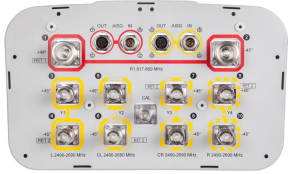


DT465B-2XR-V2



10-port, Multiband, DualPol® Planar Array ® Antenna, 2x 817-869, 8x 2490-2690 MHz, 65° HPBW, 2x RET with individual tilt available for the 850 MHz band and 2500 MHz bands.

- 1 column for 817-869 MHz and 4 columns for 2490-2690 MHz
- Two sets of AISG inputs for independent control of the internal RETs
- Integrated with a calibration board

OBSOLETE

This product was discontinued on: March 31, 2021

General Specifications

Antenna Type	Sector
Band	Multiband
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 Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Copper Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.1-9.5 DIN Female 7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male

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Input Voltage	10–30 Vdc
Internal RET	High band (1) Low 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	350 mm 13.78 in
Depth	209 mm 8.228 in
Length	1825 mm 71.85 in
Net Weight, without mounting kit	26.5 kg 58.422 lb

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	2490 – 2690 MHz 817 – 869 MHz
Polarization	±45°

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	817–869	2490–2690
Gain, dBi	16.3	18.3
Beamwidth, Horizontal, degrees	62	69
Beamwidth, Vertical, degrees	10.6	4.3
Beam Tilt, degrees	0–8	0–6
USLS (First Lobe), dB	19	16
Front-to-Back Ratio at 180°, dB	28	28
Isolation, Cross Polarization, dB	28	27
Isolation, Inter-band, dB	30	30
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, maximum, watts	300	50

Electrical Specifications, BASTA

Frequency Band, MHz	817–869	2490–2690
Gain by all Beam Tilts, average, dBi	16.1	17.9
Gain by all Beam Tilts Tolerance, dB	±0.2	±0.5
Gain by Beam Tilt, average, dBi	0° 16.1 4° 16.2 8° 16.0	0° 18.0 3° 18.0 6° 17.7
Beamwidth, Horizontal Tolerance, degrees	±0.6	±9.6
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	19	16
Front-to-Back Total Power at 180° ± 30°, dB	27	24
CPR at Boresight, dB	21	18
CPR at Sector, dB	16	8

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	2490–2690
Gain, dBi	16.8
Beamwidth, Horizontal, degrees	68
Beamwidth, Horizontal Tolerance, degrees	±7
Beamwidth, Vertical, degrees	4.3
Beamwidth, Vertical Tolerance, degrees	±0.2
CPR at Boresight, dB	19
CPR at Sector, dB	4
Front-to-Back Total Power at 180° ± 30°, dB	25.7

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Null Fill, dB 25.7

Electrical Specifications, Service Beam

Frequency Band, MHz	2490–2690
Steered 0° Gain, dBi	23.7
Steered 0° Gain Tolerance, dBi	±0.5
Steered 0° Beamwidth, Horizontal, degrees	20
Steered 0° CPR at Beampeak, dB	22
Steered 0° Horizontal Sidelobe, dB	11
Steered 13° USLS (First Lobe), dB	5
Steered 30° Gain, dBi	21.4
Steered 30° Gain Tolerance, dBi	±1.4
Steered 30° Beamwidth, Horizontal, degrees	22
Steered 30° Horizontal Sidelobe, dB	5
Steered 42° Front-to-Back Total Power at 180° ± 30°, dB	14

Mechanical Specifications

Wind Loading @ Velocity, frontal	301.0 N @ 150 km/h (67.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	253.0 N @ 150 km/h (56.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	637.0 N @ 150 km/h (143.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	464 mm 18.268 in
Depth, packed	357 mm 14.055 in
Length, packed	1971 mm 77.598 in
Weight, gross	40.1 kg 88.405 lb

Regulatory Compliance/Certifications

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



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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