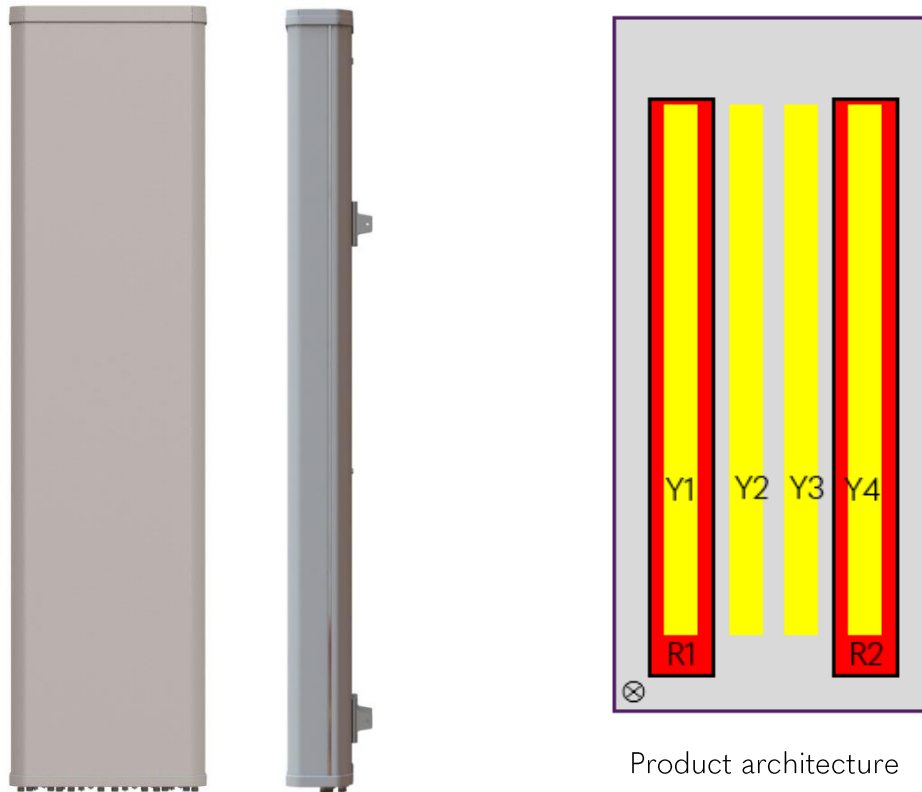


12071x

CMA-UBTLBLBHHHH/6517/17/21/21/21/21

12-port antenna	Unit	R1	R2	Y1	Y2	Y3	Y4
Frequency range	MHz	698 - 894	698 - 894	1695 - 2690	1695 - 2690	1695 - 2690	1695 - 2690
Polarization		x	x	x	x	x	x
HBW	°	65	65	65	65	65	65
Gain	dBi	17	17	21	21	21	21
EDT range	°	2 - 10	2 - 10	1 - 9	1 - 9	1 - 9	1 - 9



Product architecture

The CellMax new form factor multiband antennas extend line of the ultra-wide band antennas, combining wide band width in the high bands with wide band in the low bands, still featuring exceptionally low insert ion loss in a compact package.

The design aims at low differences between the ports in terms of gain (per band), azimuth and elevation patterns, and a very good electrical tilt precision. New for these antennas is the built- in aim in the bottom plate, which can help making sure the antenna is also mechanically aimed correctly, allowing the antenna potential to the highest in the industry cell throughput to come to fruition.

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Electrical Parameters R1 and R2:

Parameter (Radiation)			
Frequency band	MHz	698 - 798	824 - 960
Gain	dBi	16.4	17.4
Azimuth Parameters			
Azimuth (3dB) Beam Width	°	68	69
Azimuth Beam Squint	°	3	3
Front to Back Ratio (total power)	dB	>21	>23
Cross-Polar Discrimination (0°)	dB	>16	>20
Sector Power Ratio	%	6	5
Elevation Parameters			
Elevation (3 dB) Beam Width	°	11.0	9.4
Electrical Downtilt Range	°	2 - 10	2 - 10
First upper Sidelobe suppression	dB	>18	>16
First Nullfill Below Horizon	dB	-	-

Parameter (ports)			
Frequency band	MHz	698 - 894	
Impedance	Ω	50	
VSWR/Return Loss	_/dB	1.5 / 14	
Intra Array Isolation	dB	25	
Inter Array Isolation	dB	25	
Passive Intermodulation @ 2x43 dBm CW	dBc	-155	
Maximum input Power per port	W	500	
Antenna Insertion Loss	dB	0.4	

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Electrical Parameters Y1, Y2, Y3 and Y4:

Parameter (Radiation)					
Frequency band	MHz	1695-1880	1850-1990	1920-2170	2490-2690
Gain	dBi	20.0	20.2	20.7	21.4
Azimuth Parameters					
Azimuth (3dB) Beam Width	°	62	62	62	52
Azimuth Beam Squint**	°	2	3	3	2
Front to Back Ratio (total power)	dB	>25	>26	>26	>25
Cross-Polar Discrimination (0°)	dB	14	17	20	15
Sector Power Ratio	%	5	5	4	2
Elevation Parameters					
Elevation (3 dB) Beam Width	°	4.8	4.4	4.3	3.4
Electrical Downtilt Range	°	1 – 9	1 – 9	1 – 9	1 – 9
First upper Sidelobe suppression	dB	16	16	16	16
First Nullfill Below Horizon	dB	- 24	- 21	- 20	- 16

Parameter (ports)					
Frequency band	MHz	1695-1880	1850-1990	1920-2170	2490-2690
Impedance	Ω	50			
VSWR/Return Loss	_/dB	1.5 / 14			
Intra Array Isolation	dB	25	25	25	25
Inter Array Isolation	dB	25	25	25	25
Passive Intermodulation @ 2x43 dBm CW	dBc	-155			
Maximum Input Power per port	W	500			
Antenna Insertion Loss	dB	0.5	0.5	0.6	0.7

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Mechanical parameters:

Mechanical specification:	
Connectors	12 x 4.3 -10 female
Connector position	Bottom
Lightning protection	DC grounded
Height mm (inch)	1949 (77)
Width mm (inch)	609 (24)
Depth mm (inch)	200 (8)
Antenna weight kg (lb)	65 (143)
Wind load at 42 m/s (94 mph)	
Frontal N (lbf)	1150 (259)
Lateral N (lbf)	199 (45)
Survival wind speed m/s (mph)	67 (151)
Colour radome	Light Grey, RAL 7035
Radome material	ASA
Mounting hardware:	
Mounting bracket	2
Bracket weight (complete) kg (lb)	5 (11)
Pole diameter mm (inch)	45 (1.8) - 120 (4.7)
Mechanical tilt range °	0 - 5

Box size mm (inch)	2260x634x293 (89x25x12)
Box weight kg (lb)	76 (167)
Maximum number of boxes per pallet	7

Ordering information:

Product number	Product description
120715	CMA-UBTLBLBHHHH/6517/17/21/21/21/21//RET including standard tilt mount

RET info

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.

Type CMA-RET-02

RET spare part order number: 110086.

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Bottom View