

Model 6016P FM Panel Antenna

True Circular Polarization

Broadband 87.5 - 108 MHz; Designed for Multistation Use

15 kW Average, 100 kW Peak Power Rating per Panel

Designed for 4-Sided Towers

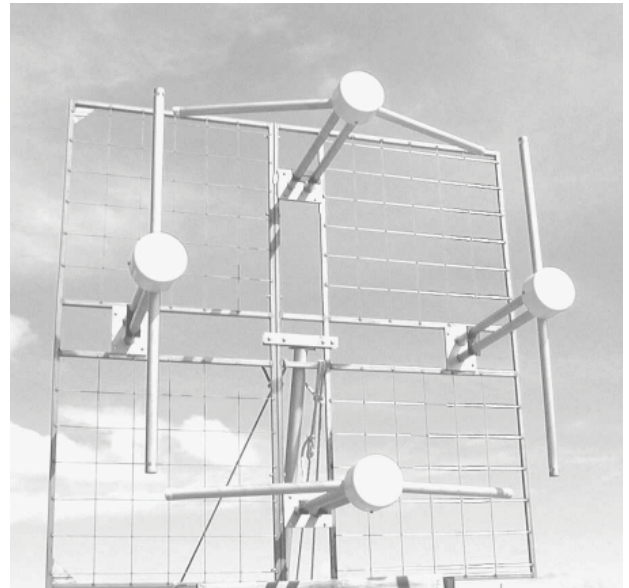
Omnidirectional ± 2 dB

Directional Versions Available

Minimum Maintenance

Stainless Steel Construction

Electrical Specifications (United States):



No. of Levels (4 panels each)	Gain		Power Rating kW	No. of Levels (4 panels each)	Gain		Power Rating kW
	Power	dB			Power	dB	
1	0.7	-1.55	60	5	3.14	4.96	160
2	1.31	1.17	120	6	3.75	5.74	160
3	1.92	2.83	160	7	4.36	6.39	160
4	2.53	4.03	160	8	4.96	6.96	160

Electrical Specifications (Overseas: Gain = azimuth gain + elevation gain.)

No. of Levels (4 panels each)	Gain		Power Rating kW	No. of Levels (4 panels each)	Gain		Power Rating kW
	Power	dB			Power	dB	
1	1.02	0.07	60	5	4.56	6.59	160
2	1.90	2.79	120	6	5.44	7.36	160
3	2.79	4.45	160	7	6.33	8.01	160
4	3.67	5.65	160	8	7.20	8.57	160

Performance Specifications:

Polarization: Right circular
 VSWR: 1.1 : 1 over the FM band
 Azimuth Pattern Circularity: Horizontal component
 ± 2 dB on a 5-ft triangular tower
 Power Rating: 15 kW average per panel
 100 kW peak per panel
 Input: 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. Gain will increase in a directional array by the directivity of the azimuth pattern.

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An Employee-Owned Company

Certified to ISO-9001:2000

Model 6016P Size and Weight:

No. of Levels (4 panels each)	Vertical Tower Space		Weight			
	Antenna Radiation Aperture		without ice		with 1/2" (1.2 cm) radial ice	
	ft	m	lb	N	lb	N
1	10	3.3	1152	5138	2091	9326
2	20	6.6	2804	12506	4762	21239
3	30	9.8	3956	17644	6853	30564
4	40	13.1	5108	22782	8944	39890
5	50	16.4	6260	27920	11035	49216
6	60	19.7	7612	33950	13356	59568
7	70	23.0	8564	38195	15217	67868
8	80	26.2	9766	43556	17308	77194

Windload:

No. of Levels (4 panels each)	Revision 'C'				Revision 'F'			
	without ice		with 1/2" (1.2 cm) radial ice		without ice		with 1/2" (1.2 cm) radial ice	
	lb	N	lb	N	(ft ²)	m ²	(ft ²)	m ²
1	2425	10816	4450	19847	77	7.2	133	12.4
2	4850	21631	8900	39694	155	14.4	266	24.7
3	7275	32447	13350	59541	232	21.6	399	37.1
4	9700	43262	17799	79384	309	28.7	532	49.4
5	12125	54078	22249	99231	387	36.0	665	61.8
6	14550	64893	26699	119078	464	43.1	798	74.1
7	16975	75709	31149	138925	541	50.3	931	86.5
8	19400	86524	35599	158772	618	57.4	1064	98.8

Notes:

- Vertical apertures are approximate, consisting of the distance between the top edge of the top panel to the bottom edge of the bottom panel. Contact us for the exact antenna aperture for your frequency.
Please do not confuse vertical aperture with tower space needed for proper installation. Tower space required is greater. Contact us for details.
- Windload and weight figures are approximate values and should be used for estimating purposes only. They assume a typical omnidirectional (4 panel per level) pattern. The figures include radiators, panels, panel hybrids, and a representative single input feed system. No values are included for mounts. The values for mounts, complex feed systems, and directional arrays may significantly affect these estimates. Please contact the factory for an estimate for a system to meet your specific requirements.
- 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 surface area is calculated per EIA standard RS-222-F (C_oA_c).
- Ask for technical assistance at Shively if you are planning to install antennas at altitudes over 3,000 ft AMSL.