

## 10-port sector antenna, $2 \times 617-960,4 \times 1427-2690 \mathrm{MHz}$ and $4 \times 1695-$ $2690 \mathrm{MHz}, 65^{\circ} \mathrm{HPBW}, 5 \times$ RET with tilt indicators

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Wind Loading; Frontal / Lateral / Rear - 477 / 409 / 506 N @ 150km/h
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios


## General Specifications

## Antenna Type

Band
Color
Grounding Type

## Performance Note

Radome Material
Radiator Material
Reflector Material
RF Connector Interface
RF Connector Location
RF Connector Quantity, high band
RF Connector Quantity, low band
RF Connector Quantity, total

Sector
Multiband
Light Gray (RAL 7035)
RF connector inner conductor and body grounded to reflector and mounting bracket

Outdoor usage
Fiberglass, UV resistant
Aluminum | Low loss circuit board
Aluminum
4.3-10 Female

Bottom
8
2
10

## Remote Electrical Tilt (RET) Information

## RET Hardware

RET Interface, quantity
Input Voltage
Power Consumption, active state, maximum
Power Consumption, idle state, maximum
Protocol

CommRET v2
2 female | 2 male
$10-30$ Vdc
8 W
1 W
3GPP/AISG 2.0 (Single RET)

Dimensions

## KZZVV-65D-R5

Width
Depth
Length
Net Weight, antenna only

350 mm | 13.78 in
208 mm | 8.189 in
2688 mm | 105.827 in
$33.6 \mathrm{~kg} \mathrm{\mid} 74.075 \mathrm{lb}$

## Array Layout

|  |  | Array ID | Frequency (MHz) | RF Connector | $\begin{array}{\|c\|} \hline \text { RET } \\ \text { (SRETT } \end{array}$ | AISG No. | AISG RET UID |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y2 | Y4 | R1 | 617-960 | 1-2 | 1 | AISG1 | CPxxxxxxxxxxxxxxxR1 |
|  |  | Y1 | 1427-2690 | 3-4 | 2 | AISG1 | CPxxxxxxxxxxxxxxxy1 |
|  |  | Y2 | 1695-2690 | 5-6 | 3 | AISG1 | CPxxxxxxxxxxxxxxxY2 |
|  |  | Y3 | 1427-2690 | 7-8 | 4 | AISG1 | CPxxxxxxxxxxxxxxxy3 |
|  |  | Y4 | 1695-2690 | 9-10 | 5 | AISG1 | CPxxxxxxxxxxxxxxxY4 |

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

## Port Configuration



## Electrical Specifications

Impedance
Operating Frequency Band
Polarization

## Electrical Specifications

| Frequency Band, MHz | 617-690 | 690-790 | 790-890 | 890-960 | 1427-1518 | 1695-1920 | 1930-2200 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gain, dBi | 16 | 16 | 16.5 | 16.5 | 15 | 16.8 | 17.2 |
| Beamwidth, Horizontal, degrees | 73 | 73 | 70 | 71 | 71 | 58 | 56 |
| Beamwidth, Vertical, degrees | 9.3 | 8.4 | 7.5 | 6.9 | 9.4 | 7.7 | 6.8 |
| Beam Tilt, degrees | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 19 | 20 | 18 | 18 | 15 | 15 | 15 |
| Front-to-Back Ratio at $\mathbf{1 8 0}^{\circ}$, dB | 26 | 29 | 32 | 34 | 32 | 38 | 35 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| VSWR \| Return loss, dB | 1.5114 .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, $2 \times 20$ W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port at $50^{\circ} \mathrm{C}$, maximum, watts | 300 | 300 | 300 | 300 | 250 | 250 | 250 |

## Electrical Specifications, BASTA

Frequency Band, MHz
Gain by all Beam Tilts, average, dBi

Beamwidth, Horizontal
Tolerance, degrees
Beamwidth, Vertical
Tolerance, degrees
USLS, beampeak to $20^{\circ}$ above

| $\mathbf{6 1 7 - 6 9 0}$ | $\mathbf{6 9 0 - 7 9 0}$ | $\mathbf{7 9 0 - 8 9 0}$ | $\mathbf{8 9 0 - 9 6 0}$ | $\mathbf{1 4 2 7 - 1 5 1 8}$ | $\mathbf{1 6 9 5 - 1 9 2 0}$ | $\mathbf{1 9 3 0 - 2 2 0 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 15.9 | 15.9 | 16.4 | 16.3 | 14.9 | 16.6 | 17 |
| $\pm 1.6$ | $\pm 2$ | $\pm 1.5$ | $\pm 2.9$ | $\pm 6.5$ | $\pm 4.7$ | $\pm 7.8$ |
| $\pm 0.6$ | $\pm 0.5$ | $\pm 0.5$ | $\pm 0.5$ | $\pm 0.6$ | $\pm 0.7$ | $\pm 0.5$ |
| 17 | 15 | 15 | 13 | 14 | 15 | 15 |
| 22 | 24 | 23 | 22 | 24 | 29 | 27 |
| 20 | 21 | 22 | 19 | 13 | 21 | 20 |
| 11 | 11 | 9 | 6 | 6 | 6 | 3 |

