

VV-65A-R1B-KTE



Kit with one 4-port sector antenna model VV-65A-R1 (4x 1695–2690 MHz, 65° HPBW, 1x RET#The two high band arrays utilize a common tilt.)

- 1 x ATCB-B01-003 Cable 3m, RET to RRU
- The RET interface comprises one pair of AISG input/output ports

General Specifications

Antenna Type	Sector
Band	Single band
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	PVC, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, total	4

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 (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	10 W
Protocol	3GPP/AISG 2.0

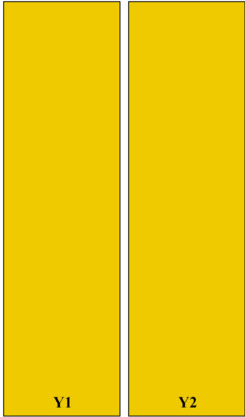
Dimensions

Width	307 mm 12.087 in
Depth	118 mm 4.646 in

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Length 1390 mm | 54.724 in
Net Weight, without mounting kit 10.8 kg | 23.81 lb

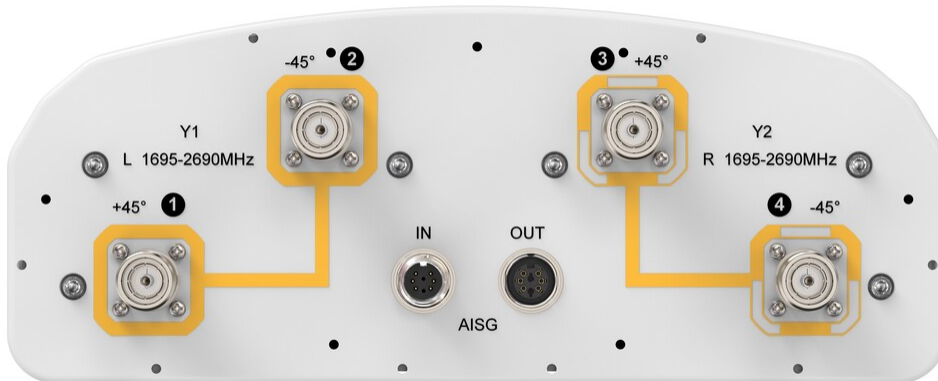
Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
Y1	1695-2690	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxxxxY1
Y2	1695-2690	3 - 4	65°			

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

Port Configuration



Electrical Specifications

Impedance 50 ohm
Operating Frequency Band 1695 – 2690 MHz
Polarization ±45°
Total Input Power, maximum 400 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	1695–1880	1850–1990	1920–2200	2300–2500	2490–2690
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Gain, dBi	17.5	17.7	18.2	18.5	18.6
Beamwidth, Horizontal, degrees	66	65	66	63	62
Beamwidth, Vertical, degrees	6.9	6.5	6.1	5.4	5.2
Beam Tilt, degrees	0–12	0–12	0–12	0–12	0–12
USLS (First Lobe), dB	17	18	18	21	21
Front-to-Back Ratio at 180°, dB	30	31	32	29	30
Isolation, Cross Polarization, dB	30	30	30	30	30
Isolation, Inter-band, dB	28	28	28	28	28
VSWR Return loss, dB	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	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300	250

Electrical Specifications, BASTA

Frequency Band, MHz	1695–1880	1850–1990	1920–2200	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	17.1	17.5	17.9	18.3	18.2
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.4	±0.4	±0.5
Beamwidth, Horizontal Tolerance, degrees	±4.5	±3.5	±2.7	±2.5	±3.2
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	16	17	17	18	16
Front-to-Back Total Power at 180° ± 30°, dB	24	26	27	26	26
CPR at Boresight, dB	16	17	17	20	19
CPR at Sector, dB	15	14	13	7	9

Mechanical Specifications

Wind Loading @ Velocity, frontal	494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	102.0 N @ 150 km/h (22.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	598.0 N @ 150 km/h (134.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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Packaging and Weights

Width, packed	404 mm 15.906 in
Depth, packed	278 mm 10.945 in
Length, packed	1527 mm 60.118 in
Weight, gross	19.8 kg 43.651 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



Included Products

- 600899A-2 – 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.
- ATCB-B01-003 – AISG RET Control Cable, 3 m

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

600899A-2



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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 114.3 mm | 4.5 in

Compatible Diameter, minimum 61 mm | 2.402 in

Weight, net 3.9 kg | 8.598 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 4.2 kg | 9.259 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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

600899A-2



ATCB-B01-003



AISG RET Control Cable, 3 m

- Feeds data and power to RET system components
- AISG and RoHS compliant

Product Classification

Product Type AISG standard cable

General Specifications

AISG Connector A 8-pin DIN Female

AISG Connector A Body Style Straight

AISG Connector A Standard IEC 60130-9

AISG Connector B 8-pin DIN Male

AISG Connector B Body Style Straight

AISG Connector B Standard IEC 60130-9

Color Black

Data Conductor Type 0.24 mm² (24 AWG) twisted pair

EU Certification CB | CE

Power Conductor Type 0.82 mm² (18 AWG) stranded

Total Conductors, quantity 6

Dimensions

Length 3 m | 9.843 ft

Diameter Over Jacket 8 mm | 0.315 in

Electrical Specifications

Protocol AISG 1.1 | AISG 2.0

Voltage, maximum 300 V

Environmental Specifications

Operating Temperature -40 °C to +70 °C (-40 °F to +158 °F)

Relative Humidity Up to 100%

ATCB-B01-003

Climatic Sequence Test Method	IEC 60068-2-14
Cold Exposure Test Method	IEC 60068-2-1
Damp Heat Exposure Test Method	IEC 60068-2-30, Test Condition Db
Heat Exposure Test Method	IEC 60068-2-2
Ingress Protection Test Method	IEC 60529:2001, IP67
Rain Simulation Test Method	IEC 60068-2-18, Test Condition Ra, Method 1
UV Resistance Test Method	IEC 60068-2-5, Test Condition B

Packaging and Weights

Weight, net 0.3 kg | 0.661 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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

