

# Twin-Beam Antenna

## CMA-BTHH/3324/E0-6

### XX-Pol: 1710-2180 / 1710-2180 MHz



#### Electrical specification:

Frequency range per input (MHz)	1710-1880	4 x 1710-2180 1850-1990	1920-2180
Frequency band definitions (MHz)			
Polarization		Dual linear $\pm 45^\circ$	
Gain (dBi)	23.0	23.4	24.0
Horizontal = 3 dB beam width ( $^\circ$ ) $\pm 3^\circ$	35	34	33
Vertical = 3 dB beam width ( $^\circ$ ) $\pm 0.3^\circ$	4.4	4.2	3.9
Horizontal beam pointing ( $^\circ$ )		+27 / -27	
Adjustable electrical down tilt ( $^\circ$ )		0 - 6	
Front to back ratio, $\pm 30^\circ$ total power (dB)		>28	
Horizontal side lobe suppression (dB)		>16	
First upper side lobe suppression (dB)		0 $^\circ$ , 3 $^\circ$ , 6 $^\circ$ >18, >17, >16	
First null fill below horizon, typ. (dB)		< 20	
Cross-polar discrimination +/-0 $^\circ$ (dB)		> 20	
Cross-polar discrimination +/-30 $^\circ$ (dB)		> 10	
VSWR		< 1.5:1	
Isolation between inputs (dB)		> 30	
Antenna efficiency*		92 %	
Inter modulation, IM3 (dBc)		<-153 @2x43 dBm	
Nominal impedance		50 $\Omega$	
Max power per input		500 W	

#### Mechanical specification:

Connectors	4 x 7/16 female
Connector position	Bottom
Lightning protection	DC grounded
Height/Width/Depth mm (in)	2060 (81.1) / 580 (22.8) / 255 (8.9)
Antenna weight	48 kg (106.7 lb)

#### Wind load at 42 m/s (94 mph) :

Frontal:	1120 N (261 lbf)
Lateral:	335 N ( 75 lbf)
Rear:	1280 N (281 lbf)

Survival wind speed	67 m/s (150 mph)
Colour radome	Light Grey, RAL 7035
Radome material	ASA

#### Mounting hardware:

Mounting bracket	2
Bracket weight (complete)	7.0 kg (15.6 lb)
Pole diameter	50-120 mm (2.0-4.7 in)
Tilt bracket	0 $^\circ$ - 5 $^\circ$ mechanical

#### Ordering information:

CMA-BTHH/3324/E0-6/MET	110550
CMA-BTHH/3324/E0-6/RET	110555

