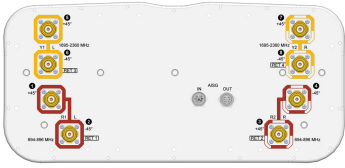


NNHH-65B-R4N17



8-port sector antenna, 4x 694–896 and 4x 1695–2360 MHz, 65° HPBW, 4x RETs

- Array configuration provides capability for 4T4R (4x MIMO) on Low band and High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics

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

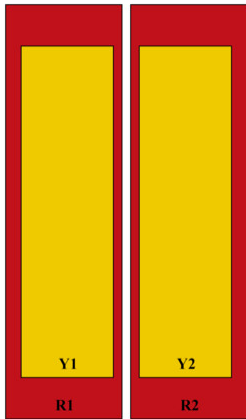
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (2) Low band (2)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

NNHH-65B-R4N17

Dimensions

Width	430 mm 16.929 in
Depth	197 mm 7.756 in
Length	1848 mm 72.756 in
Net Weight, without mounting kit	28.4 kg 62.611 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG RET UID
R1	694-896	1 - 2	1	CPxxxxxxxxxxxxMM.1
R2	694-896	3 - 4	2	CPxxxxxxxxxxxxMM.2
Y1	1695-2360	5 - 6	3	CPxxxxxxxxxxxxMM.3
Y2	1695-2360	7 - 8	4	CPxxxxxxxxxxxxMM.4

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

Port Configuration



NNHH-65B-R4N17

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz 694 – 896 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain, dBi	13.9	14.6	16.6	17.2	17.6	18.2
Beamwidth, Horizontal, degrees	61	57	65	65	63	59
Beamwidth, Vertical, degrees	12.5	10.9	7	6.6	6.2	5.6
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	21	18	15	14	14	14
Front-to-Back Ratio at 180°, dB	30	31	32	35	33	31
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	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	694–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	13.4	14.3	16	16.7	17	17.7
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.5	±0.8	±0.7	±0.8	±0.6
Beamwidth, Horizontal Tolerance, degrees	±10.7	±6.5	±6.7	±5.6	±6.9	±7.5
Beamwidth, Vertical Tolerance, degrees	±1.1	±0.9	±0.5	±0.3	±0.5	±0.2
USLS, beampeak to 20° above beampeak, dB	21	17	11	13	13	13
Front-to-Back Total Power at 180° ± 30°, dB	23	23	25	28	26	25

NNHH-65B-R4N17

CPR at Boresight, dB	24	24	17	21	21	20
CPR at Sector, dB	9	9	8	9	8	6

Mechanical Specifications

Wind Loading @ Velocity, frontal	471.0 N @ 150 km/h (105.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	241.0 N @ 150 km/h (54.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	762.0 N @ 150 km/h (171.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	444.0 N @ 150 km/h (99.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	530 mm 20.866 in
Depth, packed	349 mm 13.74 in
Length, packed	2020 mm 79.528 in
Weight, gross	41.1 kg 90.61 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
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.
----------	---	--

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
-------------------------	---