

GHH-33B-R3



6-port sector antenna, 2x 873–925 and 4x 1900–1910 MHz, 33° HPBW, 3x RET

- Excellent wind loading characteristics
- 33° HPBW antenna for GSM-R and FRMCS track coverage
- 20.6 dBi Low Band Gain (GSM-R), 22.1 dBi gain for FRMCS

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

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

Dimensions

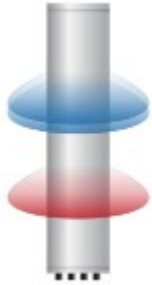
Width	640 mm 25.197 in
Depth	235 mm 9.252 in
Length	2250 mm 88.583 in

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Net Weight, without mounting kit

48.2 kg | 106.263 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (dB)	AISG No.	RET UID
R1	873-925	1-2	33°	1	AISG1	CPxxxxxxxxxxxxxxxxR1
B1	1900-1910	3-4	33°	2	AISG1	CPxxxxxxxxxxxxxxxxB1
B2	1900-1910	5-6	33°	3	AISG1	CPxxxxxxxxxxxxxxxxB2

Sizes of colored boxes are not true depictions of array sizes

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1900 – 1910 MHz 873 – 925 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1	B1,B2
Frequency Band, MHz	873–925	1900–1910

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RF Port	1-2	3-6
Gain, dBi	20.6	22.1
Beamwidth, Horizontal, degrees	30	29
Beamwidth, Vertical, degrees	8.1	5.1
Beam Tilt, degrees	2–12	2–10
USLS (First Lobe), dB	18	19
Front-to-Back Ratio at 180°, dB	39	38
CPR at Boresight, dB	21	23
Isolation, Cross Polarization, dB	25	25
Isolation, Inter-band, dB	25	25
VSWR Return loss, dB	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150
Input Power per Port at 50°C, maximum, watts	300	250

Mechanical Specifications

Wind Loading @ Velocity, frontal	940.0 N @ 150 km/h (211.3 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,412.0 N @ 150 km/h (317.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	965.0 N @ 150 km/h (216.9 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	2402 mm 94.567 in
Weight, gross	67.5 kg 148.812 lb

Regulatory Compliance/Certifications

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

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.
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BSAMNT-M

- 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