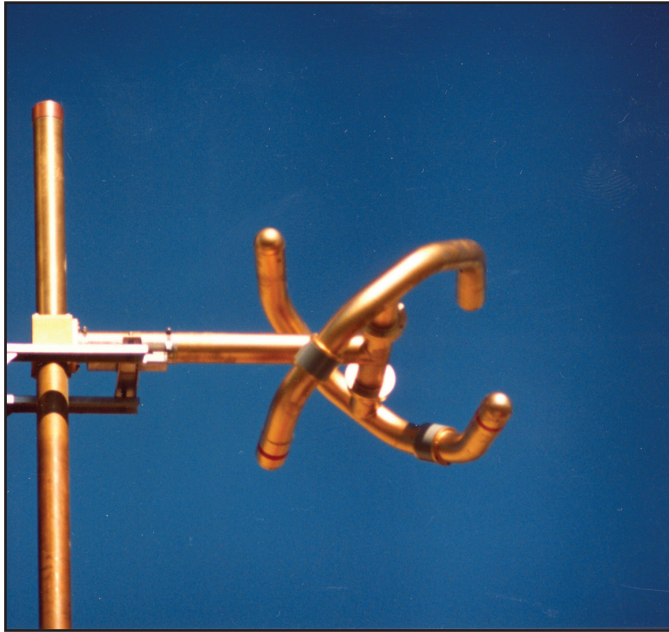


ROTOTILLER®

Circularly Polarized FM Antenna



ERI antennas are unchallenged in quality and dependability. ERI is the only manufacturer to use large diameter outer conductors and a completely enclosed, pressurized, internal series feed system. The result is a simple and reliable method of coupling power to the elements. Unlike competing designs, ERI series fed antennas do not require a troublesome secondary current loop for element excitation with all the resulting disadvantages. All ERI antennas include brackets for mounting on leg, pole, or face mounting (up to 42-inch uniform cross section tower); brackets for other mounting configurations are optionally available.

ERI's original and distinctive design combines the exceptional engineering features of an internally fed, fully pressurized system with superior fabrication characterized by totally welded feed connections, rugged brass material and TIG welding. The ROTOTILLER® FM antenna's unique design consists of two series fed, bent dipole elements which form a space phased, circularly polarized radiator. The antenna's configuration and the large diameter of the radiating elements contribute to the excellent bandwidth of the antenna system, and also inhibits corona discharge.

The horizontally polarized horizontal plane azimuth pattern of the SHPX series antenna is omnidirectional within ± 2 dB when the antenna is pole or LAMBDA™ Optimized Mounting System mounted atop a tower. Side mounting the antenna on a typical tower structure will affect the azimuth pattern. ERI offers a pattern measurement service to assist in determining the effect of the mounting structure on the antenna's pattern. Using ERI's pattern optimization service, the pattern's circularity may be improved through the addition of parasitically excited elements.

Benefits

- Low VSWR, superior VSWR band width, and minimal weather related VSWR problems
- Fully pressurized, internal feed and welded feed connections
- High input power capacity
- Modular construction facilitates easy installation and repair
- Rugged brass construction and stainless steel support brackets and hardware – Corrosion resistant construction
- Radomes or deicing heaters not normally required for radial ice less than 1/2-inch; however radomes or deicing heaters are available
- Quarter Wave Stub included

Characteristics

Product Line	ROTOTILLER®
Product Series	Classic Series
Frequency Range	88 - 108 MHz, Single frequency or multiplexed versions
Polarization	Circular (Clockwise)
Azimuth	± 2 dB in free space
Axial Ratio	Less than 3 dB in free space
VSWR at Input	1.07:1 or less (with field matching) 1.25:1 or less (with top pole or LAMBDA™ Mounting System) 1.50:1 or less (top mounted without field matching)

