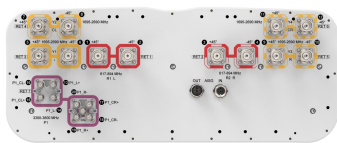


# FFV4S4-65B-R7



20-port sector antenna, 4x 617-894, 8x 1695-2690 MHz 65° HPBW and 8x 3300-3800 MHz, 90° HPBW, 7x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Cluster connectors for the beam-forming array, including eight RF ports plus one calibration port

## General Specifications

Antenna Type	Sector and beamforming
Band	Multiband
Calibration Connector Interface	M-LOC
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
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female   M-LOC
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	20

## 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)   Low band (2)   Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W

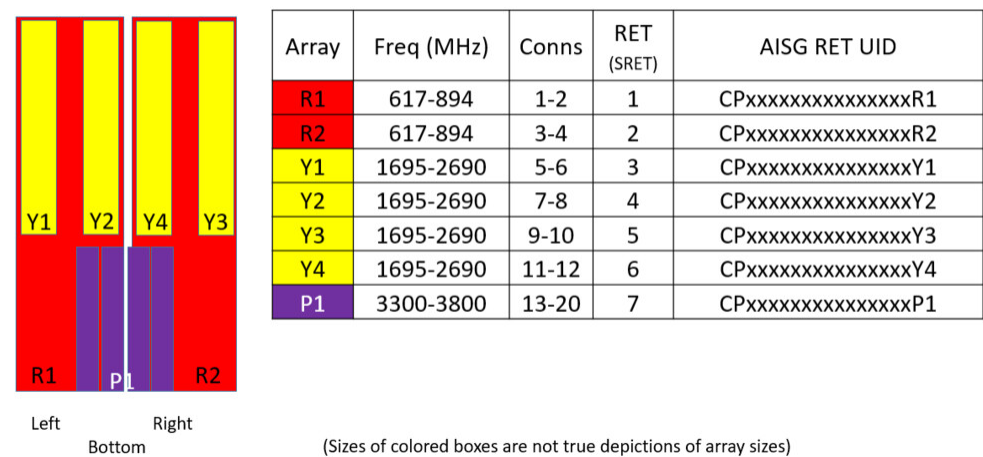
# FFV4S4-65B-R7

**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

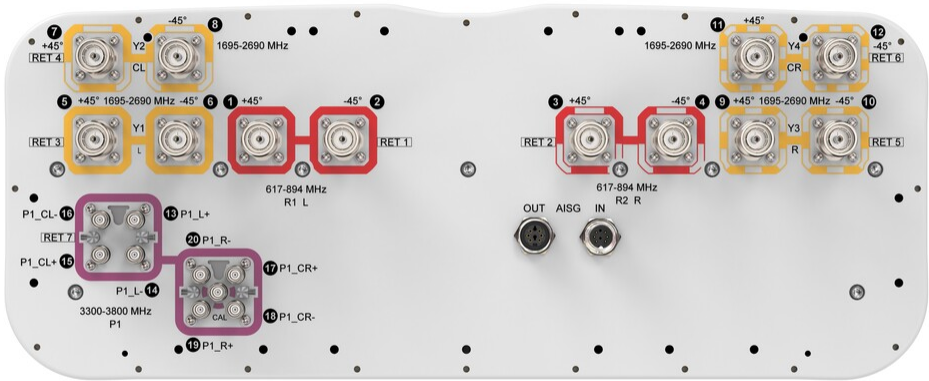
**Width** 498 mm | 19.606 in  
**Depth** 197 mm | 7.756 in  
**Length** 2000 mm | 78.74 in  
**Net Weight, antenna only** 43 kg | 94.799 lb  
**TDD Column Spacing** 42 mm | 1.654 in

