

24-port sector antenna, 2x 694-862 (R1), 2x 880-960 (R2), 2x 694-960 (R3), 8x 1695-2690 (Y1-Y2/Y4-Y5) & 2x 1427-2690 (Y3) MHz, 65° HPBW and 8x 3300-3800 (P1) MHz, 90° HPBW, 9x RET.

- Includes 1x 4-Column Array for 3300-3800MHz and calibration port. Column spacing optimized to support Soft Split Beamforming
- Retractable tilt indicator rods
- S4 array uses MQ cluster connectors
- Includes nine internal RET's
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Antenna shape optimized for wind load reduction

This product will be discontinued on: December 31, 2025

#### General Specifications

Antenna Type Sector and beamforming

Band Multiband
Calibration Connector Interface MQ5

Calibration Connector Quantity 1

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

Reflector Material Aluminum

**RF Connector Interface** 4.3-10 Female | MQ4 | MQ5

**RF Connector Location** Bottom

RF Connector Quantity, high band 8
RF Connector Quantity, mid band 10
RF Connector Quantity, low band 6
RF Connector Quantity, total 24

Remote Electrical Tilt (RET) Information



**RET Hardware** CommRET v2

**RET Interface** 8-pin DIN Female | 8-pin DIN Male

**RET Interface, quantity** 2 female | 2 male

Input Voltage 10-30 Vdc

Internal RET High band (1) | Low band (3) | Mid band (5)

Power Consumption, active state, maximum 8 W
Power Consumption, idle state, maximum 1 W

**Protocol** 3GPP/AISG 2.0 (Single RET)

**Dimensions** 

 Width
 430 mm | 16.929 in

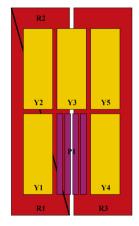
 Depth
 197 mm | 7.756 in

 Length
 2769 mm | 109.016 in

 Net Weight, antenna only
 59 kg | 130.073 lb

TDD Column Spacing 42 mm | 1.654 in

#### Array Layout

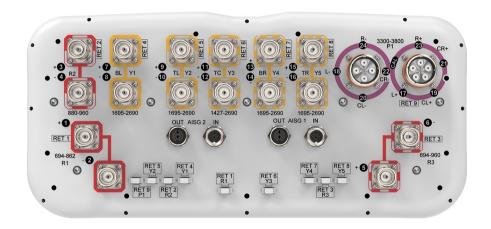


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-862	1 - 2	1	AISG1	CPxxxxxxxxxxxxxXR1
R2	880-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxXR3
Y1	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY1
Y2	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxY2
Y3	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxY3
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxx4
Y5	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxY5
P1	3300-3800	17 - 24	9	AISG1	CPxxxxxxxxxxxxxP1

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

### Port Configuration





### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1427 – 2690 MHz | 1695 – 2690 MHz | 3300 – 3800 MHz | 694 – 862

MHz | 694 - 960 MHz | 880 - 960 MHz

Polarization ±45°

**Total Input Power, maximum** 900 W @ 50 °C

### **Electrical Specifications**

	R1	R2	R3	Y1-Y2/Y4-Y	5Y1-Y2/Y4-Y	5 Y 3	Y3	Y3	P1
Frequency Band, MHz	694-862	880-960	694-960	1695-2200	2300-2690	1427-151	81695-218	02300-269	03300-3800
RF Port	1,2	3,4	5,6	7-10,13-16	7-10,13-16	11,12	11,12	11,12	17-24
Gain, dBi	15.8	16.3	16.4	17.4	18	16.4	17.7	18.2	16
Beamwidth, Horizontal, degrees	60	54	58	60	59	58	56	63	83
Beamwidth, Vertical, degrees	7.4	6.4	7	6.2	5	7.2	5.6	4.3	6.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	17	15	15	16	23	20	20	16
Front-to-Back Ratio at 180°, dB	34	31	31	32	32	33	31	32	29
Coupling level, Amp,									26

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Antenna port to Cal port, dB									
Coupling level, max Amp Δ, Antenna port to Cal port, dB									±2
Coupler, max Amp $\Delta$ , Antenna port to Cal port, dB									0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees									7
Isolation, Cross Polarization, dB	27	27	27	27	27	26	26	26	25
Isolation, Inter-band, dB	27	27	27	27	27	27	27	27	25
Isolation, Co-polarization, dB									20
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	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	-153	-153	-130
Input Power per Port at 50°C, maximum, watts	300	300	300	250	200	250	250	200	75
Electrical Specific	ations	, Broac	lcast 6	5°					
Frequency Band, MHz									3300-3800
Gain, dBi									17.9
Beamwidth, Horizontal, degrees									65
Beamwidth, Vertical, degrees									6.2
Front-to-Back Total Power at 180° ± 30°, dB									25
USLS (First Lobe), dB									20
Electrical Specific	ations	, Servic	te Beai	m					
Frequency Band, MHz									3300-3800
Steered 0° Gain, dBi									20.8
Steered 0° Beamwidth, Horizontal, degrees									24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB									30

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Steered 0° Horizontal Sidelobe, dB	15
Steered 30° Gain, dBi	19.5
Steered 30° Beamwidth, Horizontal, degrees	28
Steered 30° Front-to- Back Total Power at 180° ± 30°, dB	27

## Electrical Specifications, Soft Split

Frequency Band, MHz	3300-3800
Gain, dBi	19.5
Beamwidth, Horizontal, degrees	31
Front-to-Back Total Power at 180° ± 30°, dB	29
Horizontal Sidelobe, dB	17

### Mechanical Specifications

Wind Loading @ Velocity, frontal	651.0 N @ 150 km/h (146.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	351.0 N @ 150 km/h (78.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,028.0 N @ 150 km/h (231.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	421.0 N @ 150 km/h (94.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

### Packaging and Weights

Width, packed	530 mm   20.866 in
Depth, packed	356 mm   14.016 in
Length, packed	2897 mm   114.055 ir
Weight, gross	80 kg   176.37 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.andrew.com/ProductCompliance
ROHS	Compliant



**UK-ROHS** 

Compliant



#### 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

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

