2H-33A-R2

4-port multibeam antenna, 4x 1695–2400 MHz, 2x 38° HPBW, 2x RET

- Enhances network capacity through six sectors site application with only three antenna faces
- Maximizes frequency spectrum utilization to increase Average Revenue Per User (ARPU)
- Reduces antenna count to minimize Cap-Ex and Op-Ex costs
- High gain with excellent sector edge roll-off and azimuth sidelobe suppression
- Each antenna downtilt can be independently adjusted for greater flexibility in network optimization

General Specifications

Antenna Type	Multibeam
Band	Single band
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
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, total	4

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male
Input Voltage	10–30 Vdc
Internal RET	High band (2)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

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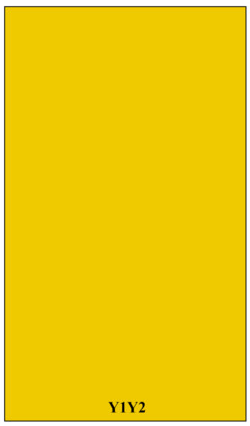
Width	350 mm | 13.78 in
Depth	208 mm | 8.189 in
Length	1400 mm | 55.118 in
Net Weight, without mounting kit	17.6 kg | 38.801 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
Y1	1695-2400	1 - 2	33°	1	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2400	3 - 4	33°	2	AISG1	CPxxxxxxxxxxxxxxY2

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

Beams Configuration

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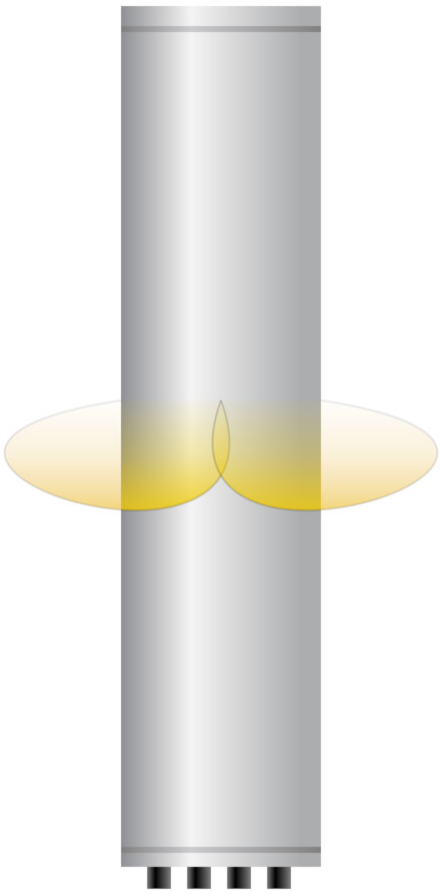

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2400 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2400**
Gain, dBi	19.1	19.6	19.9	19.1
Beam Centers, Horizontal, degrees	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	38	35.8	34	30
Beamwidth, Vertical, degrees	7.5	7	6.5	5.9
Beam Tilt, degrees	2–12	2–12	2–12	2–12

USLS (First Lobe), dB	20	20	19	18
Front-to-Back Ratio at 180°, dB	34	37	37	30
Isolation, Cross Polarization, dB	28	28	28	28
Isolation, Inter-band, dB	16	16	16	16
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150
Input Power per Port, maximum, watts	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2400**
Gain by all Beam Tilts, average, dBi	18.7	19.3	19.6	18.7
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.6	±0.6
Gain by Beam Tilt, average, dBi	2 ° | 18.6 7 ° | 18.8 12 ° | 18.6	2 ° | 19.1 7 ° | 19.4 12 ° | 19.2	2 ° | 19.5 7 ° | 19.8 12 ° | 19.0	2 ° | 19.0 7 ° | 18.8 12 ° | 18.3
Beamwidth, Horizontal Tolerance, degrees	±1.3	±1.3	±2.2	±1.7
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5	±0.2
USLS, beampeak to 20° above beampeak, dB	14	15	15	15
Front-to-Back Total Power at 180° ± 30°, dB	28	29	27	24
CPR at Boresight, dB	23	24	19	13

Mechanical Specifications

Wind Loading @ Velocity, frontal	221.0 N @ 150 km/h (49.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	185.0 N @ 150 km/h (41.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	469.0 N @ 150 km/h (105.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	234.0 N @ 150 km/h (52.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	447 mm | 17.598 in
Depth, packed	354 mm | 13.937 in
Length, packed	1544 mm | 60.787 in
Weight, gross	30 kg | 66.139 lb

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Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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-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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance