

# NH65S-DG-F0M



2-port small cell antenna, 2x (698-896 and 1710–2180 MHz), 65° HPBW with fixed tilt in the low band and manual tilt in the high band. Contains internal diplexer and active GPS L1 band antenna.

## OBSOLETE

This product was discontinued on: March 31, 2023

## General Specifications

<b>Antenna Type</b>	Small Cell
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>GPS Connector Interface</b>	4.1-9.5 DIN Female
<b>GPS Connector Quantity</b>	1
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Internal GPS frequency band</b>	1,575.42 MHz
<b>Internal GPS VSWR</b>	2
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>RF Connector Interface</b>	7-16 DIN Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, diplexed low and high bands</b>	2
<b>RF Connector Quantity, total</b>	2

## Dimensions

<b>Width</b>	301 mm   11.85 in
<b>Depth</b>	181 mm   7.126 in

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<b>Length</b>	728 mm   28.661 in
<b>Net Weight, without mounting kit</b>	7.6 kg   16.755 lb

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1710 – 2180 MHz   698 – 896 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2180
<b>Gain, dBi</b>	10.1	10.5	14	14.1	14
<b>Beamwidth, Horizontal, degrees</b>	69	65	60	60	61
<b>Beamwidth, Vertical, degrees</b>	39.9	35.7	14.1	13.5	13.1
<b>Beam Tilt, degrees</b>	0	0	0–16	0–16	0–16
<b>USLS (First Lobe), dB</b>	15	15	12	13	13
<b>Front-to-Back Ratio at 180°, dB</b>	24	32	24	25	25
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153
<b>Input Power per Port, maximum, watts</b>	125	125	125	125	125

## Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2180
<b>Gain by all Beam Tilts, average, dBi</b>	9.5	10.1	13.5	13.8	13.6
<b>Gain by all Beam Tilts Tolerance, dB</b>	±1.3	±0.8	±0.7	±0.5	±0.6
<b>Gain by Beam Tilt, average, dBi</b>			0°   14.0 8°   13.5 16°   12.9	0°   14.2 8°   13.8 16°   13.3	0°   14.0 8°   13.6 16°   13.3
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±7.5	±4.6	±5.1	±5.4	±7.7
<b>Beamwidth, Vertical Tolerance, degrees</b>	±6	±3.2	±1.1	±0.7	±0.8
<b>USLS, beampeak to 20° above</b>			12	13	13

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## beampeak, dB

<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	19	20	21	20	19
<b>CPR at Boresight, dB</b>	16	17	18	16	16
<b>CPR at Sector, dB</b>	9	5	9	9	10

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	98.0 N @ 150 km/h (22.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	77.0 N @ 150 km/h (17.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	188.0 N @ 150 km/h (42.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	99.0 N @ 150 km/h (22.3 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	409 mm   16.102 in
<b>Depth, packed</b>	299 mm   11.772 in
<b>Length, packed</b>	976 mm   38.425 in
<b>Weight, gross</b>	13.9 kg   30.644 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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>



## 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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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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