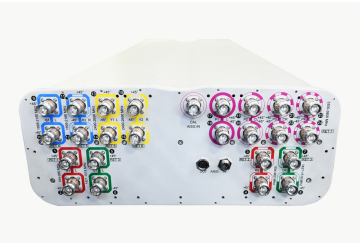
RRYYHHTTS4-65A-R7



24-port sector antenna, 4x 694–960, 4x 1427–1518, 4x 1695-2180, 4x 2490-2690 65° HPBW and 8x 3300-3800 MHz, 7x RET

- Integrated with a calibration board
- Optimized for Software Defined Split 6 Sector applications
- 2 columns for 694-960 MHz and 2 columns for 1427-1518 / 1695-2180 / 2490-2690 MHz and 4 columns for 3300-3800 MHz
- Seven internal RETs control the antenna arrays

General Specifications

Antenna Type	Sector
Band	Multiband
Calibration Connector Interface	4.3-10 Female
Calibration Connector Quantity	1
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum | Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	20
RF Connector Quantity, low band	4
RF Connector Quantity, total	24

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (5) | Low band (2)
Power Consumption, idle state, maximum	1 W

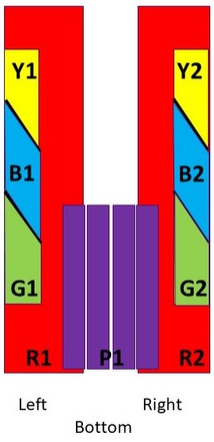
RRYYHHTTS4-65A-R7

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

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	1499 mm | 59.016 in
Net Weight, without mounting kit	39.2 kg | 86.421 lb
TDD Column Spacing	42 mm | 1.654 in

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxR2
G1	1427-1518	5-6	3	CPxxxxxxxxxxxxxxG1
G2	1427-1518	7-8		
B1	1695-2180	9-10	4	CPxxxxxxxxxxxxxxB1
B2	1695-2180	11-12	5	CPxxxxxxxxxxxxxxB2
Y1	2490-2690	13-14	6	CPxxxxxxxxxxxxxxY1
Y2	2490-2690	15-16		
P1	3300-3800	17-24	7	CPxxxxxxxxxxxxxxP1

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

Port Configuration

RRYYHHTTS4-65A-R7

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 1518 MHz | 1695 – 2180 MHz | 2496 – 2690 MHz | 3300 – 3800 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1-R2	R1-R2	R1-R2	G1-G2	B1-B2	Y1-Y2	P1
Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1427–1518**	**1695–2180**	**2490–2690**	**3300–3800**
Gain, dBi	13.4	13.5	13.8	14.9	15.9	16.8	15.9
Beamwidth, Horizontal, degrees	60	60	60	59	68	57	91
Beamwidth, Vertical, degrees	17.2	15.8	15	8.1	6.5	4.9	6.5
Beam Tilt, degrees	2–16	2–16	2–16	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	21	17	17	17	17	16	16
Front-to-Back Ratio at 180°, dB	30	29	29	31	29	30	28
Coupling level, Amp, Antenna port to Cal port, dB							26

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							9
Isolation, Cross Polarization, dB	26	26	26	25	25	25	25
Isolation, Inter-band, dB	26	26	26	28	28	28	20
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-145
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	150	75

Electrical Specifications, BASTA

Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1427–1518**	**1695–2180**	**2490–2690**	**3300–3800**
Gain by all Beam Tilts, average, dBi	13.1	13.1	13.5	14.5	15.3	16.2	15.2
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.6	±0.4	±0.8	±0.8	±0.9	±0.8
Gain by Beam Tilt, average, dBi	2 ° | 13.2 9 ° | 13.1 16 ° | 12.9	2 ° | 13.2 9 ° | 13.2 16 ° | 12.9	2 ° | 13.5 9 ° | 13.6 16 ° | 13.4	2 ° | 14.3 7 ° | 14.5 12 ° | 14.5	2 ° | 14.8 7 ° | 15.6 12 ° | 15.6	2 ° | 15.5 7 ° | 16.6 12 ° | 16.3	2 ° | 15.0 7 ° | 15.4 12 ° | 15.2
Beamwidth, Horizontal Tolerance, degrees	±8.4	±6.8	±5.2	±5	±5.5	±4.6	±19.2
Beamwidth, Vertical Tolerance, degrees	±1.1	±1.2	±1.1	±0.5	±0.8	±0.3	±0.6
USLS, beampeak to 20° above beampeak, dB	16	16	15	13	15	13	14
Front-to-Back Total Power at 180° ± 30°, dB	20	19	21	24	23	25	21
CPR at Boresight, dB	20	19	19	13	18	16	15

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**3300–3800**
Gain, dBi	16.5
Beamwidth, Horizontal, degrees	63
Beamwidth, Vertical, degrees	6.6
USLS (First Lobe), dB	17

RRYYHHTTS4-65A-R7

Electrical Specifications, Service Beam

Frequency Band, MHz	**3300–3800**
Steered 0° Gain, dBi	20.6
Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	27
Steered 0° Horizontal Sidelobe, dB	15
Steered 30° Gain, dBi	19.7
Steered 30° Beamwidth, Horizontal, degrees	27
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	26

Electrical Specifications, Soft Split

Frequency Band, MHz	**3300–3800**
Gain, dBi	19.6
Beamwidth, Horizontal, degrees	32
CPR at Beampeak, dB	16
Front-to-Back Total Power at 180° ± 30°, dB	26
Horizontal Sidelobe, dB	19

Mechanical Specifications

Mechanical Tilt Range	0°–15°
Wind Loading @ Velocity, frontal	549.0 N @ 150 km/h (123.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	183.0 N @ 150 km/h (41.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	712.0 N @ 150 km/h (160.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	452.0 N @ 150 km/h (101.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	608 mm | 23.937 in
Depth, packed	352 mm | 13.858 in
Length, packed	1682 mm | 66.221 in

RRYYHHTTS4-65A-R7

Weight, gross	50.6 kg | 111.554 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
ROHS	Compliant
UK-ROHS	Compliant/Exempted

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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance