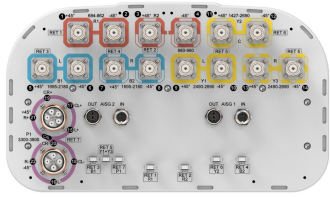


# EGZHHTTS4-65B-R7V2



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 2 MQ connectors MQ4/MQ5

## 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  |
| <b>Radome Material</b>                  | Fiberglass, UV resistant   |
| <b>Radiator Material</b>                | Low loss circuit board   |
| <b>Reflector Material</b>               | Aluminum   |
| <b>RF Connector Interface</b>           | 4.3-10 Female   MQ4   MQ5  |
| <b>RF Connector Location</b>            | Bottom   |
| <b>RF Connector Quantity, high band</b> | 8  |
| <b>RF Connector Quantity, mid band</b>  | 10   |
| <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 (1)   Low band (2)   Mid band (4) |
| <b>Power Consumption, active state, maximum</b> | 8 W   |
| <b>Power Consumption, idle state, maximum</b>   | 1 W   |

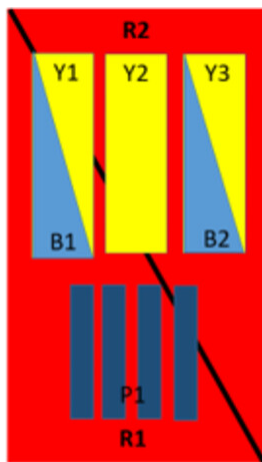
# EGZHHTTS4-65B-R7V2

**Power Consumption, normal conditions, maximum** 8 W  
**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

**Width** 395 mm | 15.551 in  
**Depth** 228 mm | 8.976 in  
**Length** 2100 mm | 82.677 in  
**Net Weight, without mounting kit** 42.9 kg | 94.578 lb

## Array Layout



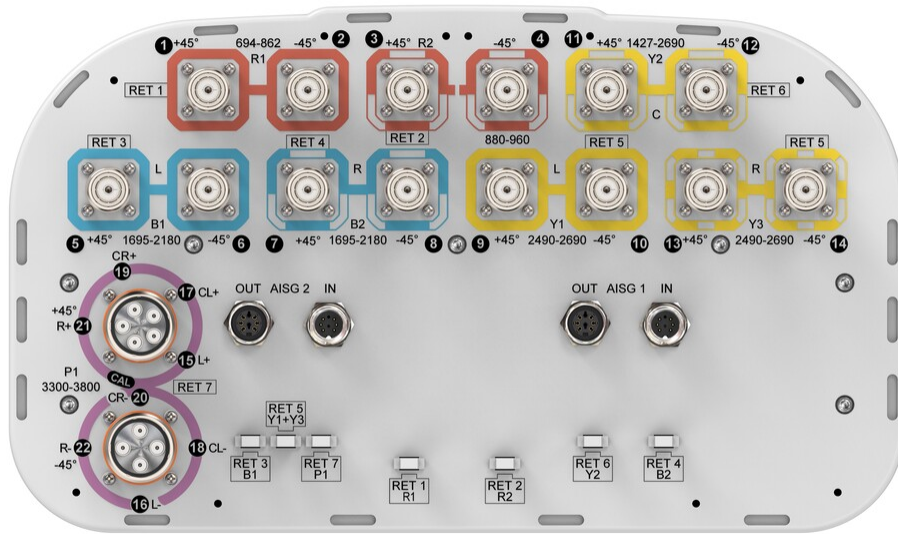
| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID         |
|-------|------------|-------|------------|----------------------|
| R1    | 694-862    | 1-2   | 1          | CPxxxxxxxxxxxxxxxxR1 |
| R2    | 880-960    | 3-4   | 2          | CPxxxxxxxxxxxxxxxxR2 |
| B1    | 1695-2180  | 5-6   | 3          | 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 Bottom Right

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

## Port Configuration

# EGZHHTTS4-65B-R7V2



## 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

| Frequency Band, MHz                                      | 694–862 | 880–960 | 1695–2180 | 2490–2690 | 1427–1518 | 1695–2200 | 2300–2690 | 3300–3800 |
|--|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| <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        |
| <b>Coupling level, max Amp Δ,</b>                        |         |         |           |           |           |           |           | ±2        |

# EGZHHTTS4-65B-R7V2

## Antenna port to Cal port, dB

Coupler, max Amp  $\Delta$ , Antenna port to Cal port, dB 0.9

Coupler, max Phase  $\Delta$ , 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, BASTA

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

## 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

# EGZHHTTS4-65B-R7V2

|  |                  |
|--|------------------|
| <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° Front-to-Back Total Power at 180° ± 30°, dB</b>  | 28               |
| <b>Steered 0° Horizontal Sidelobe, 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               |

## 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               |

## Mechanical Specifications

|   |   |
|---|---|
| <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>  | 58.6 kg   129.191 lb |

# EGZHHTTS4-65B-R7V2

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**Weight, net**

42.9 kg | 94.578 lb

## 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.commscope.com/ProductCompliance](http://www.commscope.com/ProductCompliance)

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

**Performance Note**

Severe environmental conditions may degrade optimum performance