

CMAX-DM20-CPUSEI53



Cell-Max™ Low PIM Directional High Capacity Venue MIMO Antenna, 698–960 MHz and 1710–2700 MHz, 20-Deg, 12 dBi

OBSOLETE

This product was discontinued on: November 15, 2016

Replaced By:

CMAX-DM20-43-V53 Cell-Max™ Low PIM Directional High Capacity Venue MIMO Antenna, 698–960 MHz and 1695–2700 MHz, 20-Deg, 4.30-10, Internal Diplexer

Product Classification

| | |
|----------------------|------------------------|
| Product Type | Indoor/outdoor antenna |
| Product Brand | Cell-Max™ |

General Specifications

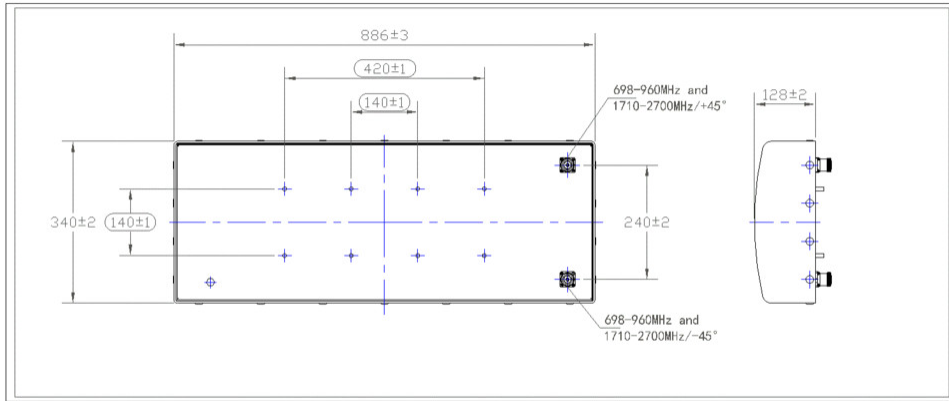
| | |
|-------------------------------|-------------------|
| Application | Indoor/Outdoor |
| Antenna Type | Directional |
| Polarization | ±45° |
| Color | White |
| Number of Ports | 2 |
| Radome Material | ABS, UV resistant |
| RF Connector Interface | 7-16 DIN Female |

Dimensions

| | |
|---------------|----------------------|
| Width | 340.4 mm 13.402 in |
| Depth | 127 mm 5 in |
| Length | 881.4 mm 34.701 in |

CMAX-DM20-CPUSEI53

Outline Drawing



Electrical Specifications

| | |
|-----------------------------|-----------|
| Impedance | 50 ohm |
| Lightning Protection | dc Ground |

Electrical Specifications

| Frequency Band, MHz | 698-800 | 800-960 | 1695-1880 | 1850-1990 | 1920-2180 | 2200-2700 | 2300-2360 |
|---|----------|----------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 12 | 13.4 | 12.3 | 12.6 | 13.2 | 13.5 | 13.5 |
| Beamwidth, Horizontal, degrees | 26 | 23 | 24 | 22 | 20 | 18 | 19 |
| Beamwidth, Vertical, degrees | 63 | 61 | 64 | 61 | 62 | 60 | 65 |
| Front-to-Back Ratio, Copolarization 180° ± 30°, dB | 25 | 29 | 35 | 35 | 35 | 30 | 35 |
| CPR at Boresight, dB | 20 | 20 | 15 | 15 | 15 | 15 | 15 |
| Isolation, Cross Polarization, dB | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| VSWR Return loss, dB | 1.7 11.7 | 1.7 11.7 | 1.8 10.9 | 1.8 10.9 | 1.8 10.9 | 1.8 10.9 | 1.8 10.9 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 200 | 200 | 200 | 200 | 200 | 200 | 200 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, maximum | 686.0 N @ 216 km/h (154.2 lbf @ 216 km/h) |
| Wind Speed, maximum | 216 km/h 134.216 mph |

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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 | 350 mm 13.78 in |
| Depth, packed | 210 mm 8.268 in |
| Length, packed | 1125 mm 44.291 in |
| Included | Mounting bracket |
| Packaging quantity | 1 |
| Weight, gross | 14.2 kg 31.306 lb |
| Weight, net | 8 kg 17.637 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Below maximum concentration value |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

