



## THE JAMPRO OPTIMIZER MEDIUM POWER FM BROADCAST ANTENNA

The JAMPRO JBCP-M FM side mount antenna is designed for broadcast applications that require relative insensitivity to icing conditions as well as high power handling. Each element is fabricated with high strength thick wall brass and copper with a 1-5/8" outside diameter. Capable of handling 12 KW, the JBCP-M is also available for higher power handling available with optional 3-1/8" Center feed. On a single frequency, VSWR is 1.10:1  $\pm$  200 KHz. Radomes are not normally needed, because even with 1/2" of radial ice, typical VSWR is still less than 1.4:1. Each JBCP-M antenna is factory VSWR tuned; optional field tuning may improve VSWR.

**Outstanding VSWR without a need for field tuning**

**DC grounded for lightning protection**

**Excellent diplexing capabilities**

**Circular or elliptical polarization**

**Medium power handling**

**Custom directional patterns available**

**Beam tilt and null fill available**

**FCC Directionalization available**



This antenna is designed with the same principles as JAMPRO's patented PENETRATOR series of FM antennas, which set the industry standard for FM side mount antennas. The shunt fed design eliminates the need to "slug tune" the antenna in the field for optimum performance. Unlike similar, older designs, the Optimizer uses low impedance bays for un-excelled stability and band pass.



# JBCP-M

# Bays	Power Gain	Gain (dB)	Net Weight (lbs)	Wind load with no ice (lbs)	Wind load with 1/2" radial ice (lbs)	Wind load with radomes (lbs)
1	0.46	-3.37	110	92	181	267
2	1	0	203	256	419	570
3	1.5	1.76	315	402	657	872
4	2.1	3.22	426	548	895	1175
5	2.7	4.31	538	694	1134	1478
6	3.2	5.05	649	840	1372	1780
8	4.3	6.34	894	1170	1911	2425
10	5.5	7.4	1117	1462	2388	3030
12	6.6	8.2	1340	1754	2864	3635

**NOTES:**

- 1. Weights and wind loads shown include standard leg brackets.
- 2. Wind loads based on 50/33 PSF (98 MHz midband).
- 3. 1-bay through 6-bay configurations are end-fed, standard. Center feeding is available. 7-bay through 12-bay configurations are center-fed, standard.
- 4. Feed points: 3 ft. below bottom bay when end-fed, 9 ft. below center when center fed.
- 5. All inputs EIA flange, female.
- 6. Power and dB gains are typical for horizontal and vertical components.

- 7. Custom mounting brackets available.
- 8. Specifications shown based on 1-5/8" input, end fed through 8 bays. \*3 -1/8" EA Available
- 9. Free space azimuth circularity is +/- 2dB.
- 10. Polarization is left hand, clockwise, circular.
- 11. Optional fine matcher available. Contact factory for details.

**OPTIONS:**

Options available include FCC Directionalization, Pattern Measurement Service, beam tilt, null fill, fractional wave length bay spacing and special mounting brackets.

Since many factors contribute to a station's compliance with the FCC exposure guidelines for radio frequency radiation, JAMPRO ANTENNAS, INC. 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.