

# EGZHHTTS4-65B-R7



22-port sector antenna, 2x 694-862 (R1), 2x 880-960 (R2), 2x 1427-2690 (Y2), 4x 1695-2180 (B1-B2), 4x 2490-2690 (Y1 & Y3) MHz, 65° 8x 3300-3800 (P1) HPBW, 7X RET. Y1 & Y3 share common RET.

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Retractable tilt indicator rods
- Two cluster connectors for the S4 beam-forming array, including eight RF ports plus one calibration port

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female   M-LOC
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	18
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	22

## Remote Electrical Tilt (RET) Information

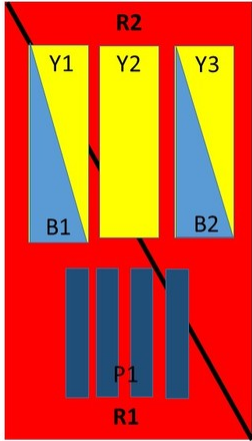
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (5)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

# EGZHHTTS4-65B-R7

<b>Width</b>	395 mm   15.551 in
<b>Depth</b>	228 mm   8.976 in
<b>Length</b>	2100 mm   82.677 in
<b>Net Weight, without mounting kit</b>	42 kg   92.594 lb

## Array Layout



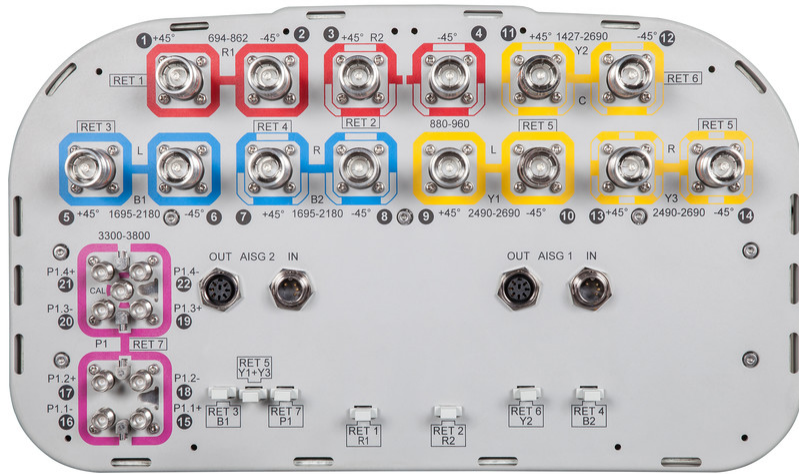
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-862	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	880-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
B1	1695-2180	5-6	3	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	7-8	4	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	9-10	5	CPxxxxxxxxxxxxxxxxY1
Y3	2490-2690	13-14		
Y2	1427-2690	11-12	6	CPxxxxxxxxxxxxxxxxY2
P1	3300-3800	15-22	7	CPxxxxxxxxxxxxxxxxP1

Left Right  
Bottom

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

## Port Configuration

# EGZHHTTS4-65B-R7



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2180 MHz   2490 – 2690 MHz   3300 – 3800 MHz   694 – 862 MHz   880 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

	R1	R2	B1-B2	Y1&Y3	Y2	Y2	Y2	P1
<b>Frequency Band, MHz</b>	<b>694–862</b>	<b>880–960</b>	<b>1695–2180</b>	<b>2490–2690</b>	<b>1427–1518</b>	<b>1695–2200</b>	<b>2300–2690</b>	<b>3300–3800</b>
<b>Gain, dBi</b>	14.7	15	16.5	16.7	14.6	16.3	17	15.1
<b>Beamwidth, Horizontal, degrees</b>	65	64	66	60	70	63	56	91
<b>Beamwidth, Vertical, degrees</b>	10.5	8.9	7.1	5.6	9.3	7.5	5.8	7.1
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	17	22	21	18	19	16	21	15
<b>Front-to-Back Ratio at 180°, dB</b>	35	33	32	30	32	32	34	27
<b>Coupling level, Amp, Antenna port to Cal port, dB</b>								26

