T4-90A-R1-V5

Planar Array Antenna, 2300–2690 MHz, 90° HPBW, 1xIntRET

- For use in beamforming system, includes a calibration port
- Planar array antenna – 4 columns
- Single internal RET control for all four antenna arrays
- Optimized for software defined split six sector applications

This product will be discontinued on: March 30, 2024

General Specifications

Antenna Type	Sector
Band	Single band
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	PVC, UV resistant
Reflector Material	Aluminum
RF Connector Interface	MQ4 | MQ5
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v1
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Cal Port
Internal RET	High band (1)
Power Consumption, idle state, maximum	1 W

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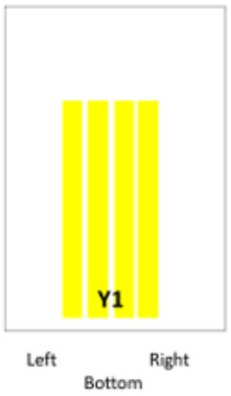
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	307 mm | 12.087 in
Depth	118 mm | 4.646 in
Length	1610 mm | 63.386 in
Net Weight, without mounting kit	15.6 kg | 34.392 lb
TDD Column Spacing	58 mm | 2.283 in

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
Y1	2300-2690	1-8	1	CPxxxxxxxxxxxxxxxY1

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

Port Configuration

Electrical Specifications

Impedance	50 ohm

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Operating Frequency Band	2300 – 2690 MHz
Polarization	±45°
Total Input Power, maximum	500 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**2300–2400**	**2496–2690**
Gain, dBi	17.3	17.8
Beamwidth, Horizontal, degrees	99	95
Beamwidth, Vertical, degrees	5.1	4.8
Beam Tilt, degrees	2–12	2–12
USLS (First Lobe), dB	16	17
Front-to-Back Ratio at 180°, dB	30	30
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
Coupler, max Phase Δ, Antenna port to Cal port, degrees	7	7
Isolation, Cross Polarization, dB	24	24
Isolation, Co-polarization, dB	18	18
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-130	-130
Input Power per Port at 50°C, maximum, watts	150	150

Electrical Specifications, BASTA

Frequency Band, MHz	**2300–2400**	**2496–2690**
Gain by all Beam Tilts, average, dBi	16.8	16.9
Gain by all Beam Tilts Tolerance, dB	±0.7	±1.2
Beamwidth, Horizontal Tolerance, degrees	±16.8	±14.3
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.4
USLS, beampeak to 20° above beampeak, dB	15	13
Front-to-Back Total Power at 180° ± 30°, dB	22	24
CPR at Boresight, dB	20	17
CPR at Sector, dB	11	7

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**2300–2400**	**2496–2690**

Gain, dBi	18	18.6
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	5.1	4.8
Front-to-Back Total Power at 180° ± 30°, dB	31	32
USLS (First Lobe), dB	16	16

Electrical Specifications, Service Beam

Frequency Band, MHz	**2300–2400**	**2496–2690**
Steered 0° Gain, dBi	22.3	22.3
Steered 0° Beamwidth, Horizontal, degrees	27	26
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	33	33
Steered 0° Horizontal Sidelobe, dB	12	11
Steered 30° Gain, dBi	21.6	21.6
Steered 30° Beamwidth, Horizontal, degrees	30	28
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	31	31

Electrical Specifications, Soft Split

Frequency Band, MHz	**2300–2400**	**2496–2690**
Gain, dBi	20.7	21
Beamwidth, Horizontal, degrees	35	33
Front-to-Back Total Power at 180° ± 30°, dB	32	32
Horizontal Sidelobe, dB	22	20

Mechanical Specifications

Wind Loading @ Velocity, frontal	586.0 N @ 150 km/h (131.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	123.0 N @ 150 km/h (27.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	709.0 N @ 150 km/h (159.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	413 mm | 16.26 in
Depth, packed	257 mm | 10.118 in
Length, packed	1740 mm | 68.504 in
Weight, gross	25.5 kg | 56.218 lb

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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

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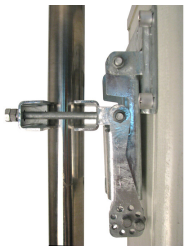

Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

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.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

BSAMNT-3