ROTOTILLER®

Circularly Polarized FM Antenna

SHP Model - Super High Power

Electrical Specifications

Type Number	Number of Bays	Power Gain	dB Gain	Input Type	Feed Configuration	Input Power Rating kW	Bay to Bay Spacing
SHP-1AE	1	0.4611	-3.3623	3 1/8 inch 50 Ohm Female	End	32.0	Full Wave
SHP-1BE	1	0.4611	-3.3623	6 1/8 inch 50 Ohm Female	End	40.0	Full Wave
SHP-2AE	2	0.9971	-0.0128	3 1/8 inch 50 Ohm Female	End	32.0	Full Wave
SHP-2AC	2	0.9971	-0.0128	3 1/8 inch 50 Ohm Female	Center	39.0	Full Wave
SHP-2BE	2	0.9971	-0.0128	6 1/8 inch 50 Ohm Female	End	56.0	Full Wave
SHP-2AC6	2	0.9971	-0.0128	6 1/8 inch 50 Ohm Female	Center	64.0	Full Wave
SHP-2BC	2	0.9971	-0.0128	6 1/8 inch 50 Ohm Female	Center	80.0	Full Wave
SHP-2CE	2	0.9971	-0.0128	6 1/8 inch 50 Ohm Female	End	80.0	Full Wave
SHP-3AE	3	1.5588	1.9278	3 1/8 inch 50 Ohm Female	End	32.0	Full Wave
SHP-3AC	3	1.5588	1.9278	3 1/8 inch 50 Ohm Female	Off Center	39.0	Full Wave
SHP-3BE	3	1.5588	1.9278	6 1/8 inch 50 Ohm Female	End	56.0	Full Wave
SHP-3AC6	3	1.5588	1.9278	6 1/8 inch 50 Ohm Female	Off Center	64.0	Full Wave
SHP-3BC	3	1.5588	1.9278	6 1/8 inch 50 Ohm Female	Center	112.0	Full Wave
SHP-4AE	4	2.1332	3.2903	3 1/8 inch 50 Ohm Female	End	32.0	Full Wave
SHP-4AC	4	2.1332	3.2903	3 1/8 inch 50 Ohm Female	Center	39.0	Full Wave
SHP-4BE	4	2.1332	3.2903	6 1/8 inch 50 Ohm Female	End	56.0	Full Wave
SHP-4AC6	4	2.1332	3.2903	6 1/8 inch 50 Ohm Female	Center	64.0	Full Wave
SHP-4BC	4	2.1332	3.2903	6 1/8 inch 50 Ohm Female	Center	112.0	Full Wave
SHP-4CE	4	2.1332	3.2903	6 1/8 inch 50 Ohm Female	End	120.0	Full Wave
SHP-5AE	5	2.7154	4.3384	3 1/8 inch 50 Ohm Female	End	32.0	Full Wave
SHP-5AC	5	2.7154	4.3384	3 1/8 inch 50 Ohm Female	Off Center	39.0	Full Wave
SHP-5BE	5	2.7154	4.3384	6 1/8 inch 50 Ohm Female	End	56.0	Full Wave
SHP-5AC6	5	2.7154	4.3384	6 1/8 inch 50 Ohm Female	Off Center	64.0	Full Wave
SHP-5BC	5	2.7154	4.3384	6 1/8 inch 50 Ohm Female	Center	112.0	Full Wave
SHP-6AC	6	3.3028	5.1888	3 1/8 inch 50 Ohm Female	Center	39.0	Full Wave
SHP-6AC6	6	3.3028	5.1888	6 1/8 inch 50 Ohm Female	Center	64.0	Full Wave
SHP-6BC	6	3.3028	5.1888	6 1/8 inch 50 Ohm Female	Center	112.0	Full Wave
SHP-6CE	6	3.3028	5.1888	6 1/8 inch 50 Ohm Female	End	120.0	Full Wave
SHP-7AC	7	3.8935	5.9034	3 1/8 inch 50 Ohm Female	Off Center	39.0	Full Wave
SHP-7AC6	7	3.8935	5.9034	6 1/8 inch 50 Ohm Female	Off Center	64.0	Full Wave
SHP-7BC	7	3.8935	5.9034	6 1/8 inch 50 Ohm Female	Off Center	112.0	Full Wave
SHP-8AC	8	4.4872	6.5197	3 1/8 inch 50 Ohm Female	Center	39.0	Full Wave
SHP-8AC6	8	4.4872	6.5197	6 1/8 inch 50 Ohm Female	Center	64.0	Full Wave
SHP-8BC	8	4.4872	6.5197	6 1/8 inch 50 Ohm Female	Center	112.0	Full Wave
SHP-9AC	9	5.0826	7.0608	3 1/8 inch 50 Ohm Female	Off Center	39.0	Full Wave
SHP-9AC6	9	5.0826	7.0608	6 1/8 inch 50 Ohm Female	Off Center	64.0	Full Wave
SHP-9BC	9	5.0826	7.0608	6 1/8 inch 50 Ohm Female	Off Center	112.0	Full Wave
SHP-10AC	10	5.6800	7.5435	3 1/8 inch 50 Ohm Female	Center	39.0	Full Wave
SHP-10AC6	10	5.6800	7.5435	6 1/8 inch 50 Ohm Female	Center	64.0	Full Wave
SHP-10BC	10	5.6800	7.5435	6 1/8 inch 50 Ohm Female	Center	112.0	Full Wave
SHP-11AC	11	6.2783	7.9785	3 1/8 inch 50 Ohm Female	Off Center	39.0	Full Wave
SHP-11AC6	11	6.2783	7.9785	6 1/8 inch 50 Ohm Female	Off Center	64.0	Full Wave
SHP-11BC	11	6.2783	7.9785	6 1/8 inch 50 Ohm Female	Off Center	112.0	Full Wave
SHP-12AC	12	6.8781	8.3747	3 1/8 inch 50 Ohm Female	Center	39.0	Full Wave
SHP-12AC6	12	6.8781	8.3747	6 1/8 inch 50 Ohm Female	Center	64.0	Full Wave
SHP-12BC	12	6.8781	8.3747	6 1/8 inch 50 Ohm Female	Center	112.0	Full Wave

