

# NNH4-85B-R6-V1



12-port sector antenna, 4x 694–894 and 8x 1695–2360 MHz, 85° HPBW, 6x 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
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

## General Specifications

<b>Antenna Type</b>	Sector
<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>	Aluminum   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>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

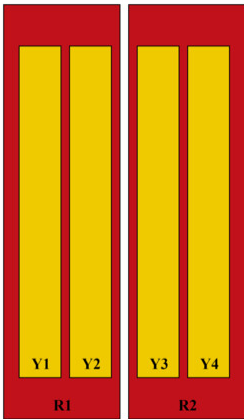
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

# NNH4-85B-R6-V1

## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1828 mm   71.969 in
<b>Net Weight, antenna only</b>	37.3 kg   82.232 lb

## Array Layout



ArrayID	Frequency(MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
R1	694-894	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-894	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2360	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2360	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2360	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY4

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2360 MHz   694 – 894 MHz
<b>Polarization</b>	±45°

# NNH4-85B-R6-V1

Total Input Power, maximum

900 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–806	806–894	1695–1880	1850–1990	1920–2180	2300–2360
RF Port	1-4	1-4	5-12	5-12	5-12	5-12
Gain, dBi	14.5	14.8	15.9	16.8	17.4	17.9
Beamwidth, Horizontal, degrees	82	76	84	82	78	73
Beamwidth, Vertical, degrees	12.5	11.1	5.5	5.2	5	4.6
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	20	19	15	18	18	18
Front-to-Back Ratio at 180°, dB	33	27	28	30	30	29
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	250	250	200	200	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694–806	806–894	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	14	14.5	14.9	16.1	16.7	17.4
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±1.5	±0.8	±1	±0.7
Beamwidth, Horizontal Tolerance, degrees	±10	±5	±8	±10	±10	±11
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.7	±0.2	±0.3	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	20	19	13	15	15	15
Front-to-Back Total Power at 180° ± 30°, dB	20	20	22	25	24	24
CPR at Boresight, dB	20	21	15	16	15	17
CPR at Sector, dB	11	8	10	11	11	8

## Mechanical Specifications

# NNH4-85B-R6-V1

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<b>Effective Projective Area (EPA), frontal</b>	0.64 m <sup>2</sup>   6.889 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.22 m <sup>2</sup>   2.368 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	685.0 N @ 150 km/h (154.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	232.0 N @ 150 km/h (52.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	889.0 N @ 150 km/h (199.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	564.0 N @ 150 km/h (126.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	2015 mm   79.331 in
<b>Weight, gross</b>	48.4 kg   106.704 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



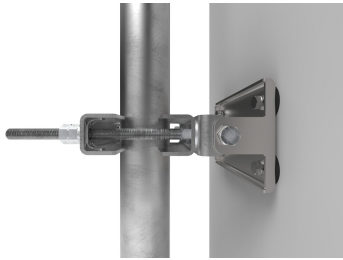
## Included Products

BSAMNT-2F	-	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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# BSAMNT-2F



Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

## Product Classification

**Product Type** Fixed tilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 3.8 kg | 8.378 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 4 kg | 8.818 lb

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-2F

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