# EGZHHTTS4-65B-R7

<b>Coupling level, max Amp Δ, Antenna port to Cal port, dB</b>								±2
<b>Coupler, max Amp Δ, Antenna port to Cal port, dB</b>								0.9
<b>Coupler, max Phase Δ, Antenna port to Cal port, degrees</b>								7
<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	27	27	25
<b>Isolation, Inter-band, dB</b>	28	28	28	28	28	28	28	19
<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	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150	-145
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	250	200	200	250	250	75

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694–862</b>	<b>880–960</b>	<b>1695–2180</b>	<b>2490–2690</b>	<b>1427–1518</b>	<b>1695–2200</b>	<b>2300–2690</b>	<b>3300–3800</b>
<b>Gain by all Beam Tilts, average, dBi</b>	14.5	14.7	16	16.1	14.4	15.4	16.6	14.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.3	±0.4	±0.8	±0.7	±0.4	±1.3	±0.7	±0.6
<b>Gain by Beam Tilt, average, dBi</b>	2° 14.5 7° 14.5 12° 14.4	2° 14.7 7° 14.9 12° 14.6	2° 15.8 7° 16.1 12° 15.9	2° 15.7 7° 16.4 12° 15.9	2° 14.4 7° 14.5 12° 14.2	2° 15.3 7° 15.6 12° 15.4	2° 16.6 7° 16.9 12° 16.2	2° 14.2 7° 14.6 12° 14.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±2.5	±1.9	±5.4	±5.8	±4.2	±5.9	±5.9	±14.5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±1.1	±0.5	±0.7	±0.2	±0.5	±1	±0.6	±0.6
<b>USLS, beampeak to 20° above beampeak, dB</b>	17	18	15	14	15	15	16	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	26	24	24	24	26	28	29	21
<b>CPR at Boresight, dB</b>	19	16	17	18	14	22	24	15
<b>CPR at Sector, dB</b>	12	8	7	10	8	8	6	9

## Electrical Specifications, Broadcast 65°

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Gain, dBi</b>	16.2
<b>Beamwidth, Horizontal, degrees</b>	60
<b>Beamwidth, Vertical, degrees</b>	7.1

# EGZHHTTS4-65B-R7

---

USLS (First Lobe), dB 16

## Electrical Specifications, Service Beam

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Steered 0° Gain, dBi</b>	19.8
<b>Steered 0° Beamwidth, Horizontal, degrees</b>	25
<b>Steered 0° CPR over 10 dB Beamwidth, dB</b>	25
<b>Steered 0° Front-to-Back Total Power at 180° ± 30°, dB</b>	28
<b>Steered 0° Horizontal Sidelobe, dB</b>	12
<b>Steered 13° Gain, dBi</b>	25
<b>Steered 13° Beamwidth, Horizontal, degrees</b>	10
<b>Steered 13° CPR at Beampeak, dB</b>	28
<b>Steered 13° CPR over 10 dB Beamwidth, dB</b>	12
<b>Steered 30° Gain, dBi</b>	19.4
<b>Steered 30° Beamwidth, Horizontal, degrees</b>	25
<b>Steered 30° Front-to-Back Total Power at 180° ± 30°, dB</b>	27
<b>Steered 30° Horizontal Sidelobe, dB</b>	10
<b>Steered 42° CPR at Beampeak, dB</b>	27

## Electrical Specifications, Soft Split

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Gain, dBi</b>	19.2
<b>Beamwidth, Horizontal, degrees</b>	29
<b>CPR at Beampeak, dB</b>	17
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	27
<b>Horizontal Sidelobe, dB</b>	17

# EGZHHTTS4-65B-R7

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.4 m <sup>2</sup>   4.306 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.29 m <sup>2</sup>   3.122 ft <sup>2</sup>
<b>Mechanical Tilt Range</b>	0°–12°
<b>Wind Loading @ Velocity, frontal</b>	427.0 N @ 150 km/h (96.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	730.0 N @ 150 km/h (164.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	439.0 N @ 150 km/h (98.7 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	505 mm   19.882 in
<b>Depth, packed</b>	386 mm   15.197 in
<b>Length, packed</b>	2233 mm   87.913 in
<b>Weight, gross</b>	57.7 kg   127.207 lb

## Regulatory Compliance/Certifications

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