



# FMP20 SERIES MEDIUM POWER FM PANEL ANTENNA

## Product Specifications:

Frequency Range	88.1 – 107.9 MHz
Polarization	Circular
Circularity	+/- 2 dB (6 ft. face)
Channels	Multi
VSWR	1.1:1, +/- 200 kHz
System Input	3-1/8" or 6-1/8" E.I.A.
Half Power Beam-Width	6 dB / 120 Degrees
Power Rating	5 or 10 kW per bay
Impedance	50 Ohm
Bay Spacing	0.9 to 1 $\lambda$
Mounting Pipes Included	Specified

## Features:

•**IDEAL FOR MULTI-STATION OPERATION.** The high power capability and wide VSWR bandwidth make it an excellent choice for multiplexing multiple FM stations.

•**PRESSURIZED AND GROUNDED.** The antenna system is pressurized to the feed point of each bay and each bay is DC grounded.

•**RUGGED CONSTRUCTION.** Each panel is constructed of heavy gauge stainless or mild galvanized steel. The elements are made of heavy wall copper and naval brass.

•**BEAM TILT AND/OR NULL FILL STANDARD.** Custom elevation patterns are available for multi-element arrays.

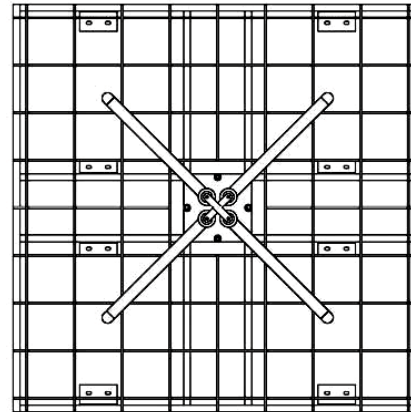
•**CUSTOM DIRECTIONAL ANTENNA PATTERNS.** Directional horizontal plane patterns based on the customers mounting structure are available.

•**WEATHERIZATION (OPTIONAL).** Radomes or electrical deicers available for areas that experience periods of heavy icing and/or show conditions.

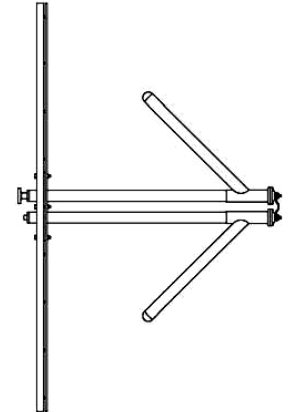
•**WARRANTY.** 2-year limited warranty on defects in materials and workmanship to the original purchaser.

### Notes:

- Wind load and ratings are based on 50/33 psf, and are representative only.
- Panel reflector is typically 72", square flat panel (welded mesh over structural tube members – stainless or galvanized).
- Power rating is based on 40 degrees C ambient. Degeneration occurs above 2000 ft. Special high power designs available.
- Antenna aperture is based on 98 MHz operation.
- All antennas are supplied with custom mounting brackets, power dividers and cabling required for a complete functional array.
- SWR, Inc. maintains a continuous program of product improvement and reserves the right to change specifications without notice.



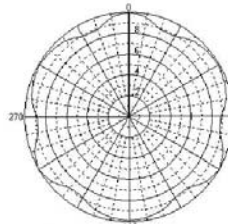
Front View



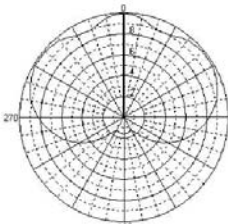
Side View

## Electrical and Mechanical Specifications

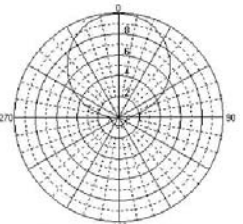
# of Bays	Panels Per Bay	Gain (times)	Gain (dBd)	Antenna Height (ft.)	Net Weight (lbs.)	Wind load (lbs.)
1	1	1.80	2.55	6	145	302
	2	0.80	-0.97		310	539
	3	0.50	-3.01		460	748
2	1	3.80	5.80	10	310	597
	2	1.80	2.55		615	1073
	3	1.10	0.41		945	1495
4	1	8.20	9.14	30	615	1193
	2	3.80	5.80		1235	2144
	3	2.30	3.62		1865	2972
6	1	12.60	11.00	50	945	1786
	2	5.90	7.71		1865	3208
	3	3.60	5.56		2810	4455
8	1	17.20	12.36	70	1235	2386
	2	8.00	9.03		2520	4276
	3	4.90	6.90		3730	5940



Typical 3-Around Tower



Typical 2-Around Tower



Typical 1-Around Tower