Broadcast Antennas & Transmission Systems

SYSTEMS WITH RELIABILITY, LP
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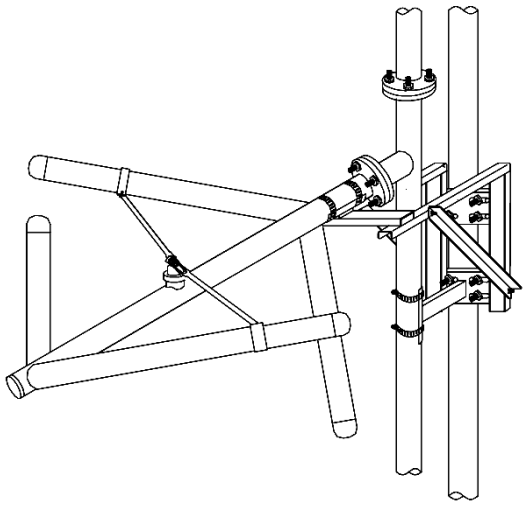
FMU SERIES
ULTRA POWER FM ANTENNAS



Product Specifications:

Frequency Range	88 – 107.9 MHz
Polarization	Circular
Power Rating	35 kW per bay
System Input	3 1/8" - 4 1/16" - 6 1/8" EIA
Circularity	± 2 dB Free Space
VSWR	1.1:1 ± 200 kHz
Bay Dimensions	H 52" / W 40.5" / D 22"

Features:

•**FULL POWER RATING.** Rated at 35 kW per bay with a maximum of 105 kW for three bays or more.

•**EXCELLENT CHOICE FOR MOST CLASS "C" STATIONS.** Provides superior performance for stereo and SCA operations due to its high VSWR rating.

•**RUGGED CONSTRUCTION.** The antenna system is fabricated from rugged, heavy wall copper and naval brass. All joints are tig-welded.

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

•**BEAM TILT AND/OR NULL FILL OPTIONAL.** Custom vertical patterns are available with center-fed arrays that have an even number of bays.

•**CUSTOM DIRECTIONAL PATTERNS.** FM directional antennas based on the customer's mounting structure, with FCC filing documentation, are available.

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

•**STANDARD MOUNTING BRACKETS.** Fits up to 4" tower leg or pipe. Supplied with antenna.

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

Notes:
1. Power gain figure is for each polarization.
2. Power rating is based on 40 degrees C ambient. Degeneration occurs above 2000 ft.
3. Antenna weight, windload, aperture, and dimensions are based on mid-band operation (98.1 MHz).
4. Antennas with 2 or more bays come with input fine-matcher.
5. SWR, Inc. maintains a continuous program of product improvement and therefore reserves the right to change specifications without notice.

Full Wave Spaced
Electrical and Mechanical Specifications

Bays	Power Rating (kW)	Power Gain	dB Gain	Net. Weight (lbs)	Windload (lbs)
1	35	0.441	-3.556	97	183
2	70	0.959	-0.182	293	465
3	105	1.495	1.746	390	712
4	105	2.044	3.105	486	959
5	105	2.590	4.133	583	1206
6	105	3.160	4.997	679	1453
8	105	4.311	6.346	872	1947
10	105	5.456	7.369	1065	2441

Half Wave Spaced
Electrical and Mechanical Specifications

Bays	Power Rating (kW)	Power Gain	dB Gain	Net. Weight (lbs)	Windload (lbs)
1	35	0.441	-3.556	97	183
2	70	0.695	-1.580	293	465
3	105	1.012	0.052	390	712
4	105	1.313	1.183	486	959
5	105	1.623	2.103	583	1206
6	105	1.924	2.842	679	1453
8	105	2.528	4.028	872	1947
10	105	3.129	4.954	1065	2441

3/4 Wave Spaced
Electrical and Mechanical Specifications

Bays	Power Rating (kW)	Power Gain	dB Gain	Net. Weight (lbs)	Windload (lbs)
1	35	0.441	-3.556	97	183
2	70	0.935	-0.292	293	465
3	105	1.396	1.449	390	712
4	105	1.845	2.660	486	959
5	105	2.301	3.619	583	1206
6	105	2.756	4.403	679	1453
8	105	3.664	5.640	872	1947
10	105	4.590	6.618	1065	2441