

# FFHH-65A-R3



8-port sector antenna, 4x 617-806 and 4x 1695–2360 MHz, 65° HPBW, 3x RET, 600 MHz-Ready Antenna Technology

## OBSOLETE

This product was discontinued on: March 30, 2024

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<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   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>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>	4
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

<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>Internal RET</b>	High band (2)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	10 W

# FFHH-65A-R3

**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

**Width** 640 mm | 25.197 in

**Depth** 235 mm | 9.252 in

**Length** 1224 mm | 48.189 in

**Net Weight, without mounting kit** 33 kg | 72.752 lb

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-806	1-2	1	ANxxxxxxxxxxxxxxxxx1
R2	617-806	3-4		
Y1	1695-2360	5-6	2	ANxxxxxxxxxxxxxxxxx2
Y2	1695-2360	7-8	3	ANxxxxxxxxxxxxxxxxx3

Left Bottom Right

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

## Port Configuration

# FFHH-65A-R3



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2360 MHz   617 – 806 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	617–698	698–806	1695–1880	1850–1990	1920–2200	2300–2360
<b>Gain, dBi</b>	12.9	13.4	16.6	17.1	17.9	18.4
<b>Beamwidth, Horizontal, degrees</b>	65	61	67	63	60	52
<b>Beamwidth, Vertical, degrees</b>	20.7	19.1	8	7.5	7	6.2
<b>Beam Tilt, degrees</b>	5–22	5–22	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	15	14	16	17	18	18
<b>Front-to-Back Ratio at 180°, dB</b>	29	30	38	36	37	39
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	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	1.5 14.0

# FFHH-65A-R3

<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	200	200	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>617–698</b>	<b>698–806</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>
<b>Gain by all Beam Tilts, average, dBi</b>	12.6	12.8	16.1	16.9	17.3	18.1
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.8	±0.7	±0.4	±0.6	±0.5
<b>Gain by Beam Tilt, average, dBi</b>	5°   12.8 14°   12.7 22°   12.1	5°   13.2 14°   12.9 22°   12.0	2°   16.1 7°   16.2 12°   15.8	2°   16.9 7°   17.0 12°   16.6	2°   17.1 7°   17.4 12°   17.0	2°   17.9 7°   18.3 12°   17.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±6.5	±5	±4.2	±4.2	±6.2	±5.8
<b>Beamwidth, Vertical Tolerance, degrees</b>	±1.5	±1.8	±0.5	±0.5	±0.6	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>			14	15	15	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	21	20	31	31	31	30
<b>CPR at Boresight, dB</b>	18	18	17	18	18	19
<b>CPR at Sector, dB</b>	7	5	9	7	8	8

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	505.0 N @ 150 km/h (113.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	156.0 N @ 150 km/h (35.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	688.0 N @ 150 km/h (154.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	520.0 N @ 150 km/h (116.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	752 mm   29.606 in
<b>Depth, packed</b>	387 mm   15.236 in
<b>Length, packed</b>	1379 mm   54.291 in
<b>Weight, gross</b>	49.5 kg   109.129 lb

## Regulatory Compliance/Certifications

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

# FFHH-65A-R3

---

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



## Included Products

BSAMNT-4	–	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

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

# BSAMNT-4



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** 6.5 kg | 14.33 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

## Regulatory Compliance/Certifications

Agency	Classification
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

