3X-KKV4S4-65B-R15

60-port sector antenna, 12x 617-960MHz, 24x 1695-2690MHz 65° HPBW and 24x 3300-3800 MHz, 90° HPBW, 15x RET

- Separated Extension KIT available for this antenna, check Optional Mounting Kits section
- No pole mounting kit for this antenna

General Specifications

Antenna Type	DualPol® tri-sector
Band	Multiband
Calibration Connector Interface	M-LOC
Calibration Connector Quantity	3
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
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female | M-LOC
RF Connector Location	Bottom
RF Connector Quantity, high band	24
RF Connector Quantity, mid band	24
RF Connector Quantity, low band	12
RF Connector Quantity, total	60

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface, quantity	3 female | 3 male
Internal RET	High band (3) | Low band (6) | Mid band (6)
Protocol	3GPP/AISG 2.0

Dimensions

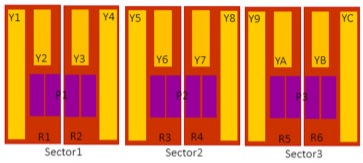
Length	2100 mm | 82.677 in

3X-KKV4S4-65B-R15

Outer Diameter 580 mm | 22.835 in

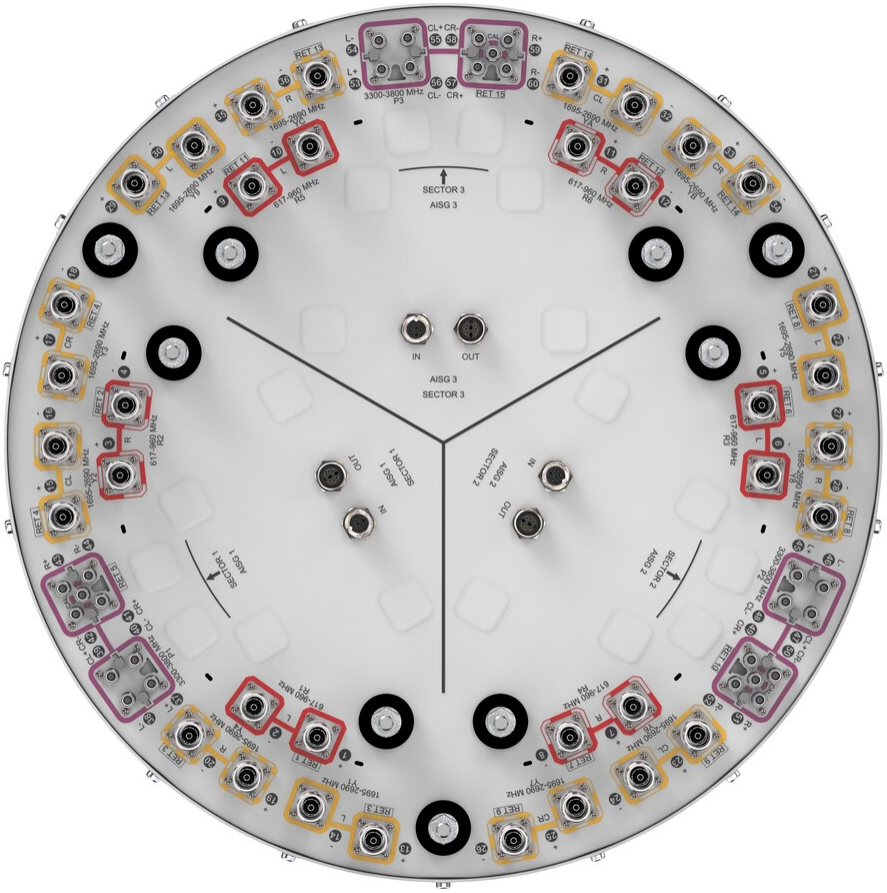
Array Layout

Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	617-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	617-960	3 - 4	2		CPxxxxxxxxxxxxxxR2
Y1	1695-2690	13 - 14	3		CPxxxxxxxxxxxxxxY1
Y4	1695-2690	19 - 20			
Y2	1695-2690	15 - 16	4		CPxxxxxxxxxxxxxxY2
Y3	1695-2690	17 - 18			
P1	3300-3800	37 - 44	5		CPxxxxxxxxxxxxxxP1
R3	617-960	5 - 6	6	AISG2	CPxxxxxxxxxxxxxxR3
R4	617-960	7 - 8	7		CPxxxxxxxxxxxxxxR4
Y5	1695-2690	21 - 22	8		CPxxxxxxxxxxxxxxY5
Y8	1695-2690	27 - 28			
Y6	1695-2690	23 - 24	9		CPxxxxxxxxxxxxxxY6
Y7	1695-2690	25 - 26			
P2	3300-3800	45 - 52	10		CPxxxxxxxxxxxxxxP2
R5	617-960	9 - 10	11	AISG3	CPxxxxxxxxxxxxxxR5
R6	617-960	11 - 12	12		CPxxxxxxxxxxxxxxR6
Y9	1695-2690	29 - 30	13		CPxxxxxxxxxxxxxxY9
YC	1695-2690	35 - 36			
YA	1695-2690	31 - 32	14		CPxxxxxxxxxxxxxxYA
YB	1695-2690	33 - 34			
P3	3300-3800	53 - 60	15		CPxxxxxxxxxxxxxxP3



