

FFV4S4-65C-R7



20-port sector antenna, 4x 617-894, 8x 1695-2690 MHz, 65° HPBW and 8x 3300-4200 MHz, 90° HPBW, 7x RET.

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Cluster connectors for the beam-forming array, including eight RF ports plus one calibration port
- Antenna shape optimized for wind load reduction

General Specifications

Antenna Type	Sector and beamforming
Band	Multiband
Calibration Connector Interface	M-LOC
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 M-LOC
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	20

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 (2) Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W

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Protocol3GPP/AISG 2.0 (Single RET)

Dimensions

Width498 mm | 19.606 in

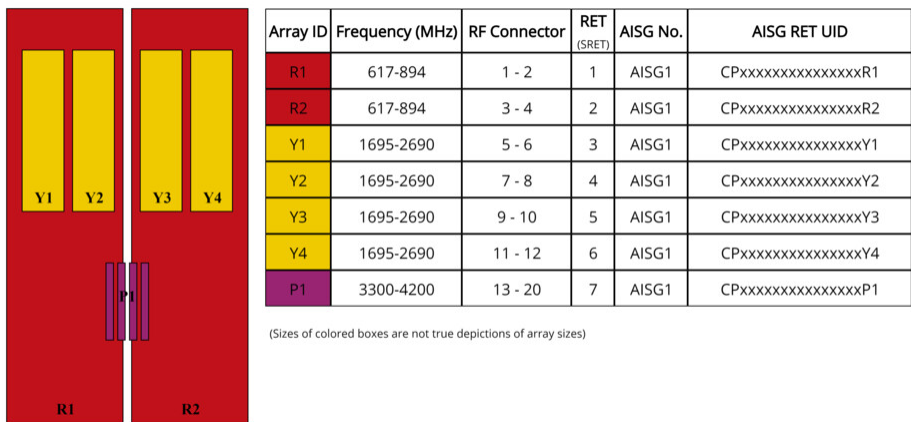
Depth197 mm | 7.756 in

Length2438 mm | 95.984 in

Net Weight, antenna only49.6 kg | 109.349 lb

TDD Column Spacing41 mm | 1.614 in

Array Layout



Port Configuration



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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3300 – 4200 MHz 617 – 894 MHz
Polarization	±45°
Total Input Power, maximum	1,400 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4	P1	P1
Frequency Band, MHz	617–698	698–894	1695–1880	1850–1990	1920–2200	2490–2690	3300–3800	3700–4200
RF Port	1,2,3,4	1,2,3,4	5,6,7,8,9,10,11,12	5,6,7,8,9,10,11,12	5,6,7,8,9,10,11,12	5,6,7,8,9,10,11,12	13,14,15,16,17,18,19,20	13,14,15,16,17,18,
Gain, dBi	15.1	15.6	16.4	16.8	17.2	17.6	15.6	16.4
Beamwidth, Horizontal, degrees	67	57	63	64	61	57	85	77
Beamwidth, Vertical, degrees	10.2	8.6	6.7	6.3	5.9	5	6.2	5.7
Beam Tilt, degrees	2–13	2–13	2–12	2–12	2–12	2–12	0–10	0–10
USLS (First Lobe), dB	17	15	17	17	17	18	14	14
Front-to-Back Ratio at 180°, dB	29	30	34	34	34	28	30	29
Coupling level, Amp, Antenna port to Cal port, dB							26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB							±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB							0.9	0.9

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Coupler, max Phase Δ , Antenna port to Cal port, degrees	7						7
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
Isolation, Co- polarization, dB	19						19
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-140
Input Power per Port at 50°C, maximum, watts	250	250	200	200	200	200	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300–3800	3700–4200
Gain, dBi	17.7	18.2
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	6.2	5.7
Front-to- Back Total Power at 180° ± 30°, dB	27	26
USLS (First	17	18

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Lobe), dB

Electrical Specifications, Service Beam

Frequency Band, MHz	3300–3800	3700–4200
Steered 0° Gain, dBi	20.3	20.7
Steered 0° Beamwidth, Horizontal, degrees	25	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	30	29
Steered 0° Horizontal Sidelobe, dB	12	13
Steered 0° USLS (First Lobe), dB	18	19
Steered 30° Gain, dBi	19.6	20.1
Steered 30° Beamwidth, Horizontal, degrees	27	23
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	28	28

Electrical Specifications, Soft Split

Frequency Band, MHz	3300–3800	3700–4200
Gain, dBi	19.5	19.8
Beamwidth, Horizontal, degrees	31	29
Front-to-	29	28

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Back Total Power at 180° ± 30°, dB		
Horizontal Sidelobe, dB	19	18
USLS (First Lobe), dB	18	19

Mechanical Specifications

Wind Loading @ Velocity, frontal	865.0 N @ 150 km/h (194.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	595.0 N @ 150 km/h (133.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2685 mm 105.709 in
Weight, gross	70.5 kg 155.426 lb

Regulatory Compliance/Certifications

Agency	Classification
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-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.
BSAMNT-M	–	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

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Performance Note Severe environmental conditions may degrade optimum performance



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.

Product Classification

Product Type Downtilt 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 6.2 kg | 13.669 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

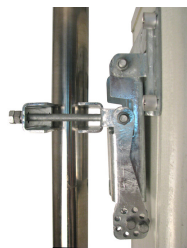
Weight, gross 6.4 kg | 14.11 lb

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 www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



BSAMNT-M



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.

Product Classification

Product Type Downtilt 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 4.5 kg | 9.921 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

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

