

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

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female M-LOC
RF Connector Location	Bottom
RF Connector Quantity, high band	18
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	4
RF Connector Quantity, total	22

Remote Electrical Tilt (RET) Information

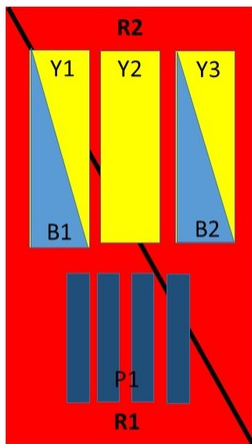
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10-30 Vdc
Internal RET	High band (5) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

EGZHHTTS4-65B-R7

Dimensions

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

Array Layout



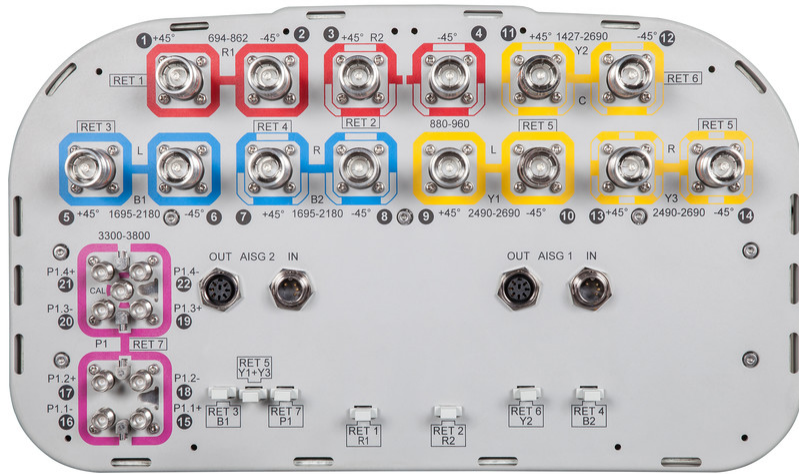
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-862	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	880-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
B1	1695-2180	5-6	3	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	7-8	4	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	9-10	5	CPxxxxxxxxxxxxxxxxY1
Y3	2490-2690	13-14		
Y2	1427-2690	11-12	6	CPxxxxxxxxxxxxxxxxY2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

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

Electrical Specifications

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

EGZHHTTS4-65B-R7

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

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300–3800
Gain, dBi	16.2
Beamwidth, Horizontal, degrees	60
Beamwidth, Vertical, degrees	7.1
USLS (First Lobe), dB	16

Electrical Specifications, Service Beam

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

EGZHHTTS4-65B-R7

Beamwidth, dB	
Steered 30° Gain, dBi	19.4
Steered 30° Beamwidth, Horizontal, degrees	25
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	27
Steered 30° Horizontal Sidelobe, dB	10
Steered 42° CPR at Beampeak, dB	27

Electrical Specifications, Soft Split

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

Mechanical Specifications

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

Packaging and Weights

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

EGZHHTTS4-65B-R7

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 www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant/Exempted



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

Performance Note Severe environmental conditions may degrade optimum performance