

Model 6020 Vertically-Polarized FM Antenna

Vertical polarization

5 kW power rating per bay

Radomes & de-icers not required

Shively standard features:

- Low weight and windload
- Rugged corrosion-resistant adjustable mounts
- Easy to install - minimum maintenance
- Non-pressurized
- Pattern studies and directional patterns available

Performance specifications:

Polarization: Vertical only.

Frequency range: 88-108 MHz

Impedance: 50 Ω

VSWR: Better than 1.3 : 1 over the FM band

Input Connection: Female 7/8" EIA.

Electrical specifications:

No. of bays	Gain		Power rating	No. of bays	Gain		Power rating
	Power	dB			Power	dB	
1	0.92	-0.36	5 kW	5	5.40	7.32	Contact factory
2	1.98	2.97	Contact factory	6	6.56	8.17	
3	3.10	4.91		7	7.74	8.89	
4	4.24	6.27		8	8.92	9.50	

NOTE

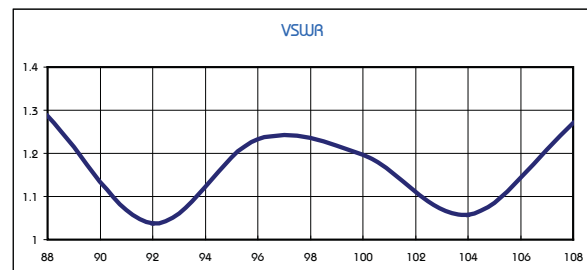
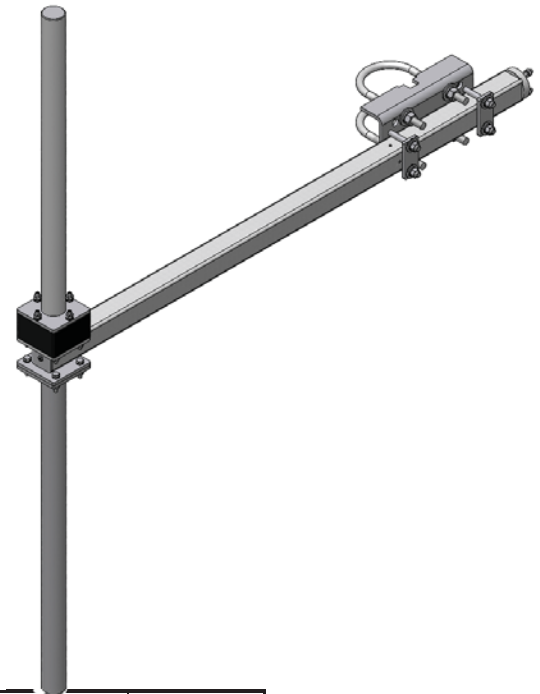
Gain and patterns depend on mounting geometry.

Mechanical specifications:

Dimensions per bay	Weight per bay	Windload per bay	Max. wind velocity	Materials
56 in (142.2 cm) x 46 in (116.8 cm) x 5.5 in (14 cm)	Antenna: 16 lb (7.3 kg) with mount: 25 lb (11.4 kg)	150 mph (0.21 kN)	137 mph (220 km/h)	External parts: stainless Internal parts: copper & stainless

NOTE

Mounts are designed to fit 1-1/2" to 3-1/2" diameter pole.



Document No. ds-6020_domestic (100603)

A Division of Howell Laboratories, Inc., P. O. Box 389, Bridgton, Maine 04009 USA
 (207) 647-3327 1-888-SHIVELY Fax: (207)647-8273
 An Employee-Owned Company

www.shively.com
 sales@shively.com
 Certified to ISO-9001:2000

Windload:

No. of Bays	Without ice		With 1/2" radial ice		With 1" radial ice		With 1-1/2" radial ice	
	EPA _N	EPA _T	EPA _N	EPA _T	EPA _N	EPA _T	EPA _N	EPA _T
1	1.7	0.7	2.4	1.0	2.9	1.2	3.4	1.5
2	6.0	4.0	9.2	6.4	12.0	8.6	14.1	10.4
3	10.2	7.1	16.2	12.0	21.8	16.7	27.1	21.5
4	17.6	13.5	26.9	21.3	35.5	28.6	43.5	35.9
5	24.0	18.8	37.3	30.2	50.0	41.4	62.2	52.7
6	27.0	20.9	42.1	33.7	56.7	46.4	70.5	59.2
7	35.6	28.4	57.1	47.3	77.9	66.0	97.9	84.7
8	39.3	31.1	63.0	51.9	86.2	72.5	108.3	93.2
9	49.6	40.3	81.2	68.6	112.1	96.7	141.8	125.0
10	53.8	43.5	88.2	74.2	121.9	104.8	154.3	135.5

Weight:

No. of Bays	Without ice	With 1/2" radial ice	With 1" radial ice	With 1-1/2" radial ice
1	28	41	59	81
2	111	159	230	322
3	149	232	355	519
4	182	326	536	812
5	215	410	695	1071
6	248	467	790	1215
7	392	919	1025	1602
8	334	655	1135	1773
9	392	801	1416	2239
10	430	873	1542	2436

NOTES

Windload and weight are estimated. Effective projected area (EPA) is calculated in accordance with TIA-222-G. Ask for technical assistance at Shively if you are planning to mount antennas on AM towers or install them at altitudes over 3,000 ft (915 m) above mean sea level.

