

# NNV4-65C-R6-HG



12-port sector antenna, 4x 698–896 and 8x 1695–2690 MHz, 65° HPBW, 6x RET.

- Antenna design optimized to offer high gain performances
- Excellent choice to maximize both coverage and capacity in suburban and rural applications

## 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>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>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (4)
<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 (Multi-RET)

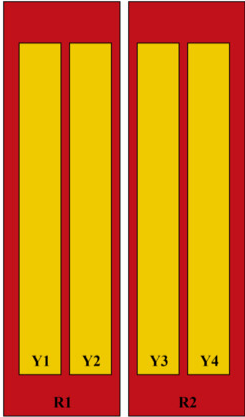
## Dimensions

<b>Width</b>	640 mm   25.197 in
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**Depth** 235 mm | 9.252 in  
**Length** 2438 mm | 95.984 in

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxMM.1
R2	698-896	3 - 4	2	AISG1	CPxxxxxxxxxxxxMM.2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxMM.3
Y2	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxMM.4
Y3	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxMM.5
Y4	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxMM.6

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

## Port Configuration



## Electrical Specifications

**Impedance** 50 ohm  
**Operating Frequency Band** 1695 – 2690 MHz | 698 – 896 MHz

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<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>824–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>	<b>2490–2690</b>
<b>Gain, dBi</b>	16.2	16.6	19.3	19.6	19.9	19.9	19.8
<b>Beamwidth, Horizontal, degrees</b>	68	64	61	59	60	64	69
<b>Beamwidth, Vertical, degrees</b>	9.6	8.2	4.3	4.1	3.9	3.5	3.2
<b>Beam Tilt, degrees</b>	0–10	0–10	0–7	0–7	0–7	0–7	0–7
<b>USLS (First Lobe), dB</b>	18	18	22	24	22	19	17
<b>Front-to-Back Ratio at 180°, dB</b>	32	32	35	34	32	36	33
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	28	28	28	28	28
<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	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	200	200	200	200	200	150	150

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>824–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.7	16.3	18.9	19.3	19.5	19.7	19.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.4	±0.7	±0.4	±0.4	±0.4	±0.5
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±5.7	±3	±3.4	±3	±3.8	±5.8	±6.4
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.4	±0.2	±0.1	±0.2	±0.1	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	16	17	14	15	15	15	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	25	24	28	28	25	29	27
<b>CPR at Boresight, dB</b>	18	19	21	24	24	27	25
<b>CPR at Sector, dB</b>	10	10	8	7	9	12	10

## Mechanical Specifications

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<b>Wind Loading @ Velocity, frontal</b>	1,055.0 N @ 150 km/h (237.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,433.0 N @ 150 km/h (322.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	1,086.0 N @ 150 km/h (244.1 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>	89.5 kg   197.313 lb
<b>Weight, net</b>	65.5 kg   144.403 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## 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 members. Kit contains one scissor bracket set.

## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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