## Array Layout



## Port Configuration

# FFV4S4-65B-R7



## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz   3300 – 3800 MHz   617 – 894 MHz
Polarization	±45°
Total Input Power, maximum	1,400 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2	Y1,Y3	Y1,Y3	Y1,Y3	Y1,Y3	Y2,Y4
Frequency Band, MHz	617–698	698–894	1695–1880	1850–1990	1920–2200	2490–2690	1695–1880
RF Port	1,2,3,4	1,2,3,4	5,6,9,10	5,6,9,10	5,6,9,10	5,6,9,10	7,8,11,12
Gain, dBi	13.7	14.7	16	16.4	16.5	17	15.8
Beamwidth, Horizontal, degrees	69	60	70	71	69	55	62
Beamwidth, Vertical, degrees	13.8	11.8	7.6	7.2	6.9	5.7	8.1
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	15	17	19	19	20	17
Front-to-Back Ratio at 180°, dB	28	29	34	33	32	25	36
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25

# FFV4S4-65B-R7

<b>VSWR   Return loss, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50° C, maximum, watts</b>	250	250	200	200	200	200	200

## Electrical Specifications

	<b>Y2,Y4</b>	<b>Y2,Y4</b>	<b>Y2,Y4</b>	<b>P1</b>
<b>Frequency Band, MHz</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2490–2690</b>	<b>3300–3800</b>
<b>RF Port</b>	7,8,11,12	7,8,11,12	7,8,11,12	13,14,15,16,17,18,19,20
<b>Gain, dBi</b>	16	16.2	16.5	15.7
<b>Beamwidth, Horizontal, degrees</b>	64	62	59	86
<b>Beamwidth, Vertical, degrees</b>	7.8	7.4	6.1	6.1
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	18	18	17	15
<b>Front-to-Back Ratio at 180°, dB</b>	37	36	31	28
<b>Coupling level, Amp, Antenna port to Cal port, dB</b>				26
<b>Coupling level, max Amp Δ, Antenna port to Cal port, dB</b>				±2
<b>Coupler, max Amp Δ, Antenna port to Cal port, dB</b>				0.9
<b>Coupler, max Phase Δ, Antenna port to Cal port, degrees</b>				7
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25
<b>Isolation, Co-polarization, dB</b>				20
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-140
<b>Input Power per Port at 50° C, maximum, watts</b>	200	200	200	75

## Electrical Specifications, Broadcast 65°

# FFV4S4-65B-R7

Frequency Band, MHz	3300–3800
Gain, dBi	17.3
Beamwidth, Horizontal, degrees	65
Beamwidth, Vertical, degrees	6.2
Front-to-Back Total Power at 180° ± 30°, dB	25
USLS (First Lobe), dB	20

## Electrical Specifications, Service Beam

Frequency Band, MHz	3300–3800
Steered 0° Gain, dBi	20.3
Steered 0° Beamwidth, Horizontal, degrees	25
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	29
Steered 0° Horizontal Sidelobe, dB	14
Steered 30° Gain, dBi	19.7
Steered 30° Beamwidth, Horizontal, degrees	27
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	28

## Electrical Specifications, Soft Split

Frequency Band, MHz	3300–3800
Gain, dBi	19.1
Beamwidth, Horizontal, degrees	32
Front-to-Back Total Power at 180° ± 30°, dB	27
Horizontal Sidelobe, dB	18

## Mechanical Specifications

Wind Loading @ Velocity, frontal	759.0 N @ 150 km/h (170.6 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	259.0 N @ 150 km/h (58.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	984.0 N @ 150 km/h (221.2 lbf @ 150 km/h)

# FFV4S4-65B-R7

Wind Loading @ Velocity, rear	625.0 N @ 150 km/h (140.5 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

## Packaging and Weights

Width, packed	565 mm   22.244 in
Depth, packed	309 mm   12.165 in
Length, packed	2187 mm   86.102 in
Weight, gross	56.8 kg   125.222 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

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.
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## \* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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# 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.

## 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 mm | 2.362 in

**Weight, net** 6.5 kg | 14.33 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

## 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

