

Model 6017 FM Antenna

True circular polarization from 4-dipole configuration

Broadband; designed for multistation use

15 kW average, 160 kW peak power rating per level

Designed for top-mounted poles with 4.5" to 12.75" diameters

Omnidirectional ± 2 dB

Stainless steel construction

Low-windload design with excellent strength-to-windload ratio

Nominal 9-ft spacing to optimize gain and downward radiation



Electrical specifications:

No. of Levels (4 dipoles each)	Gain		Power Rating kW	No. of Levels (4 dipoles each)	Gain		Power Rating kW
	Power	dB			Power	dB	
1	0.46	-3.4	15	4	2.15	3.33	60
2	1.00	0.00	30	6	3.28	5.16	90
3	1.58	2.00	45				

Performance specifications:

Polarization: Right circular

VSWR: 1.15 : 1 typical. Contact the factory for more details.

Azimuth pattern circularity: Horizontal component ± 1.5 dB

Power rating: 15 kW average per panel
160 kW peak per level

Input: 1-5/8" - 6-1/8" EIA.

Notes:

1. Our gain figures are derived from the computed directivity and include the losses in the antenna feed system. Gain is computed for 98 MHz and will vary across the band.

Gain is provided for one polarization and is equal in circularly polarized antennas for both horizontal and vertical components. Gain will be reduced if special wavelength spacing is provided.

Document No. ds-6017 (150317)

Model 6017 Size and weight:

No. of Levels (4 dipoles each)	Vertical Pole Space		Weight			
	Antenna Radiation Aperture		without ice		with 1/2" radial ice	
	ft	m	lb	N	lb	N
1	9	2.7	170	756	255	1135
2	18	5.5	340	1512	565	2514
3	27	8.2	510	2269	930	4135
4	36	11.0	680	3024	1239	5513
6	54	16.5	1020	4537	1859	8270

IMPORTANT!

Weight and windload will vary with each system, depending on the specific components used in the feed system. The numbers shown here represent very conservative estimates.

Windload:

No. of Levels (4 dipoles each)	Revision 'C'				Revision 'G'			
	without ice		with 1/2" radial ice		without ice		with 1/2" radial ice	
	lb	N	lb	N	(ft ²)	m ²	(ft ²)	m ²
1	134	596	255	1134	4	0.4	7	0.7
2	366	1628	584	2597	11	1.0	17	1.6
3	500	2224	987	4389	19	1.7	30	2.8
4	683	3037	1315	5852	25	2.3	31	2.9
6	1049	4665	1973	8777	37	3.4	47	4.4

Notes:

- Vertical apertures are approximate. Contact us for the exact pole space for your application.
- Windload and weight figures are approximate values and should be used for estimating purposes only. The figures include radiators, typical power dividers, and feed cables.
- Antenna windloads are calculated for 112 mph (180 kph), using 50 psf (2400 N/m²) for flats and 33 psf (1600 N/m²) for rounds] per EIA standard RS-222-C and CSA standard S37-94. The effective projected area is calculated per EIA standard RS-222-G (C_oA_o).
- Ask for technical assistance at Shively if you are planning to install antennas at altitudes over 3,000 ft (915 m) AMSL.