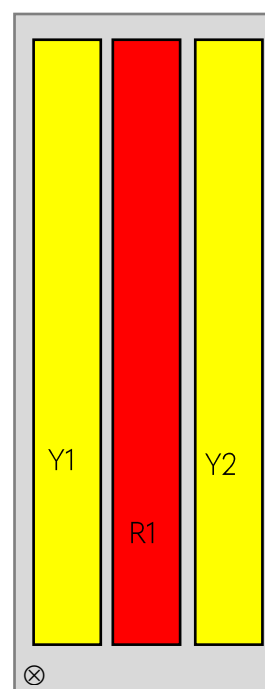
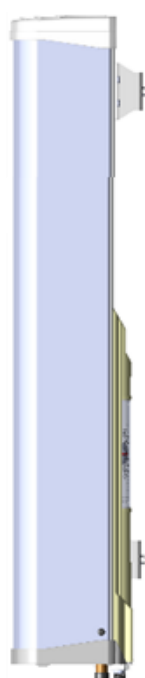


12030x

CMA-UBTULBHH/6514/19/19

6-port antenna	Unit	R1	Y1	Y2
Frequency range	MHz	617- 894	1695 - 2690	1695 - 2690
Polarization		x	x	x
HBW	°	65	65	65
Gain	dBi	14	19	19
EDT range	°	4 - 14	2 - 10	2 - 10



Product architecture

The CellMax new form factor multiband antennas extend the line of the ultra-wide band antennas, combining wide band frequency range in the mid band with wide band in the low band, still featuring exceptionally low insertion 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, allowing the network to generate highest possible cell throughput, capacity and coverage.

Electrical Parameters R1

Parameter (Radiation)			
Frequency band	MHz	617- 798	824 - 894
Gain	dBi	13.8	14.1
Azimuth Parameters			
Azimuth (3dB) Beam Width	°	69	71
Azimuth Beam Squint	°	3	5
Front to Back Ratio (total power)	dB	>23	>24
Cross-Polar Discrimination (0°)	dB	>25	>23
Sector Power Ratio	%	7	8
Elevation Parameters			
Elevation (3 dB) Beam Width	°	21	16
Electrical Downtilt Range	°	4 - 14	4 - 14
First upper Sidelobe suppression	dB	>16	>10
First Nullfill Below Horizon	dB	-	-

Parameter (ports)			
Frequency band	MHz	617 - 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	-155	
Maximum input Power per port	W	500	
Antenna Insertion Loss	dB	0.3	

Electrical Parameters Y1, Y2

Parameter (Radiation)					
Frequency band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2490 - 2690
Gain	dBi	17.6	18.1	18.2	19.9
Azimuth Parameters					
Azimuth (3dB) Beam Width	°	66	67	67	53
Azimuth Beam Squint**	°	2	4	4	2
Front to Back Ratio (total power)	dB	>26	>27	>22	>27
Cross-Polar Discrimination (0°)	dB	>20	>22	>20	>18
Sector Power Ratio	%	3	3	3	3
Elevation Parameters					
Elevation (3 dB) Beam Width	°	8.1	7.5	7.1	5.6
Electrical Downtilt Range	°	2 - 10	2 - 10	2 - 10	2 - 10
First upper Sidelobe suppression	dB	12	14	14	15
First Nullfill Below Horizon	dB	-12	-13	-13	-14

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	28			
Inter Array Isolation	dB	28			
Passive Intermodulation @ 2x43 dBm CW	dBc	-155			
Maximum Input Power per port	W	500			
Antenna Insertion Loss	dB	0.4	0.4	0.4	0.5

Mechanical parameters:

Mechanical specification:	
Connectors	6 x 4.3 -10 female
Connector position	Bottom
Lightning protection	DC grounded
Height mm (inch)	1232 (48)
Width mm (inch)	420 (16)
Depth mm (inch)	157 (6)
Antenna weight kg (lb)	21 (46)
Wind load at 42 m/s (94 mph)	
Frontal N (lbf)	581 (130)
Lateral N (lbf)	94 (21)
Survival wind speed m/s (mph)	67
EPA m ² (inch ²)	0.54 (837)
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)	435x253x2075 (17.x10x82)
Box weight kg (lb)	32 (70)
Maximum number of boxes per pallet	10

Ordering information:

Product number	Product description
120300	CMA-UBTULBHH/6514/19/19/MET including standard tilt mount
120305	CMA-UBTULBHH/6514/19/19/RET including standard tilt mount

RET info

The integrated 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).