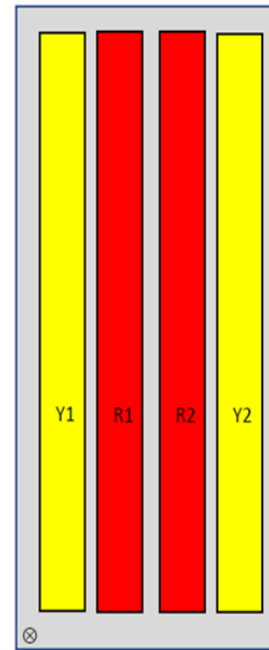
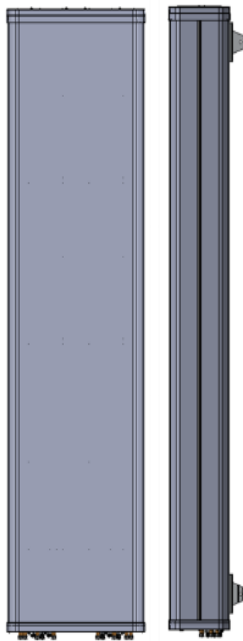


12086x

CMA-UBTLBLBHH/6518/18/23/23

8-port antenna	Unit	R1	R2	Y1	Y2
Frequency range	MHz	698- 960	698- 960	1695 - 2690	1695 - 2690
Polarization		x	x	x	x
HBW	°	65	65	65	65
Gain	dBi	18.5	18.5	23.0	23.0
EDT range	°	2 – 9	2 – 9	1 - 7	1 - 7

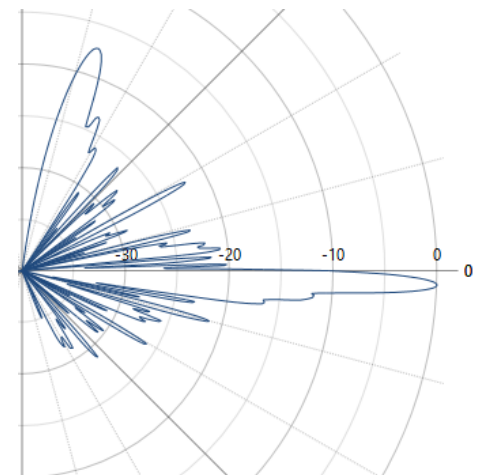


Product architecture

The CellMax antenna 12086x offers the world’s highest gain for a 65-degree antenna. The coverage provided on both low band and high band is unparalleled. The extended high band coverage, thanks to 23dBi gain, will offer more spectrum and higher capacity to the subscribers located at the cell edge (indoor or physical cell edge).

The 23 dBi high band gain will double the coverage area compared to standard antennas on the market

With unique phase shifter design strong null-fills are created to enable the usage of smaller vertical lobes and secure high coverage levels also below the site. Furthermore, Cellmax world leading tilt precision allows for accurate planning even with smaller vertical lobes.



Electrical Parameters R1 and R2:

Parameter (Radiation)			
Frequency band	MHz	698 - 798	824 - 960
Gain	dBi	17.7	18.3
Azimuth Parameters			
Azimuth (3dB) Beam Width	°	68	63
Azimuth Beam Squint	°	7	6
Front to Back Ratio (total power)	dB	>25	>25
Cross-Polar Discrimination (0°)	dB	>20	>20
Sector Power Ratio	%		
Elevation Parameters			
Elevation (3 dB) Beam Width	°	7.5	6.4
Electrical Downtilt Range	°	2 - 9	2 - 9
First upper Sidelobe suppression	dB	16	16
First Nullfill Below Horizon	dB	-	-

Parameter (ports)			
Frequency band	MHz	698 - 960	
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	0.5	

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Electrical Parameters Y1 and Y2:

Parameter (Radiation)					
Frequency band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2490 - 2690
Gain	dBi	20.7	21.0	21.7	22.8
Azimuth Parameters					
Azimuth (3dB) Beam Width	°	68	67	64	56
Azimuth Beam Squint	°	5	3	3	2
Front to Back Ratio (total power)	dB	>25	>25	>25	>25
Cross-Polar Discrimination (0°)	dB	20	20	20	20
Sector Power Ratio	%				
Elevation Parameters					
Elevation (3 dB) Beam Width	°	3.4	3.1	2.9	2.3
Electrical Downtilt Range	°	1 - 7	1 - 7	1 - 7	1 - 7
First upper Sidelobe suppression	dB	16	16	16	16
First Nullfill Below Horizon	dB	- 21	- 20	- 20	- 16

Parameter (ports)					
Frequency band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2490 - 2690
Impedance	Ω	50			
VSWR/Return Loss	_/dB	1.5 / 14			
Intra Array Isolation	dB	28	28	28	28
Inter Array Isolation	dB	28	28	28	28
Passive Intermodulation @ 2x43 dBm CW	dBc	-155			
Maximum Input Power per port	W	500			
Antenna Insertion Loss	dB	0.5	0.5	0.5	0.6

Mechanical parameters:

Mechanical specification:	
Connectors	8 x 4.3 -10 female
Connector position	Bottom
Lightning protection	DC grounded
Height mm (inch)	2700 (106)
Width mm (inch)	609 (24)
Depth mm (inch)	265 (10.4)
Antenna weight kg (lb)	85 (187)
Wind load at 42 m/s (94 mph)	
Frontal N (lbf)	
Lateral N (lbf)	
Survival wind speed m/s (mph)	67
EPA m ² (inch ²)	
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

Packing data	
Box size mm (inch)	2937x640x360 (115.6x25.2x14.2)
Box weight kg (lb)	102 (224.8)
Maximum number of boxes per pallet	6

Ordering information:

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.