

T4S4-90A-R2



16-port Planar Array Antenna, 8x 2300–2690 and 8x 3300–3800 MHz, 90° HPBW, 2x RET

- For use in beamforming systems includes one calibration port per band

General Specifications

Antenna Type	Sector
Band	Multiband
Calibration Connector Interface	4.3-10 Female
Calibration Connector Quantity	2
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	16
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	0
RF Connector Quantity, total	16

Remote Electrical Tilt (RET) Information

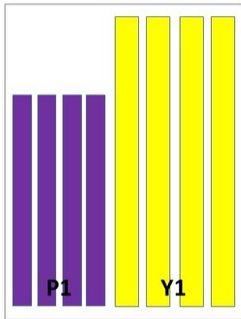
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Internal RET	High band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

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Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	1499 mm 59.016 in
Net Weight, without mounting kit	31.5 kg 69.446 lb

Array Layout



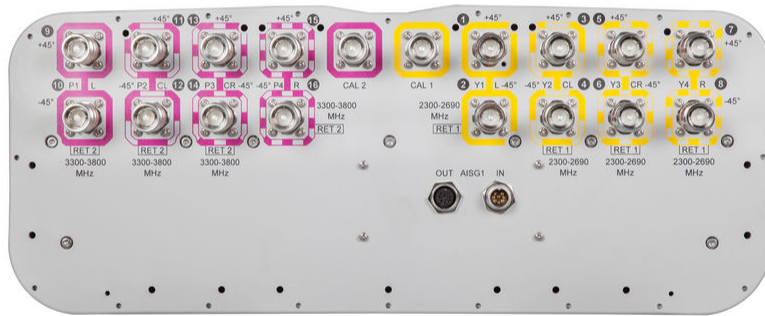
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
Y1	2300-2690	1-8	1	CPxxxxxxxxxxxxxxY1
P1	3300-3800	9-16	2	CPxxxxxxxxxxxxxxP1

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

Left Right
Bottom

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	2300 – 2690 MHz 3300 – 3800 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	Y1	Y1	P1	P1
Frequency Band, MHz	2300–2500	2500–2690	3300–3600	3600–3800
Gain, dBi	16.5	16.5	15.7	16.1
Beamwidth, Horizontal, degrees	102.5	96.5	98.8	92
Beamwidth, Vertical, degrees	5.2	5	6.7	6.3

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Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	20	15	14
Front-to-Back Ratio at 180°, dB	35	35	30	29
Coupling level, Amp, Antenna port to Cal port, dB	26	26	26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±2	±2	±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.9	0.9	0.9	0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees	7	7	7	7
Isolation, Inter-band, dB	18	18	18	18
Isolation, Cross Polarization, port to port, dB	25	25	25	25
Isolation, Cross Polarization, port to port, between two columns, dB	30	30	30	30
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-140	-140	-140	-140
Input Power per Port at 50°C, maximum, watts	150	150	75	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	2300-2500	2500-2690	3300-3600	3600-3800
Gain, dBi	17.9	17.9	16.2	16.3
Beamwidth, Horizontal, degrees	63	62	67	65
Beamwidth, Horizontal Tolerance, degrees	±4.9	±3.2	±7.8	±4.9
Beamwidth, Vertical, degrees	5.2	4.9	6.7	6.3
Beamwidth, Vertical Tolerance, degrees	±0.2	±0.2	±0.4	±0.4

Electrical Specifications, Service Beam

Frequency Band, MHz	2300-2500	2500-2690	3300-3600	3600-3800
Steered 0° Gain, dBi	21.6	21.8	20.6	20.8
Steered 0° Gain Tolerance, dBi	±0.3	±0.4	±0.4	±0.6
Steered 0° Beamwidth, Horizontal, degrees	27	25	25	23
Steered 0° CPR at Beampeak, dB	16	16	20	15
Steered 0° Horizontal Sidelobe, dB	12	11	12	12

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Steered 13° USLS (First Lobe), dB	3	4	4	6
Steered 30° Gain, dBi	21.2	21.2	19.8	19.9
Steered 30° Gain Tolerance, dBi	±0.3	±0.5	±0.4	±0.5
Steered 30° Beamwidth, Horizontal, degrees	29	27	29	27
Steered 30° Horizontal Sidelobe, dB	10	9	10	9
Steered 42° Front-to-Back Total Power at 180° ± 30°, dB	3	5	4	5

Electrical Specifications, Soft Split

Frequency Band, MHz	2300–2500	2500–2690	3300–3600	3600–3800
Gain, dBi	21.1	21.1	19.7	19.9
Beamwidth, Horizontal, degrees	32	31	32	30
CPR at Beampeak, dB	16	15	18	16
Horizontal Sidelobe, dB	18	17	18	17

Mechanical Specifications

Mechanical Tilt Range	0°–15°
Wind Loading @ Velocity, frontal	549.0 N @ 150 km/h (123.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	183.0 N @ 150 km/h (41.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	712.0 N @ 150 km/h (160.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	452.0 N @ 150 km/h (101.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	608 mm 23.937 in
Depth, packed	352 mm 13.858 in
Length, packed	1682 mm 66.221 in
Weight, gross	44 kg 97.003 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

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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.

* Footnotes

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-3