Port Configuration

3X-KKV4S4-65B-R15



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 3300 – 3800 MHz | 617 – 960 MHz
Polarization	±45°
Total Input Power, maximum	2,400 W

Electrical Specifications

	R1-R6	R1-R6	R1-R6	R1-R6
Frequency Band, MHz	**617–694**	**694–790**	**790–890**	**890–960**
RF Port	1-12	1-12	1-12	1-12
Beamwidth, Horizontal,	71	62	56	52

degrees				
Beamwidth, Vertical, degrees	11.9	10.9	9.8	9.1
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	16	16	15
Front-to-Back Total Power at 180° ± 30°, dB	20	21	22	22
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, typical, 2 x 20 W, dBc	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	**617–694**	**694–790**	**790–890**	**890–960**
Gain by all Beam Tilts, average, dBi	13	13.6	14.3	14.8

Electrical Specifications

	Y1,Y2,Y5,Y6,Y9,YA	**Y1,Y2,Y5,Y6,Y9,YA**	**Y1,Y2,Y5,Y6,Y9,YA**
Frequency Band, MHz	**1695–1920**	**1920–2180**	**2490–2690**
RF Port	13,14,19,20,21,22,27,28,29,30,35,36	13,14,19,20,21,22,27,28,29,30,35,36	13,14,19,20,21,22,27,28,29,30,35,36
Beamwidth, Horizontal, degrees	73	63	56
Beamwidth, Vertical, degrees	7.9	7.1	5.7

Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	17	18	17
Front-to-Back Total Power at 180° ± 30°, dB	24	23	22
Isolation, Cross Polarization, dB	25	25	25
Isolation, Inter-band, dB	25	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, typical, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	200	200	150

Electrical Specifications, BASTA

Frequency Band, MHz	**1695–1920**	**1920–2180**	**2490–2690**
Gain by all Beam Tilts, average, dBi	15.6	16.5	17.1

Electrical Specifications

	Y3,Y4,Y7,Y8,YB,YC	**Y3,Y4,Y7,Y8,YB,YC**	**Y3,Y4,Y7,Y8,YB,YC**
Frequency Band, MHz	**1695–1920**	**1920–2180**	**2490–2690**
RF Port	15-18,23-26,31-34	15-18,23-26,31-34	15-18,23-26,31-34
Beamwidth, Horizontal, degrees	65	60	55
Beamwidth, Vertical, degrees	7.9	7	5.7
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	15	19	19

Front-to-Back Total Power at 180° ± 30°, dB	24	27	24
Isolation, Cross Polarization, dB	25	25	25
Isolation, Inter-band, dB	25	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, typical, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	200	200	150

Electrical Specifications, BASTA

Frequency Band, MHz	**1695–1920**	**1920–2180**	**2490–2690**
Gain by all Beam Tilts, average, dBi	15.2	16.3	17

Electrical Specifications

	P1-P3	**P1-P3**
Frequency Band, MHz	**3300–3600**	**3600–3800**
RF Port	37-60	37-60
Beamwidth, Horizontal, degrees	84	82
Beamwidth, Vertical, degrees	6.4	6
Beam Tilt, degrees	2–12	2–12
USLS (First Lobe), dB	14	15
Front-to-Back Total Power at 180° ± 30°, dB	22	23
Coupling level, Amp, Antenna	26	26

port to Cal port, dB		
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.9	0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees	7	7
Isolation, Cross Polarization, dB	25	25
Isolation, Inter-band, dB	25	25
Isolation, Co-polarization, dB	19	19
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, typical, 2 x 20 W, dBc	-145	-145
Input Power per Port at 50°C, maximum, watts	75	75

Electrical Specifications, BASTA

Frequency Band, MHz	**3300–3600**	**3600–3800**
Gain by all Beam Tilts, average, dBi	14.8	15.2

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**3300–3600**	**3600–3800**
Gain, dBi	16.6	16.4
Beamwidth, Horizontal, degrees	65	65

Beamwidth, Horizontal at 10 dB, degrees	115	110
Beamwidth, Vertical, degrees	6.2	6.1
Front-to-Back Total Power at 180° ± 30°, dB	25	25
USLS (First Lobe), dB	18	21

Electrical Specifications, Service Beam

Frequency Band, MHz	**3300–3600**	**3600–3800**
Steered 0° Gain, dBi	19.9	20.6
Steered 0° Beamwidth, Horizontal, degrees	26	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	28	31
Steered 30° Gain, dBi	19.3	19.3
Steered 30° Beamwidth, Horizontal, degrees	29	29
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	36	35

Electrical Specifications, Soft Split

Frequency Band, MHz	**3300–3600**	**3600–3800**
Gain, dBi	19.1	19.3
Beamwidth, Horizontal, degrees	32	31

Front-to-Back Total Power at 180° ± 30°, dB	27	28
Horizontal Sidelobe, dB	16	19

Mechanical Specifications

Wind Loading @ Velocity, frontal	745.0 N @ 150 km/h (167.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	745.0 N @ 150 km/h (167.5 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	745.0 N @ 150 km/h (167.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	745.0 N @ 150 km/h (167.5 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	714 mm | 28.11 in
Depth, packed	692 mm | 27.244 in
Length, packed	2537 mm | 99.882 in
Weight, gross	120 kg | 264.554 lb

Regulatory Compliance/Certifications

Agency	**Classification**
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance