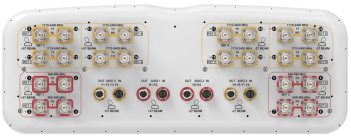
2NN2H4-33C-R6B



24-Port antenna, 8 x 698-896 MHz, 16 x 1710-2400 MHz, 33° HPBW, 6 x RETs, 4x SBTs, 8ft Length

- Provides 4T4R capability in low and mid bands
- Full spectrum operation for Band 14, AWS, PCS and WCS bands
- Twin beam patterns are optimized for minimum beam crossover providing for improved LTE data throughput

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, mid band	16
RF Connector Quantity, low band	8
RF Connector Quantity, total	24

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	4 female | 4 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 | Port 17 | Port 5 | Port 9
Internal RET	Low band (2) | Mid band (4)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W

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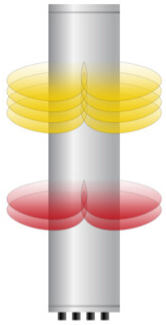
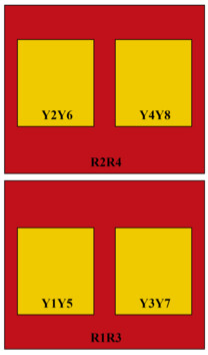
Protocol	3GPP/AISG 2.0 (Multi-RET)

Dimensions

Width	640 mm | 25.197 in
Depth	235 mm | 9.252 in
Length	2438 mm | 95.984 in
Net Weight, antenna only	73.5 kg | 162.04 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	CPxxxxxxxxxxxxxxxR1
R2	698-896	3 - 4					
R3	698-896	5 - 6	2	AISG2	5	2	CPxxxxxxxxxxxxxxxR3
R4	698-896	7 - 8					
Y1	1710-2400	9 - 10	3	AISG3	9	3	CPxxxxxxxxxxxxxxxY1
Y2	1710-2400	11 - 12					
Y3	1710-2400	13 - 14	4	AISG3			CPxxxxxxxxxxxxxxxY3
Y4	1710-2400	15 - 16					
Y5	1710-2400	17 - 18	5	AISG4	17	4	CPxxxxxxxxxxxxxxxY5
Y6	1710-2400	19 - 20					
Y7	1710-2400	21 - 22	6	AISG4			CPxxxxxxxxxxxxxxxY7
Y8	1710-2400	23 - 24					

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

Port Configuration

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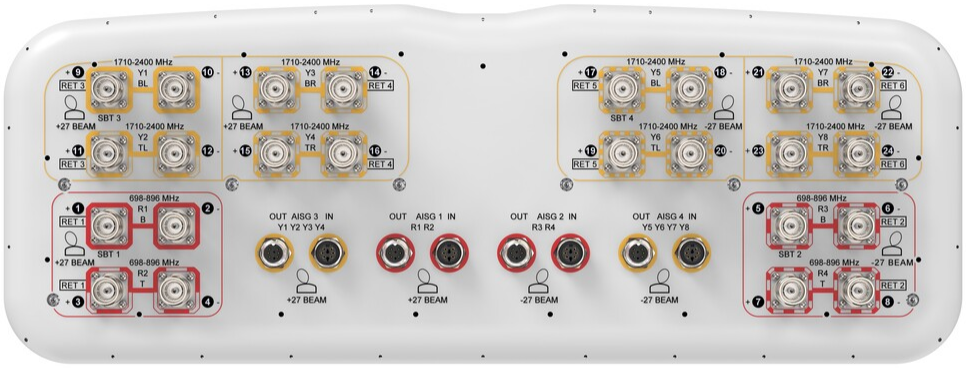

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1710 – 2400 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	2,000 W @ 50 °C

Electrical Specifications

	R1-R4	R1-R4	Y1-Y8	Y1-Y8	Y1-Y8	Y1-Y8
Frequency Band, MHz	**698–806**	**824–896**	**1710–1880**	**1850–1990**	**1920–2200**	**2300–2400**
RF Port	1-8	1-8	9-24	9-24	9-24	9-24
Gain, dBi	15.1	15.8	17	18	18.7	19.2
Beam Centers, Horizontal, degrees	±27	±27	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	40	37	35	33	31	29
Beamwidth, Vertical, degrees	19.3	17.2	7.9	7.5	7.2	6.4
Beam Tilt, degrees	2–16	2–16	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	18	16	17	18	17

Front-to-Back Ratio at 180°, dB	27	33	34	35	34	33
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	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	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**824–896**	**1710–1880**	**1850–1990**	**1920–2200**	**2300–2400**
Gain by all Beam Tilts, average, dBi	14.6	15.6	16.3	17.5	18	18.4
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.3	±1.1	±0.7	±0.8	±1
Beamwidth, Horizontal Tolerance, degrees	±2	±2	±2	±2	±2	±2
Beamwidth, Vertical Tolerance, degrees	±1.2	±1	±0.4	±0.4	±0.5	±0.4
Front-to-Back Total Power at 180° ± 30°, dB	22	28	28	29	29	28
CPR at Boresight, dB	18	19	15	15	15	16

Mechanical Specifications

Wind Loading @ Velocity, frontal	987.0 N @ 150 km/h (221.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	291.0 N @ 150 km/h (65.4 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,257.0 N @ 150 km/h (282.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	616.0 N @ 150 km/h (138.5 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm | 29.606 in
Depth, packed	382 mm | 15.039 in
Length, packed	2590 mm | 101.969 in
Weight, gross	96 kg | 211.644 lb

Regulatory Compliance/Certifications

2NN2H4-33C-R6B

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

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.
BSAMNT-M4	–	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance