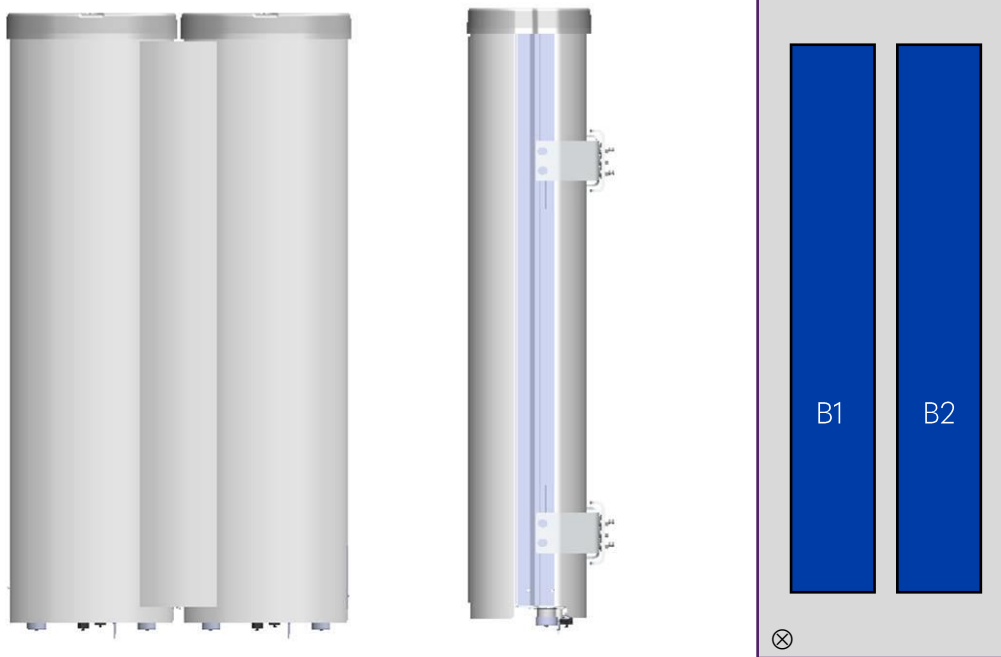


# 11052x

CMA-BDHH/3321/E0-7

4-port antenna	Unit	B1	B2
Frequency range	MHz	1710 - 2180	1710 - 2180
Polarization		x	x
HBW	°	33	33
Gain	dBi	21	21
EDT range	°	0 - 7	0 - 7



Product architecture

**Rural coverage:**

When upgrading existing sites with new frequencies, these antennas maximize high-band coverage, allowing better load-balancing, cell-edge coverage, throughput, indoor coverage, and subscriber satisfaction.

**High capacity:**

These antennas increase CINR and maximize spectrum efficiency (b/s/Hz), hence improving network throughput, allowing more subscribers and maximizing the value of the investment in network and spectrum.

**Road coverage:**

These antennas provide virtually seamless cell-edge coverage, reducing dropped calls and increasing subscriber satisfaction for people on the move.

**Load balancing:**

These antennas relieve congestion on the low band by allowing greater use of the huge high-band capacity. This allows the low band to be used by subscribers who really need it, with higher throughput and increased subscribers throughout the network.

**Indoor penetration/urban coverage:**

By offering a crucial improvement in the quality of the "last mile" in both rural and urban environments, these antennas significantly improve indoor coverage. This allows all users to enjoy all spectrums and secure high-band coverage, even deep indoors.

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Electrical Parameters B1 and B2:

Parameter (Radiation)				
Frequency band	MHz	1710 - 1880	1850 - 1990	1920 - 180
Gain	dBi	19.8	20.0	20.2
Azimuth Parameters				
Azimuth (3dB) Beam Width	°	34.8	34.7	33.5
Azimuth Beam Squint**	°	1.1	0.7	0.7
Front to Back Ratio (total power)	dB	32	31	31
Cross-Polar Discrimination (0°)	dB	28	24	22
Sector Power Ratio	%	2.6	2.2	2.8
Elevation Parameters				
Elevation (3 dB) Beam Width	°	8.7	7.9	7.5
Electrical Downtilt Range	°	0 - 7	0 - 7	0 - 7
First upper Sidelobe suppression	dB	14	14	15
First Nullfill Below Horizon	dB	-23	-22	-20

Parameter (ports)				
Frequency band	MHz	1710 - 1880	1850 - 1990	1920 - 2180
Impedance	$\Omega$	50		
VSWR/Return Loss	_/dB	1.5:1 / 14		
Intra Array Isolation	dB	28	28	28
Inter Array Isolation	dB	28	28	28
Passive Intermodulation @ 2x43 dBm CW	dBc	<-155		
Maximum Input Power per port	W	500		
Antenna Insertion Loss	dB	0.34	0.40	0.48

# 11052x

CMA-BDHH/3321/E0-7

## Mechanical parameters

Mechanical specification:	
Connectors	4 x 7/16 female
Connector position	Bottom
Lightning protection	DC grounded
Height mm (inch)	1070 (42.1)
Width mm (inch)	592 (23.3)
Depth mm (inch)	187 (7.4)
Antenna weight kg (lb)	28 (62)
Wind load at 42 m/s (94 mph)	
Frontal N (lbf)	551 (124)
Lateral N (lbf)	98 (22)
Survival wind speed m/s (mph)	67 (150)
EPA m <sup>2</sup> (inch <sup>2</sup> )	
Colour radome	Light Grey, RAL 7035
Radome material	ASA
Mounting hardware:	
Mounting bracket	2
Bracket weight (complete) kg (lb)	7 (11)
Pole diameter mm (inch)	45 (1.8) - 120 (4.7)
Mechanical tilt range °	0 - 10

Packing data	
Box size mm (inch)	
Box weight kg (lb)	37.5 (82.7)
Maximum number of boxes per pallet	5

## Ordering information:

Product number	Product description
110520	CMA-BDHH/3321/E0-7/MET including standard tilt mount
110525	CMA-BDHH/3321/E0-7/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.