NNH4-45C-R6

12-port Next Generation PerforMax™ Superior Coverage and Capacity sector antenna, 4x 698-896 MHz and 8x 1695-2360 MHz, 45° HPBW, 8ft, 6X RET

- Antenna optimized for higher gain with superior radiation efficiency
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Best in class PIM immunity
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity

General Specifications

Antenna Type	Sector with internal RET
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, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

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 (2) | Mid band (4)
Power Consumption, active state, maximum	10 W

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Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	749 mm | 29.488 in
Depth	197 mm | 7.756 in
Length	2438 mm | 95.984 in
Net Weight, without mounting kit	69.2 kg | 152.56 lb

Array Layout

Array ID	Frequency (MHz)	RF Connector	HPBW	RET (MRET)	AISG No.	RET UID
R1	698-896	1 - 2	45°	1	AISG1	CPxxxxxxxxxxxxMM.1
R2	698-896	3 - 4	45°	2	AISG1	CPxxxxxxxxxxxxMM.2
Y1	1695-2360	5 - 6	45°	3	AISG1	CPxxxxxxxxxxxxMM.3
Y2	1695-2360	7 - 8	45°	4	AISG1	CPxxxxxxxxxxxxMM.4
Y3	1695-2360	9 - 10	45°	5	AISG1	CPxxxxxxxxxxxxMM.5
Y4	1695-2360	11 - 12	45°	6	AISG1	CPxxxxxxxxxxxxMM.6

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	1,200 W @ 50 °C

Electrical Specifications

	R1-R2	R1-R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2360**
RF Port	1-4	1-4	5-12	5-12	5-12	5-12
Gain, dBi	17.2	17.9	19.8	20.3	20.8	21.2
Beamwidth, Horizontal, degrees	50	45	48	47	45	37
Beamwidth, Vertical, degrees	9.2	8.3	5.2	5	4.7	4.3
Beam Tilt, degrees	0–10	0–10	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	18	17	18	18	17	19
Front-to-Back Ratio at 180°, dB	32	34	39	40	37	37
CPR at Boresight, dB	18	18	15	17	17	15
Isolation, Cross Polarization, 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

Mechanical Specifications

Wind Loading @ Velocity, frontal	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
Wind Speed, maximum	241.4 km/h (150 mph)

Packaging and Weights

Width, packed	915 mm | 36.024 in

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Depth, packed	357 mm | 14.055 in
Length, packed	2688 mm | 105.827 in
Weight, gross	93 kg | 205.03 lb

Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

Included Products

BSAMNT-3F	–	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance