# **ADB-MPC**

## Medium Power FM Broadcast Antenna

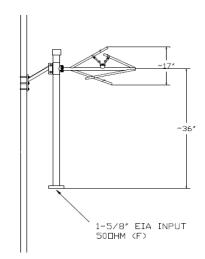


### **Product Description**

The ADB-MPC antenna is the medium-power version of the Penetrator antenna, which has become an industry standard for quality and performance. Rated at 10 kW maximum input, each bay consists of a Penetrator-style radiating element with a 1-5/8" shunt feed line. Each ADB-MPC is factory tuned to any frequency in the FM Band II (87.5 - 108 MHz) range on a tower structure that bests simulates the customer's actual tower.

Multiple frequency design is also available. The true circular polarization of the ADB-MPC antenna offers excellent performance for HD Radio, stereo and SCA operation. Typical VSWR is  $1.1:1 \pm 200$  kHz.





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Number of Bays	Power Gain	dB Gain	FS @ 1 Mi.	Safe Input Power kW	Weight (lbs / kg)	Wind load (lbs / kg)
1 Deicers Radomes	0.46	-3.37	93.2	5	35 lbs / 16 kg 44 lbs / 20 kg 65 lbs / 30 kg	44 lbs / 20 kg 54 lbs / 25 kg 166 lbs / 75 kg
2 Deicers Radomes	1.00	0.00	136.7	10	100 lbs / 45 kg 118 lbs / 54 kg 160 lbs / 73 kg	145 lbs / 66 kg 169 lbs / 77 kg 387 lbs / 176 kg
3 Deicers Radomes	1.50	1.76	168.4	10	155 lbs / 70 kg 182 lbs / 83 kg 245 lbs / 111 kg	231 lbs / 105 kg 279 lbs / 127 kg 594 lbs / 269 kg
4 Deicers Radomes	2.10	3.22	199.2	10	211 lbs / 96 kg 220 lbs / 100 kg 330 lbs / 150 kg	317 lbs / 144 kg 391 lbs / 177 kg 801 lbs / 363 kg
5 Deicers Radomes	2.70	4.31	225.2	10	267 lbs / 121 kg 312 lbs / 142 kg 417 lbs / 189 kg	403 lbs / 183 kg 502 lbs / 228 kg 1,008 lbs / 457 kg
6 Deicers Radomes	3.20	5.05	246.0	10	323 lbs / 147 kg 377 lbs / 171 kg 503 lbs / 228 kg	489 lbs / 222 kg 610 lbs / 277 kg 1,215 lbs / 551 kg
8 Deicers Radomes	4.30	6.34	285.2	10	435 lbs / 197 kg 507 lbs / 230 kg 675 lbs / 306 kg	662 lbs / 300 kg 831 lbs / 377 kg 1,630 lbs / 739 kg
10 Deicers Radomes	5.50	7.40	322.4	10	547 lbs / 248 kg 637 lbs / 289 kg 847 lbs / 384 kg	834 lbs / 378 kg 1,052 lbs / 477 kg 2,044 lbs / 927 kg
12 Deicers Radomes	6.60	8.20	353.2	10	659 lbs / 299 kg 766 lbs / 348 kg 1,018 lbs / 462 kg	1,006 lbs / 456 kg 1,212 lbs / 550 kg 2,458 lbs / 1,115 kg

<sup>\*</sup>All stated gains are Peak gains. Gains do not include losses for feed system, beam tilt or null fill.

#### NOTES:

- 1. Weights and wind loads shown include standard leg mounting brackets and feed lines
- 2. Wind loads based on 50/33 PSF (98 MHz, mid-band)
- 3. Feed points, when end fed is 3ft/0.9144m below bottom bay; when center fed is 9'6''/2.8956m below center
- 4. All inputs are EIA flange, female
- 5. Power de-rating occurs above 2,000 feet elevation. Contact factory for details

- 6. Power and Db gains are typical for horizontal and vertical components
- 7. Special mounting brackets are available
- 8. Other combinations of EIA inputs and power ratings available
- 9. Free space azimuth circularity is  $\pm$  2.0 dB
- 10. Polarization is right hand, clockwise circular
- 11. Power gain is based on half wave dipole in free space
- $12. \ \mbox{Specifications}$  based on one wave spaced bays, other spacing available

Since many factors contribute to a station's compliance with the FCC exposure guidelines for radio frequency radiation, Alan Dick Broadcast Ltd. cannot accept any responsibility in this matter. The station must examine and determine its status based on each individual situation. For reduced low angle radiation near the tower, a low RFR model of this antenna is available. Contact the factory for pricing data and further details

\*All specifications are subject to change without notice.

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