

# T4-90A-R1-V6



## 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

## General Specifications

<b>Antenna Type</b>	Sector and beamforming
<b>Band</b>	Single band
<b>Calibration Connector Interface</b>	4.3-10 Female
<b>Calibration Connector Quantity</b>	1
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	PVC, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

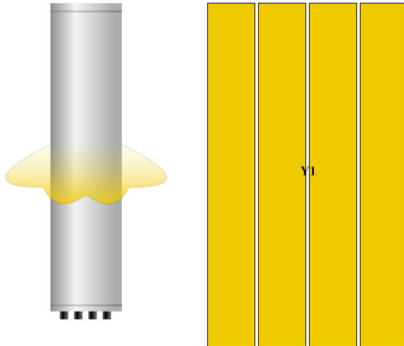
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Protocol</b>	3GPP/AISG 2.0

## Dimensions

# T4-90A-R1-V6

<b>Width</b>	307 mm   12.087 in
<b>Depth</b>	118 mm   4.646 in
<b>Length</b>	1610 mm   63.386 in
<b>Net Weight, without mounting kit</b>	14.2 kg   31.306 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
Y1	2300-2690	1 - 8	1	AISG1	CPxxxxxxxxxxxxxxxxY1

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
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# T4-90A-R1-V6

Operating Frequency Band	2300 – 2690 MHz
Polarization	±45°

## Electrical Specifications

Frequency Band, MHz	2300–2400	2496–2690
Beamwidth, Horizontal, degrees	95	86
Beamwidth, Vertical, degrees	5.1	4.8
Beam Tilt, degrees	2–12	2–12
USLS (First Lobe), dB	19	18
Front-to-Back Ratio at 180°, dB	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
Coupler, max Phase Δ, Antenna port to Cal port, degrees	7	7
Isolation, Cross Polarization, dB	24	24
Isolation, Inter-band, dB	24	24
Isolation, Co-polarization, dB	20	20
VSWR   Return loss, dB	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150
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	17	16.9
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5
Front-to-Back Total Power at 180° ± 30°, dB	21	22
CPR at Boresight, dB	18	16
CPR at Sector, dB	10	6

## Electrical Specifications, Broadcast 65°

Frequency Band, MHz	2300–2400	2496–2690
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	5.1	4.7
Front-to-Back Total Power at 180° ± 30°, dB	29	29
USLS (First Lobe), dB	19	17

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## Electrical Specifications, Service Beam

Frequency Band, MHz	2300–2400	2496–2690
Steered 0° Gain, dBi	22.6	22.7
Steered 0° Beamwidth, Horizontal, degrees	26	25
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	34	34
Steered 0° USLS (First Lobe), dB	20	18
Steered 30° Gain, dBi	21.6	21.7
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	30	31

## Electrical Specifications, Soft Split

Frequency Band, MHz	2300–2400	2496–2690
Gain, dBi	21.3	21.3
Beamwidth, Horizontal, degrees	35	32
Front-to-Back Total Power at 180° ± 30°, dB	30	30
Horizontal Sidelobe, dB	17	17

## 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, 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	24.1 kg   53.131 lb

## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

## 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.
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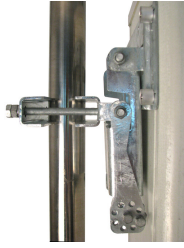
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## \* Footnotes

### **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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-3

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