

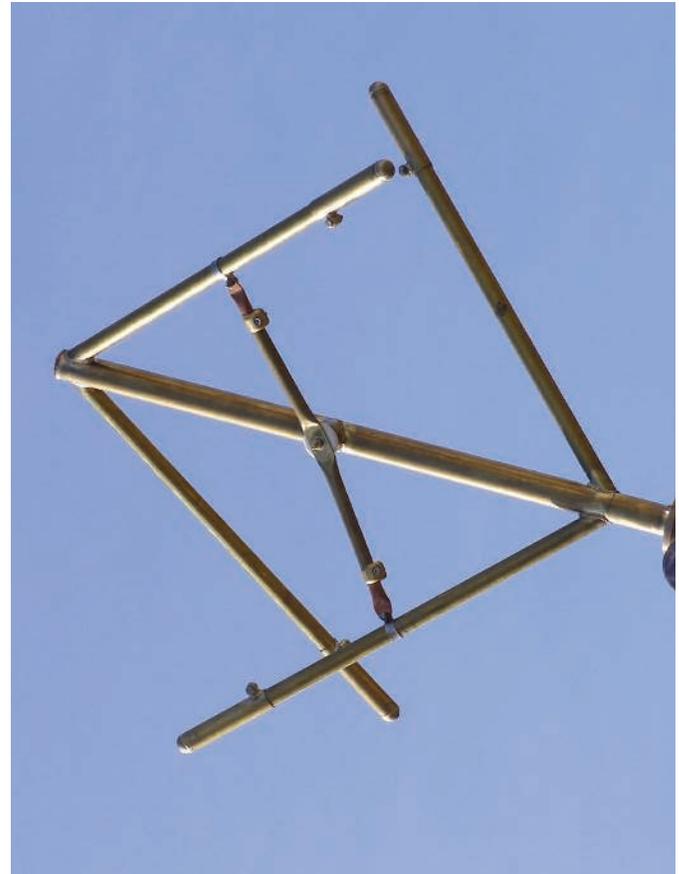
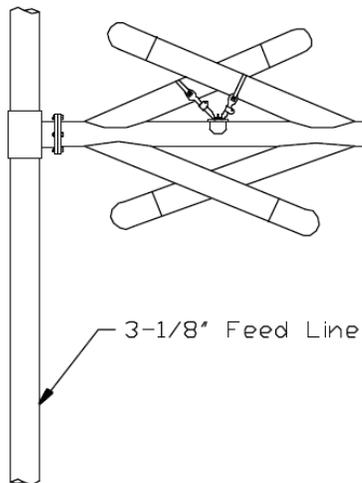
ADB-HPC

High Power FM Broadcast Antenna



Product Description

The ADB-HPC antenna is the high power version of the Penetrator antenna series, which has become an industry standard for quality and performance. Rated at 40 kW maximum inputs, each bay consists of a Penetrator style radiating element with a 3-1/8" shunt feed line. Each ADB-HPC is factory tuned to any single frequency in the FM Band II (87.5 -108 MHz) range on a tower structure that best simulates the customer's actual tower. Multiple frequency design is also available. The true circular polarization of the ADB-HPC antenna offers excellent performance for HD Radio, stereo and SCA operation. Typical VSWR is 1.1:1 \pm 200 kHz.



The ADB-HPC antenna is constructed of the highest quality marine brass and copper. A hot dipped – galvanized steel mounting bracket for utmost grounding supports each bay. Standard round leg mounting brackets for uniform face towers are included with each antenna. Silver plated inner conductor connectors are used throughout for maximum contact life and minimum power loss. Each ADB-HPC antenna is DC grounded at every bay for maximum lightning protection. This rugged mechanical construction and mounting ensure the long life and outstanding performance of each ADB-HPC antenna system.

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Number of Bays	Power Gain	dB Gain	FS @ 1 Mi.	Max Input Power kW	Weight (lbs/kg)	Wind load (lbs/kg)
1 Deicers Radomes	0.46	-3.37	93.2	10	35 lbs / 16 kg 44 lbs / 20 kg 65 lbs / 30 kg	41 lbs / 19 kg 50 lbs / 23 kg 162 lbs / 74 kg
2 Deicers Radomes	1.00	0.00	136.7	20	141 lbs / 64 kg 159 lbs / 72 kg 201 lbs / 91 kg	203 lbs / 92 kg 227 lbs / 103 kg 445 lbs / 202 kg
3 Deicers Radomes	1.50	1.76	168.4	25	226 lbs / 103 kg 253 lbs / 115 kg 345 lbs / 157 kg	331 lbs / 150 kg 379 lbs / 172 kg 694 lbs / 315 kg
4 Deicers Radomes	2.10	3.22	199.2	30	312 lbs / 142 kg 348 lbs / 157 kg 435 lbs / 197 kg	459 lbs / 208 kg 532 lbs / 241 kg 943 lbs / 428 kg
5 Deicers Radomes	2.70	4.31	225.2	35	397 lbs / 180 kg 442 lbs / 201 kg 547 lbs / 248 kg	587 lbs / 266 kg 683 lbs / 310 kg 1192 lbs / 541 kg
6 Deicers Radomes	3.20	5.05	246.0	40	483 lbs / 219 kg 537 lbs / 244 kg 663 lbs / 301 kg	714 lbs / 324 kg 835 lbs / 379 kg 1440 lbs / 653 kg
8 Deicers Radomes	4.30	6.34	285.2	40	654 lbs / 297 kg 726 lbs / 329 kg 894 lbs / 406 kg	970 lbs / 440 kg 1139 lbs / 517 kg 1938 lbs / 879 kg
10 Deicers Radomes	5.50	7.40	322.4	40	825 lbs / 374 kg 915 lbs / 415 kg 1125 lbs / 510 kg	1226 lbs / 556 kg 1444 lbs / 655 kg 2436 lbs / 1105 kg
12 Deicers Radomes	6.60	8.20	353.2	40	996 lbs / 452 kg 1104 lbs / 501 kg 1356 lbs / 615 kg	1481 lbs / 672 kg 1687 lbs / 765 kg 2933 lbs / 1330 kg

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

NOTES:

- Weights and wind loads shown include standard leg mounting brackets and feed lines
- Wind loads based on 50/33 PSF (98 MHz, midband)
- Feed points, when end fed is 3 ft below bottom bay; when center fed is 9'. 6" below center
- All inputs are EIA flange, female
- Power derating occurs above 2,000ft/609.6m elevation. Contact factory for details
- Power and dB gains are typical for horizontal and vertical components
- Special mounting brackets are available
- Other combinations of EIA inputs and power ratings available
- Free space azimuth circularity is ± 2.0 dB
- Polarization is right hand, clockwise circular
- Power gain is based on half wave dipole in free space
- Specifications based on one wave spaced bays, other spacing available
- Radomes & electrical deicers available upon request.

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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