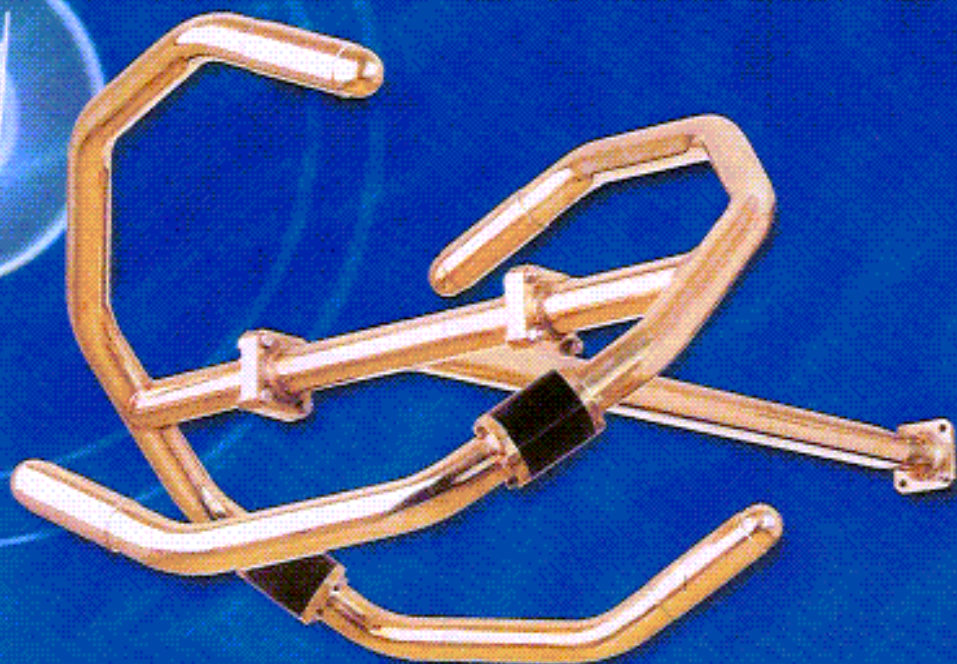


# FM BROADCAST ANTENNAS

## **FMR SERIES**



- Circularly Polarized
- Internal-Pressurized Feed
- Input Powers to 12 kW
- Copper and Marine Quality Brass Construction
- Excellent VSWR Bandwidth
- Extra Rugged TIG Welded Construction
- Factory Tuned
- Optional Fine Matcher Available
- 2 Year Limited Warranty
- Series Fed Element

The FMR Series is an omni directional, circularly polarized antenna which offers you exceptional quality at a competitive price.

Rugged copper and corrosion resistant brass construction ensure good conductivity and longevity in any environment as well as excellent VSWR bandwidth. Each bay is constructed of 1-5/8" diameter heavy wall brass and is fed from a 1-5/8" support boom. The elements are stacked in arrays of up to 12-bays for increased gain. For arrays requiring beam tilt and/or null fill, a center feed system is required. The FMR Series utilizes rigid 1-5/8" inter-bay transmission lines to connect each element. The entire antenna system including the feed is pressurized.

Each antenna is normally supplied with standard galvanized mounting brackets for round leg mounting on uniform cross section towers. Custom mounting brackets are also available.



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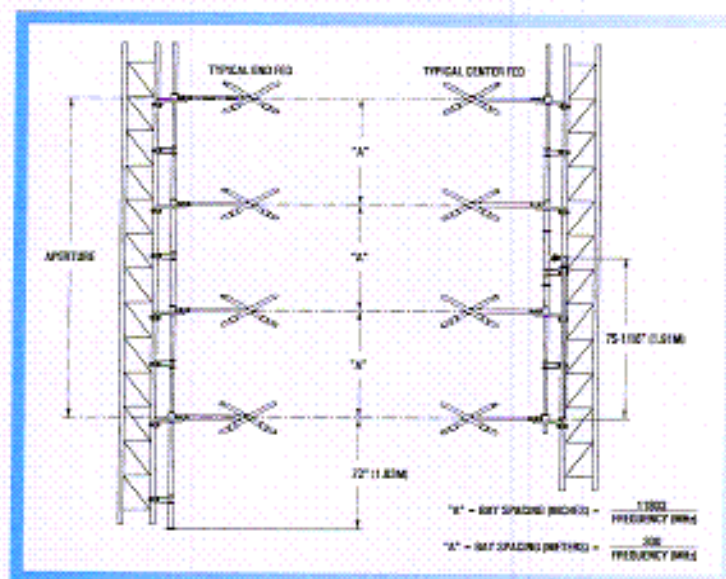
## **PROPAGATION SYSTEMS, INC.**



