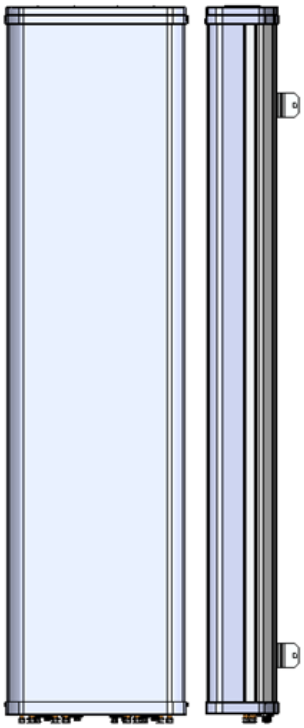
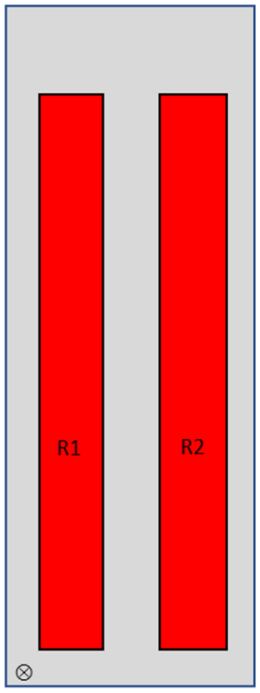
Antenna type

12050x

CMA-UBDLBLB/6516/16

4-port antenna	Unit	R1	R2
Frequency range	MHz	698 - 960	698 - 960
Polarization		x	x
HBW	°	65	65
Gain	dBi	16	16
EDT range	°	2 – 12	2 – 12





Product architecture

The CellMax new Low Band Antennas extend the line of the ultra-wide band antennas, combining wide band frequency range still featuring exceptionally low insertion loss and world leading Gain. The Cellmax low band Gain offers best possible Low Band coverage targeting Rural Coverage deployment but also offers great indoor coverage improvements for Urban Environments.

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.

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Electrical Parameters R1 and R2:

Parameter (Radiation)			
Frequency band	MHz	698 - 798	824 - 960
Gain	dBi	15.2	16.1
Azimuth Parameters			
Azimuth (3dB) Beam Width	°	74	65
Azimuth Beam Squint	°	4	2
Front to Back Ratio (total power)	dB	>23	>25
Cross-Polar Discrimination (0°)	dB	>22	>23
Sector Power Ratio	%	6	5
Elevation Parameters			
Elevation (3 dB) Beam Width	°	14.7	12.7
Electrical Downtilt Range	°	2 – 12	2 – 12
First upper Sidelobe suppression	dB	>18	>16

Parameter (ports)		
Frequency band	MHz	698 - 960
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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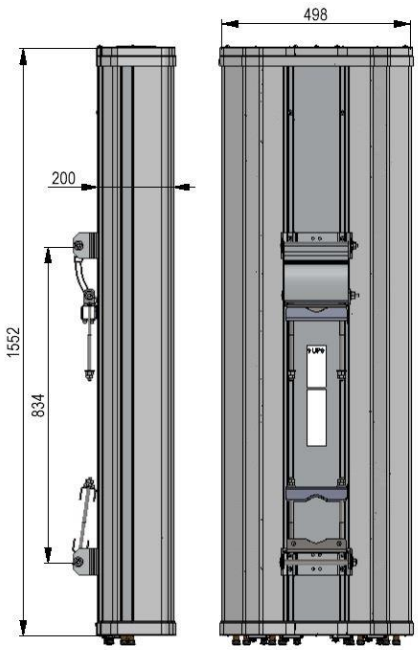
Antenna type

12050x

CMA-UBDLBLB/6516/16

Mechanical parameters:

Mechanical specification:	
Connectors	4 x 4.3 -10 female
Connector position	Bottom
Lightning protection	DC grounded
Height mm (inch)	1552 (61)
Width mm (inch)	498 (19)
Depth mm (inch)	200 (8)
Antenna weight kg (lb)	34 (75)
Wind load at 42 m/s (94 mph)	
Frontal N (lbf)	853 (191)
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)	3 (7)
Pole diameter mm (inch)	45 (2) - 120 (5)
Mechanical tilt range °	0 - 5



Packing data	
Box size mm (inch)	1760x517x293 (69x20x11)
Box weight kg (lb)	43 (94)
Maximum number of boxes per pallet	9

Ordering information:

Product number	Product description
120505	CMA-UBLBLB/6516/16/RET including standard tilt mount

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Bottom view

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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