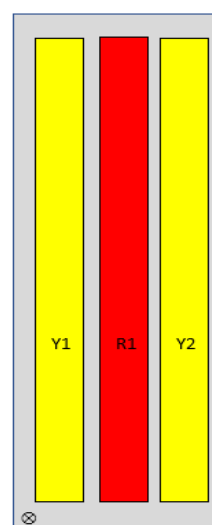


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CMA-UBTULBHP/6516/21/21

6-port antenna	Unit	R1	Y1	Y2
Frequency range	MHz	698 – 894	1695 - 2690	1695 - 2690
Polarization		x	x	x
HBW	°	65	65	65
Gain	dBi	16	21	21
EDT range	°	2 - 12	1 - 10	1 - 10



Product architecture

Electrical Parameters BASTA

6-port antenna	Unit	R1	Y1	Y2
Frequency range	MHz	698 - 894	1695 - 2690	1695 - 2690
Polarization		x	x	x
Horizontal 3dB Beam Width	°	70.2 ±1.3	63.6 ± 9.6	63.7 ± 8.9
Vertical 3dB Beam Width	°	11.6 ± 1.2	4.2 ± 0.9	4.2 ± 0.9
Gain	dBi	15.7 ± 0.2	19.9 ± 1.0	19.0 ± 1.0
EDT range	°	2-12	1 – 10	1 – 10
EDT deviation	°	<0.5	<0.4	<0.3
Max power	W	1000	1000	1000
Intra-cluster Isolation	dB	28	28	28
Inter-cluster Isolation	dB	28	28	28
Front to Back Ratio (total power)	dB	>26	>26.1	>25.4
1st Upper Side Lobe Suppression	dB	>18.0	>15.8	>16.7
Azimuth Beam Squint	°	0.5 ± 5.5	1.6 ± 4.9	2.7 ± 4.3
Azimuth Tracking ± 60°	°	<3.1	<3.4	<3.3
Sector Cross-Polar Discrimination 120°	dB	>12.8	>5.4	>6.2

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Electrical Parameters R1:

Parameter (Radiation)	R1		
Frequency band	MHz	698 - 798	824 - 894
Gain	dBi	16.0	16.0
Azimuth Parameters			
Azimuth (3dB) Beam Width	°	69	69
Azimuth Beam Squint	°	3	3
Front to Back Ratio (total power)	dB	>26	>25
Cross-Polar Discrimination (0°)	dB	>30	>20
Sector Power Ratio	%	7	7
Elevation Parameters			
Elevation (3 dB) Beam Width	°	12.2	10.9
Electrical Downtilt Range	°	2 – 12	2 – 12
First upper Sidelobe suppression	dB	>17	>15
First Nullfill Below Horizon	dB	-	-

Parameter (ports)	R1		
Frequency band	MHz	698 - 894	
Impedance	Ω	50	
VSWR/Return Loss	_/dB	1.5 / 14	
Intra Array Isolation	dB	28	
Inter Array Isolation	dB	28	
Passive Intermodulation @ 2x43 dBm CW	dBc	<-158	
Maximum input Power per port	W	500	
Antenna Insertion Loss	dB	0.4	

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Electrical Parameters Y1 and Y2:

Parameter (Radiation)						
Frequency band	MHz	1695 - 1880	1850 - 1990	1920 - 2200	2300-2360	2490 - 2690
Gain	dBi	19.5	19.9	20.2	20.8	21.5
Azimuth Parameters						
Azimuth (3dB) Beam Width	°	67	67	67	67	54
Azimuth Beam Squint	°	2	5	5	2	2
Front to Back Ratio (total power)	dB	>26	>27	>22	>25	>26
Cross-Polar Discrimination (0°)	dB	21	23	21	20	20
Sector Power Ratio	%	3	3	3	3	3
Elevation Parameters						
Elevation (3 dB) Beam Width	°	5.0	4.6	4.5	3.8	3.5
Electrical Downtilt Range	°	1 – 10	1 – 10	1 – 10	1 – 10	1 – 10
First upper Sidelobe suppression	dB	14	16	15	13	13
First Nullfill Below Horizon	dB	-16	-16	-15	-14	-12

Parameter (ports)						
Frequency band	MHz	1710 - 1880	1850 - 1990	1920 - 2200	2300–2360	2490 - 2690
Impedance	Ω	50				
VSWR/Return Loss	_/_dB	1.5 / 14				
Intra Array Isolation	dB	28				
Inter Array Isolation	dB	28				
Passive Intermodulation @ 2x43 dBm CW	dBc	-160				
Maximum Input Power per port	W	500				
Antenna Insertion Loss	dB	0.5	0.5	0.5	0.6	0.6

Mechanical parameters:

Mechanical specification:	
Connectors	6 x 4.3 -10 female
Connector position	Bottom
Lightning protection	DC grounded
Height mm (inch)	1844 (72)
Width mm (inch)	420 (16)
Depth mm (inch)	157 (6)
Antenna weight kg (lb)	29 (64)
Wind load at 42 m/s (94 mph)	
Frontal N (lbf)	843 (190)
Lateral N (lbf)	213 (48)
Survival wind speed m/s (mph)	67 (151)
EPA m ² (inch ²)	0.80 (1233)
Colour radome	Light Grey, RAL 7035
Radome material	ASA
Mounting hardware:	
Mounting bracket	2
Bracket weight (complete) kg (lb)	3 (7)
Pole diameter mm (inch)	45 (2) - 120 (5)
Mechanical tilt range °	0 - 5

Packing data	
Box size mm (inch)	2080x440x260 (81x 17x10)
Box weight kg (lb)	39.5 (87)
Maximum number of boxes per pallet	10

Ordering information:

Product number	Product description
120406	UBTULBHHP/6516/21/21//RET including standard tilt mount
Spare part number	Product description
110086	RET Unit
110091	Mounting bracket kit

RET info

Type CMA-RET-02

The RET actuator is AISG compatible and signals Single-Antenna RET Device type 0x01 (hex) in AISG protocol layer 2 as described in 3GPP TS25.462 (a.k.a. TYPE 1).

One RET actuator per antenna column, with individual AISG connectors in and out. The antenna columns are R1, Y1 and Y2.

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Bottom View