Front-to-Back Total Power at $180^{\circ} \pm 30^{\circ}$, dB

CPR at Boresight, dB
11

## 50 ohm

```
1427-1518 MHz | 1695-2690 MHz | 617-960 MHz
\pm45
```

KZZVV-65D-R5

| Frequency Band, MHz | 2300-2500 | 2500-2690 | 1695-1920 | 1930-2200 | 2300-2500 | 2500-2690 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gain, dBi | 17.4 | 17.3 | 16.5 | 17.2 | 17.5 | 17.5 |
| Beamwidth, Horizontal, degrees | 66 | 62 | 61 | 60 | 62 | 60 |
| Beamwidth, Vertical, degrees | 5.8 | 5.4 | 7.5 | 6.6 | 5.8 | 5.4 |
| Beam Tilt, degrees | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 17 | 17 | 16 | 16 | 19 | 18 |
| Front-to-Back Ratio at $\mathbf{1 8 0}^{\circ}$, dB | 31 | 29 | 38 | 37 | 32 | 32 |
| Isolation, Cross Polarization, dB | 25 | 25 | 28 | 28 | 28 | 28 |
| Isolation, Inter-band, dB | 28 | 28 | 28 | 28 | 28 | 28 |
| VSWR \| Return loss, dB | 1.5114 .0 | 1.5174 .0 | 1.5114 .0 | 1.5114 .0 | 1.5114 .0 | 1.5114 .0 |
| PIM, 3rd Order, $2 \times 20$ W, dBc | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port at $50^{\circ} \mathrm{C}$, maximum, watts | 200 | 200 | 250 | 250 | 200 | 200 |

## Electrical Specifications, BASTA

| Frequency Band, MHz | 2300-2500 | 2500-2690 | 1695-1920 | 1930-2200 | 2300-2500 | 2500-2690 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gain by all Beam Tilts, average, dBi | 17.1 | 17 | 16.4 | 17 | 17.2 | 17.2 |
| Beamwidth, Horizontal Tolerance, degrees | $\pm 5.5$ | $\pm 5.6$ | $\pm 5.5$ | $\pm 7.5$ | $\pm 5.3$ | $\pm 3.2$ |
| Beamwidth, Vertical Tolerance, degrees | $\pm 0.3$ | $\pm 0.3$ | $\pm 0.5$ | $\pm 0.4$ | $\pm 0.3$ | $\pm 0.3$ |
| USLS, beampeak to $20^{\circ}$ above beampeak, dB | 16 | 15 | 14 | 15 | 14 | 14 |
| Front-to-Back Total Power at $180^{\circ} \pm 30^{\circ}, \mathrm{dB}$ | 24 | 23 | 27 | 28 | 25 | 25 |
| CPR at Boresight, dB | 20 | 22 | 23 | 23 | 20 | 20 |
| CPR at Sector, dB | 5 | 5 | 7 | 6 | 7 | 4 |

## Mechanical Specifications

Wind Loading @ Velocity, frontal
Wind Loading @ Velocity, lateral
Wind Loading @ Velocity, rear
Wind Speed, maximum

```
477.0 N @ 150 km/h(107.2 lbf @ 150 km/h)
409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)
506.0 N @ 150 km/h(113.8 Ibf @ 150 km/h)
241 km/h (150 mph)
```


## Packaging and Weights

| Width, packed | 460 mm \| 18.11 in |
| :--- | :--- |
| Depth, packed | 350 mm \| 13.78 in |
| Length, packed | 2830 mm \| 111.417 in |
| Weight, gross | $47.5 \mathrm{~kg} \mid 104.719 \mathrm{lb}$ |

## Regulatory Compliance/Certifications

## Agency

CHINA-ROHS
REACH-SVHC
ROHS
UK-ROHS


## 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


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.

## Product Classification

## Product Type

Downtilt mounting kit

## General Specifications

| Application | Outdoor |
| :--- | :--- |
| Color | Silver |
| Dimensions |  |
| Compatible Diameter, maximum | 115 mm \| 4.528 in |
| Compatible Diameter, minimum | $60 \mathrm{~mm} \mathrm{\mid} 2.362 \mathrm{in}$ |
| Weight, net | $6.2 \mathrm{~kg} \mathrm{\mid} 13.669 \mathrm{lb}$ |

## Application

Outdoor
Silver

115 mm | 4.528 in
60 mm | 2.362 in
$6.2 \mathrm{~kg} \mathrm{\mid} 13.669 \mathrm{lb}$

## Material Specifications

## Material Type

Galvanized steel

## Packaging and Weights

## Included

Brackets | Hardware

## Packaging quantity

1
Weight, gross
$6.4 \mathrm{~kg} \mathrm{\mid} 14.11 \mathrm{lb}$

## Regulatory Compliance/Certifications

## Agency

CE
CHINA-ROHS
ISO 9001:2015
REACH-SVHC
ROHS
UK-ROHS

## Classification

Compliant with the relevant CE product directives
Below maximum concentration value
Designed, manufactured and/or distributed under this quality management system
Compliant as per SVHC revision on www.commscope.com/ProductCompliance
Compliant
Compliant

## BSAMNT-3

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