

CMAX-LHM2-22-153

Low PIM Directional High Capacity Venue MIMO Antenna 4G/5G/C-Band, 617–960 MHz, 1695–2700 MHz and 3300–4200 MHz, 22-Deg

Product Classification

Product Type Over-the-head stadium antenna

General Specifications

Application Indoor/Outdoor
Antenna Type Directional
Antenna Array Characteristic MIMO 2x2
Polarization $\pm 45^\circ$
Color White (RAL 9016)
Number of Ports 2
Radome Material PVC, UV resistant
RF Connector Interface 4.3-10 Female

Dimensions

Width 417 mm | 16.417 in
Depth 140 mm | 5.512 in
Length 1150 mm | 45.276 in

Electrical Specifications

Impedance 50 ohm
Lightning Protection dc Ground
Operating Frequency Band 1695 – 2200 MHz | 2200 – 2700 MHz | 3300 – 4200 MHz | 617 – 806 MHz | 806 – 960 MHz
Electrical Note Values typical, unless otherwise stated

Electrical Specifications

Frequency Band, MHz	617–806	806–960	1695–2200	2200–2700	3300–4200
Gain, dBi	11.8	12.5	10.8	11.7	11.2
Beamwidth, Horizontal, degrees	24	19	27	21	24
Beamwidth, Vertical, degrees	76	73	75	67	74

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Horizontal Sidelobe, dB	14	14	15	15	15
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	20	20	20	20	20
CPR at Boresight, dB	19	20	16	17	18
Isolation, Cross Polarization, dB	22	25	25	25	25
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	200	200	200	200	200

VSWR/Return Loss

Frequency Band	VSWR, Maximum	Return Loss, Maximum (dB)	VSWR, Mean	Return Loss, Mean (dB)
617–800 MHz	1.703	11.7	1.499	14
800–960 MHz	1.725	11.5	1.499	14
1695–2200 MHz	1.703	11.7	1.499	14
2200–2700 MHz	1.703	11.7	1.499	14
3300–4200 MHz	1.703	11.7	1.499	14

Mechanical Specifications

Wind Loading @ Velocity, maximum	1,557.0 N @ 241 km/h (350.0 lbf @ 150 mph)
Wind Speed, maximum	241.4 km/h (150 mph)

Environmental Specifications

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Relative Humidity	Up to 100%
Ingress Protection Test Method	IEC 60529:2001, IP65
Vibration Test Method	ASTM D4169 IEC 60068-2-6

Packaging and Weights

Width, packed	480 mm 18.898 in
Depth, packed	240 mm 9.449 in
Length, packed	1300 mm 51.181 in
Included	Mounting bracket
Net Weight, with mounting kit	13.8 kg 30.424 lb
Packaging quantity	1
Weight, gross	17.5 kg 38.581 lb

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Weight, net

11 kg | 24.251 lb

