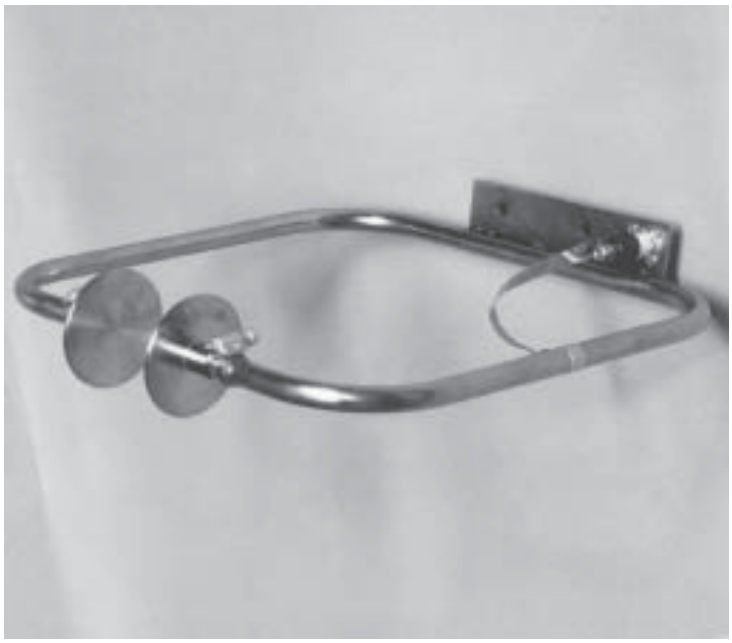
Shively Labs®

Model 6602B Horizontally-Polarized FM Antenna Full-Wave-Spaced

- Horizontal polarization
- Perfect for translators
- Digital-ready
- No pressurization needed
- The choice of campus broadcasters
- All stainless steel construction
- Designed for pipe mounting
- Economical
- No factory personnel needed to install
- Radomes and deicers available
- Special spacing, null fill, beam tilt available



Electrical specifications:

No. of Bays	Gain		Power Rating	No. of Bays	Gain		Power Rating
	Power	dB	W		Power	dB	W
1	0.92	-0.36	1000	5	5.12	7.09	1500
2	1.98	2.97	1500	6	6.15	7.89	1500
3	3.05	4.84	1500	7	7.18	8.56	1500
4	4.09	6.12	1500	8	8.22	9.15	1500

Performance specifications:

Polarization:	Horizontal
VSWR:	1.1 : 1 ± 100 kHz 1.2 : 1 ± 200 kHz
Input Connection:	Type "N" female
Mounting:	Must be mounted on a metal pipe, 2" IPS (2-3/8 in) to 3" IPS (3-1/2 in) (60 - 89 mm) outside diameter. Pipe not supplied by Shively; requires 5 ft (1.6 m) of pipe above and below antenna.

Notes:

1. Our gain figures are calculated by factoring the directivity to allow for losses in the radiating system. Due to this conservative approach, you are assured of radiating maximum ERP by using Shively's published gain figures.

   Gain is provided for horizontal polarization only. Gain will be reduced if null fill, beam tilt, or special wavelength spacing is provided.

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Certified to ISO-9001

Model 6602B size and weight (full-wave-spaced):

No. of Bays	Vertical Tower Space						Weight					
	Antenna Radiation Aperture		Pipe Length Required		Total Tower Space Recommended		Without radomes		With radomes		With radomes & 1/2" (1.2 cm) radial ice	
	ft	m	ft	m	ft	m	lb	N	lb	N	lb	N
1	2.0	0.6	12.0	3.7	22.0	6.7	3	13	38	169	57	254
2	8.5	2.6	18.5	5.6	28.5	8.7	10	45	80	357	122	544
3	17.0	5.2	27.0	8.2	37.0	11.3	17	76	122	544	187	834
4	25.5	7.8	35.5	10.8	45.5	13.9	23	103	163	727	252	1124
5	34.0	10.4	44.0	13.4	54.0	16.5	30	134	205	914	317	1414
6	42.5	13.0	52.5	16.0	62.5	19.1	37	165	247	1102	382	1704
7	51.0	15.5	61.0	18.6	71.0	21.6	43	192	288	1284	447	1994
8	59.5	18.1	69.5	21.2	79.5	24.2	50	223	330	1472	513	2288

Windload (full-wave-spaced):

No. of Bays	Revision 'C'						Revision 'F'					
	Without radomes		With radomes		With radomes & 1/2" (1.2 cm) radial ice		Without radomes		With radomes		With radomes & 1/2" (1.2 cm) radial ice	
	lb	N	lb	N	lb	N	(ft2)	m2	(ft2)	m2	(ft2)	m2
1	5	22	66	294	73	326	0.2	0.0	1.7	0.2	1.9	0.2
2	13	58	134	598	153	682	0.4	0.0	3.5	0.3	4	0.4
3	20	89	202	901	234	1044	0.6	0.1	5.4	0.5	6.3	0.6
4	28	125	270	1204	315	1405	0.9	0.1	7.2	0.7	8.5	0.8
5	35	156	339	1512	395	1762	1.1	0.1	9	0.8	10.7	1.0
6	42	187	407	1815	476	2123	1.3	0.1	10.8	1.0	12.9	1.2
7	49	219	475	2119	557	2484	1.5	0.1	12.6	1.2	15.1	1.4
8	57	254	543	2422	637	2841	1.8	0.2	14.4	1.3	17.3	1.6

Notes:

2. Antenna radiation aperture is the distance from the center of the top bay to the center of the bottom bay. Five ft of pipe is required above the top of the top bay and below the bottom of the bottom bay. Total tower space recommended allows ten ft of clear tower space above and below the pipe to protect from pattern interference by other antennas.
3. Antennas with two bays or an odd numbers of bays are end-fed; antennas with even numbers of bays are center-fed.
4. Windload and weight numbers given are typical. Actual values vary with the specific installation. Contact us with details of your installation if more precise values are needed.
5. Weight, windload, and space tabulations assume 98 MHz and include the bay, interbay feedline, input connection, and standard mounting brackets. At lower frequencies, length will increase by approximately 1 ft (31 cm) per bay.
6. Antenna windloads are calculated for 112 mph (180 kph), using 50 psf (2400 N/m^2) for flats and 33 psf (1600 N/m^2) for rounds] per EIA standard RS-222-C and CSA standard S37-94. The surface area is calculated per EIA standard RS-222-F (C_aA_c).
7. Deicers add approximately 1 lb (4.4 N) per bay in weight and 2 lb (8.9 N) or 0.3 ft^2 (0.028m^2) per bay in windload.
8. Ask for technical assistance at Shively when you are planning to mount antennas on AM towers or install them at altitudes over 3,000 ft (915 m) AMSL.