# FMR SERIES

## General Specifications

Frequency Range	88-108 MHz
Polarization	Circular
Circularity	+/- 2 dB free space
VSWR	<1.1:1 (with field matching)
Impedance	50 ohms
Lightning Protection	DC Grounded



Bays	Power Gain	Gain dBd	Feed Style	Input Size	Power Rating	Calculated Length	Calculated Weight	Calculated Windload
1	.46	-3.37	End	1-5/8"	9 kW	~	45 lbs.	90 lbs.
2	1.0	0.0	End	1-5/8"	9 kW	10 ft.	90 lbs.	180 lbs.
2	1.0	0.0	Center	3-1/8"	12 kW	10 ft.	128 lbs.	225 lbs.
3	1.5	1.76	End	1-5/8"	9 kW	20 ft.	135 lbs.	275 lbs.
4	2.1	3.22	End	1-5/8"	9 kW	30 ft.	180 lbs.	380 lbs.
4	2.1	3.22	Center	1-5/8"	9 kW	30 ft.	205 lbs.	400 lbs.
4	2.1	3.22	Center	3-1/8"	12 kW	30 ft.	218 lbs.	425 lbs.
5	2.7	4.31	End	1-5/8"	9 kW	40 ft.	225 lbs.	475 lbs.
6	3.2	5.05	End	1-5/8"	9 kW	50 ft.	270 lbs.	575 lbs.
6	3.2	5.05	Center	1-5/8"	9 kW	50 ft.	295 lbs.	590 lbs.
6	3.2	5.05	Center	3-1/8"	12 kW	50 ft.	308 lbs.	610 lbs.
7	3.8	5.80	End	1-5/8"	9 kW	60 ft.	315 lbs.	660 lbs.
8	4.3	6.34	End	1-5/8"	9 kW	70 ft.	360 lbs.	800 lbs.
8	4.3	6.34	Center	1-5/8"	12 kW	70 ft.	385 lbs.	850 lbs.
8	4.3	6.34	Center	3-1/8"	12 kW	70 ft.	398 lbs.	890 lbs.
10	5.6	7.48	Center	1-5/8"	12 kW	90 ft.	475 lbs.	950 lbs.
10	5.6	7.48	Center	3-1/8"	12 kW	90 ft.	488 lbs.	1000 lbs.
12	6.7	8.26	Center	1-5/8"	12 kW	110 ft.	565 lbs.	1150 lbs.
12	6.7	8.26	Center	3-1/8"	12 kW	110 ft.	578 lbs.	1200 lbs.

\* Aperture, weight and windload are calculated at 98 MHz. \* Windload at 50/33 lb./sq. ft. (244/163 kg/sq.m).

\* As the result of an ongoing program of product improvement, PSI reserves the right to modify the indicated technical characteristics at any time without notice.

## PSI PROPAGATION SYSTEMS, INC.

PSI builds high quality broadcast antennas at competitive prices. With over 100 years of collective experience in broadcast manufacturing, PSI offers the expertise of larger manufacturers — and the personal attention you'll only find at a smaller company.

We bring together people with expertise in mechanical, electrical,

electronic and civil engineering to do one thing: build the very best antenna products.

We're fully equipped for design, development, manufacture and testing of all our broadcast antennas. We use only the highest quality welding equipment and employ only the latest in testing methods.

So whether you need a simple FM antenna or a complex DTV array, PSI should be your first choice. Our uncompromising commitment to quality and service will ensure that your PSI antenna will work today, tomorrow — and for years to come.

- FM, VHF & UHF Antennas
- Diplexers/Combiners
- Filters
- Transmission Line
- Transmission Line Accessories

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