



CMax-DM20-CPUSEi53

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

The Cell-Max™ DM20 provides consistent dual-polarized, narrow beamwidth over ultra wide frequency range needed for delivering high capacity required in stadiums, sports arenas, and other capacity hot spots.

The directional antenna is equipped with a user friendly click technology mounting bracket allowing flexible orientation and simple adjustment.

CommScope antennas ensure optimum capacity, minimum sector overlap, and ease of installation for any solution. The innovative mounting bracket provides an audio click for each 2.5 degree horizontal and 5 degree vertical adjustments allowing easy installation without the need for visual adjustment.

- Wideband to support future technologies
- Dual-polarized ($\pm 45^\circ$) supporting MIMO installations
- Excellent PIM performance
- Flexible coverage adjustment through smart mounting bracket
- Compact size
- Laser tool mount



CMAX-DM20-CPUSEi53

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

Electrical Specifications

| Frequency Band, MHz | 698–800 | 800–960 | 1695–1880 | 1850–1990 | 1920–2180 | 2200–2700 | 2300–2360 |
|--|------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 12.0 | 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 | 63.0 | 61.0 | 64.0 | 61.0 | 62.0 | 60.0 | 65.0 |
| Horizontal Sidelobe, dB | 18 | 18 | 17 | 17 | 17 | 17 | 17 |
| 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, 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 |
| Polarization | ±45° | ±45° | ±45° | ±45° | ±45° | ±45° | ±45° |
| Impedance | 50 ohm | 50 ohm | 50 ohm | 50 ohm | 50 ohm | 50 ohm | 50 ohm |

General Specifications

| | |
|----------------------------|------------------|
| Antenna Type | Directional |
| Application | Indoor Outdoor |
| Brand | Andrew® |
| Includes | Mounting bracket |
| Number of Ports, all types | 2 |
| Package Quantity | 1 |

Mechanical Specifications

| | |
|------------------------|--|
| Color | White |
| Radome Material | ABS, UV resistant |
| RF Connector Interface | 7-16 DIN Female |
| Wind Loading, maximum | 686.0 N @ 216 km/h 154.2 lbf @ 216 km/h |
| Wind Speed, maximum | 216 km/h 134 mph |

Environmental Specifications

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

Dimensions

| | |
|------------|--------------------|
| Depth | 127.0 mm 5.0 in |
| Length | 881.4 mm 34.7 in |
| Width | 340.4 mm 13.4 in |
| Net Weight | 8.0 kg 17.6 lb |

Packed Dimensions

| | |
|-----------------|---------------------|
| Depth | 210.0 mm 8.3 in |
| Length | 1125.0 mm 44.3 in |
| Width | 350.0 mm 13.8 in |
| Shipping Weight | 14.2 kg 31.3 lb |

CMAx-DM20-CPUSEi53

POWERED BY



Outline Drawing

