F-65C-R1

2-port sector antenna, 2x 617–806 MHz, 65° HPBW, 1x RET, 600MHz-Ready Antenna Technology

OBSOLETE

This product was discontinued on: March 30, 2021

General Specifications

Antenna Type	Sector
Band	Single band
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	Aluminum | Low loss circuit board
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, low band	2
RF Connector Quantity, total	2

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W

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Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	395 mm | 15.551 in
Depth	228 mm | 8.976 in
Length	2438 mm | 95.984 in
Net Weight, without mounting kit	28 kg | 61.729 lb

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	617 – 806 MHz
Polarization	±45°
Total Input Power, maximum	500 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**617–698**	**698–806**
Gain, dBi	15.8	16.4
Beamwidth, Horizontal, degrees	66	60
Beamwidth, Vertical, degrees	10.4	9.3
Beam Tilt, degrees	2–13	2–13
USLS (First Lobe), dB	19	17
Front-to-Back Ratio at 180°, dB	30	27
Isolation, Cross Polarization, dB	30	30
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc		-153
Input Power per Port at 50°C, maximum, watts	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	**617–698**	**698–806**
Gain by all Beam Tilts, average, dBi	15.7	16.1
Gain by all Beam Tilts Tolerance, dB	±0.2	±0.4
Gain by Beam Tilt, average, dBi	2 ° | 15.5 7 ° | 15.8 13 ° | 15.6	2 ° | 15.9 7 ° | 16.3 13 ° | 16.0
Beamwidth, Horizontal Tolerance, degrees	±1.9	±4.0

Beamwidth, Vertical Tolerance, degrees	±0.6	±0.7
USLS, beampeak to 20° above beampeak, dB	17	14
Front-to-Back Total Power at 180° ± 30°, dB	25	22
CPR at Boresight, dB	22	24
CPR at Sector, dB	10	8

Mechanical Specifications

Wind Loading @ Velocity, frontal	510.0 N @ 150 km/h (114.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	374.0 N @ 150 km/h (84.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	872.0 N @ 150 km/h (196.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	524.0 N @ 150 km/h (117.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	514 mm | 20.236 in
Depth, packed	372 mm | 14.646 in
Length, packed	2645 mm | 104.134 in
Weight, gross	44.4 kg | 97.885 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

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