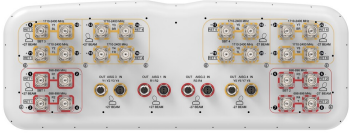


# 2NN2H4-33C-R6B



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

<b>Antenna Type</b>	Multibeam
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	16
<b>RF Connector Quantity, low band</b>	8
<b>RF Connector Quantity, total</b>	24

## Remote Electrical Tilt (RET) Information

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

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**Protocol** 3GPP/AISG 2.0 (Multi-RET)

## Dimensions

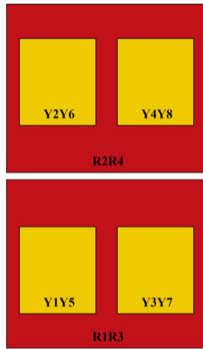
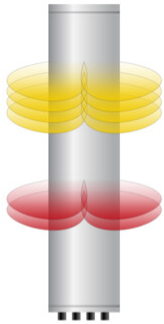
**Width** 640 mm | 25.197 in

**Depth** 235 mm | 9.252 in

**Length** 2438 mm | 95.984 in

**Net Weight, antenna only** 73.5 kg | 162.04 lb

## Array Layout

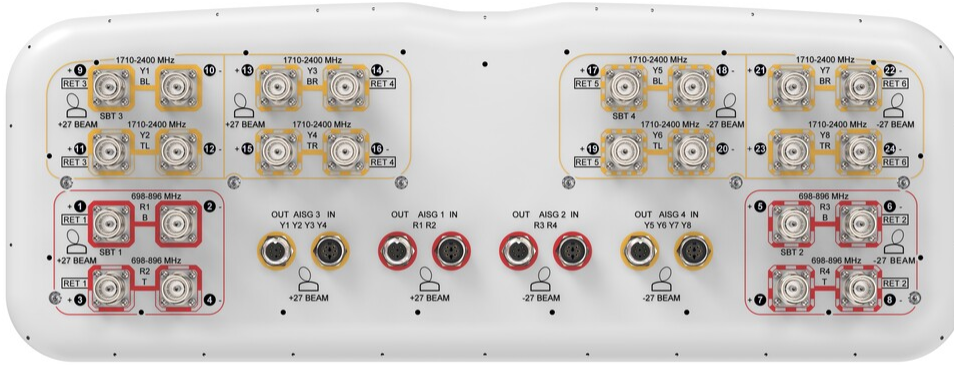


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
R2	698-896	3 - 4					
R3	698-896	5 - 6	2	AISG2	5	2	CPxxxxxxxxxxxxxxxxR3
R4	698-896	7 - 8					
Y1	1710-2400	9 - 10	3	AISG3	9	3	CPxxxxxxxxxxxxxxxxY1
Y2	1710-2400	11 - 12					
Y3	1710-2400	13 - 14	4	AISG3			CPxxxxxxxxxxxxxxxxY3
Y4	1710-2400	15 - 16					
Y5	1710-2400	17 - 18	5	AISG4	17	4	CPxxxxxxxxxxxxxxxxY5
Y6	1710-2400	19 - 20					
Y7	1710-2400	21 - 22	6	AISG4			CPxxxxxxxxxxxxxxxxY7
Y8	1710-2400	23 - 24					

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

## Port Configuration

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## Electrical Specifications

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

## Electrical Specifications

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

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

## Mechanical Specifications

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

## Packaging and Weights

<b>Width, packed</b>	752 mm   29.606 in
<b>Depth, packed</b>	382 mm   15.039 in
<b>Length, packed</b>	2590 mm   101.969 in
<b>Weight, gross</b>	96 kg   211.644 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.
- BSAMNT-M4 – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round

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members. Kit contains one scissor bracket set.

## \* Footnotes

### **Performance Note**

Severe environmental conditions may degrade optimum performance