TTTT65AP-1XR

8-port sector Planar Array Antenna, 2496–2690 MHz, 65° HPBW, 1x RET

- Excellent solution for site sharing and maximizing capacity
- Employs state-of-the-art ultra wideband technology providing excellent RF performance in all bands
- MIMO ready

OBSOLETE

This product was discontinued on: March 31, 2022

Replaced By:

T4-90A-R1-V2	Planar Array Antenna, 2300–2690 MHz, 90° HPBW, 1xIntRET

General Specifications

Antenna Type	Sector
Band	Single band
Calibration Connector Interface	N Female
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
Radiator Material	Low loss circuit board
RF Connector Interface	4.1-9.5 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male

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Input Voltage	10–30 Vdc
Internal RET	High band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	10 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	15.1 kg | 33.29 lb
TDD Column Spacing	75 mm | 2.953 in

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	2496 – 2690 MHz
Polarization	±45°
Total Input Power, maximum	200 W @ 50 °C

Beam Forming Weights

			Port 1	Port 2	Port 3	Port 4	Port 5	Port 6	Port 7	Port 8
P0	Tapered_Broadcast_65° for tilt0-3	Amp(voltage)	0.81	0	1	0	0.73	0	0.6	0
		PHz	0	0	115	0	100	0	0	0
P1	Tapered_Broadcast_65° for tilt0-3	Amp(voltage)	0	0.81	0	1	0	0.73	0	0.6
		PHz	0	0	0	115	0	100	0	0
P0	Tapered_Broadcast_65° for tilt4-8	Amp(voltage)	0.81	0	1	0	0.73	0	0.6	0
		PHz	0	0	130	0	100	0	7	0
P1	Tapered_Broadcast_65° for tilt4-8	Amp(voltage)	0	0.81	0	1	0	0.73	0	0.6
		PHz	0	0	0	130	0	100	0	7
P0	FullPower_Broadcast_65° for tilt0-8	Amp(voltage)	1	1	1	1	0	0	0	0
		PHz	80	57	0	137	0	0	0	0
P1	FullPowerBroadcast_65° for tilt0-8	Amp(voltage)	0	0	0	0	1	1	1	1
		PHz	0	0	0	0	80	-123	0	-43
+45	Service Beam_0° for tilt0-8	Amp(voltage)	1	0	1	0	1	0	1	0
		PHz	0	0	0	0	0	0	0	0
-45	Service Beam_0° for tilt0-8	Amp(voltage)	0	1	0	1	0	1	0	1
		PHz	0	0	0	0	0	0	0	0
+45	Service Beam_30° for tilt0-8	Amp(voltage)	1	0	1	0	1	0	1	0
		PHz	0	0	120	0	-120	0	0	0
-45	Service Beam_30° for tilt0-8	Amp(voltage)	0	1	0	1	0	1	0	1
		PHz	0	0	0	120	0	-120	0	0
+45	Service Beam_-30° for tilt0-8	Amp(voltage)	1	0	1	0	1	0	1	0
		PHz	0	0	-120	0	120	0	0	0
-45	Service Beam_-30° for tilt0-8	Amp(voltage)	0	1	0	1	0	1	0	1
		PHz	0	0	0	-120	0	120	0	0

Electrical Specifications

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Frequency Band, MHz	**2496–2690**
Gain, dBi	18.2
Beamwidth, Horizontal, degrees	66
Beamwidth, Vertical, degrees	4.8
Beam Tilt, degrees	0–8
Beam Tilt Tolerance, degrees	±0.4
USLS (First Lobe), dB	21
Front-to-Back Ratio at 180°, dB	30
Coupling level, Amp, Antenna port to Cal port, dB	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees	7
Isolation, Cross Polarization, dB	25
VSWR | Return loss, dB	1.43 | 15.0
PIM, 3rd Order, 2 x 20 W, dBc	-143
Input Power per Port, maximum, watts	250

Electrical Specifications, BASTA

Frequency Band, MHz	**2496–2690**
Gain by all Beam Tilts, average, dBi	17.4
Gain by Beam Tilt, average, dBi	0 ° | 17.7 4 ° | 17.9 8 ° | 17.7
Beamwidth, Horizontal Tolerance, degrees	±3
Beamwidth, Vertical Tolerance, degrees	±0.3
CPR at Sector, dB	9

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**2496–2690**

Gain, dBi	17.3
Beamwidth, Horizontal, degrees	66
Beamwidth, Horizontal Tolerance, degrees	±2.4

Electrical Specifications, Service Beam

Frequency Band, MHz	**2496–2690**
Steered 0° Gain, dBi	22.8
Steered 0° Gain Tolerance, dBi	±0.7
Steered 0° Beamwidth, Horizontal, degrees	20
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	36
Steered 0° Horizontal Sidelobe, dB	14
Steered 13° USLS (First Lobe), dB	7
Steered 30° Gain, dBi	20.8
Steered 30° Gain Tolerance, dBi	±0.7
Steered 30° Beamwidth, Horizontal, degrees	22
Steered 42° Front-to-Back Total Power at 180° ± 30°, dB	7

Mechanical Specifications

Mechanical Tilt Range	0°–17°
Wind Loading @ Velocity, frontal	559.0 N @ 150 km/h (125.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	114.0 N @ 150 km/h (25.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	677.0 N @ 150 km/h (152.2 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	22.8 kg | 50.265 lb

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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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance