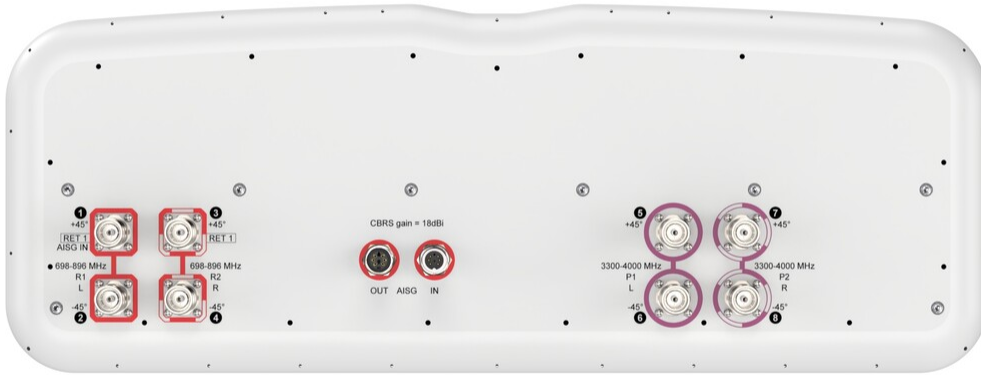


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	45°	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	698-896	3 - 4	45°			
P1	3300-4000	5 - 6	45°	N/A	NA	N/A
P2	3300-4000	7 - 8	45°			

(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

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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

Electrical Specifications, BASTA

Frequency Band, MHz	698-806	806-896	3300-3550	3550-3700	3700-4000
Gain by all Beam Tilts, average, dBi	15.1	16	16.4	16.4	16.9
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.4	±0.5	±0.4	±0.6
Beamwidth, Horizontal Tolerance, degrees	±6	±5	±6	±5	±3
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.5	±0.5	±0.6	±0.6
USLS, beampeak to 20° above beampeak, dB	12	15	14	15	15
Front-to-Back Total Power at 180° ± 30°, dB	20	22	27	26	23
CPR at Boresight, dB	19	20	12	14	17
CPR at Sector, dB	5	6	8	4	3

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)

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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



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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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