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ROTOTILLER®

Circularly Polarized FM Antenna

SHP Model - Super High Power

Electrical Specifications

Type Number	Number of Bays	Power Gain	dB Gain	Input Type	Feed Configuration	Input Power Rating kW	Bay to Bay Spacing
SHP-2AE-HW	2	0.7020	-1.5366	3 1/8 inch 50 Ohm Female	End	32.0	Half Wave
SHP-2AC-HW	2	0.7020	-1.5366	3 1/8 inch 50 Ohm Female	Center	39.0	Half Wave
SHP-2BE-HW	2	0.7020	-1.5366	6 1/8 inch 50 Ohm Female	End	56.0	Half Wave
SHP-2AC6-HW	2	0.7020	-1.5366	6 1/8 inch 50 Ohm Female	Center	64.0	Half Wave
SHP-2BC-HW	2	0.7020	-1.5366	6 1/8 inch 50 Ohm Female	Center	80.0	Half Wave
SHP-2CE-HW	2	0.7020	-1.5366	6 1/8 inch 50 Ohm Female	End	80.0	Half Wave
SHP-3AE-HW	3	1.0120	0.0518	3 1/8 inch 50 Ohm Female	End	32.0	Half Wave
SHP-3AC-HW	3	1.0120	0.0518	3 1/8 inch 50 Ohm Female	Off Center	39.0	Half Wave
SHP-3BE-HW	3	1.0120	0.0518	6 1/8 inch 50 Ohm Female	End	56.0	Half Wave
SHP-3AC6-HW	3	1.0120	0.0518	6 1/8 inch 50 Ohm Female	Off Center	64.0	Half Wave
SHP-3BC-HW	3	1.0120	0.0518	6 1/8 inch 50 Ohm Female	Center	112.0	Half Wave
SHP-4AE-HW	4	1.3070	1.1628	3 1/8 inch 50 Ohm Female	End	32.0	Half Wave
SHP-4AC-HW	4	1.3070	1.1628	3 1/8 inch 50 Ohm Female	Center	39.0	Half Wave
SHP-4BE-HW	4	1.3070	1.1628	6 1/8 inch 50 Ohm Female	End	56.0	Half Wave
SHP-4AC6-HW	4	1.3070	1.1628	6 1/8 inch 50 Ohm Female	Center	64.0	Half Wave
SHP-4BC-HW	4	1.3070	1.1628	6 1/8 inch 50 Ohm Female	Center	112.0	Half Wave
SHP-4CE-HW	4	1.3070	1.1628	6 1/8 inch 50 Ohm Female	End	120.0	Half Wave
SHP-5AE-HW	5	1.6120	2.0737	3 1/8 inch 50 Ohm Female	End	32.0	Half Wave
SHP-5AC-HW	5	1.6120	2.0737	3 1/8 inch 50 Ohm Female	Off Center	39.0	Half Wave
SHP-5BE-HW	5	1.6120	2.0737	6 1/8 inch 50 Ohm Female	End	56.0	Half Wave
SHP-5AC6-HW	5	1.6120	2.0737	6 1/8 inch 50 Ohm Female	Off Center	64.0	Half Wave
SHP-5BC-HW	5	1.6120	2.0737	6 1/8 inch 50 Ohm Female	Center	112.0	Half Wave
SHP-6AC-HW	6	1.9130	2.8171	3 1/8 inch 50 Ohm Female	Center	39.0	Half Wave
SHP-6AC6-HW	6	1.9130	2.8171	6 1/8 inch 50 Ohm Female	Center	64.0	Half Wave
SHP-6BC-HW	6	1.9130	2.8171	6 1/8 inch 50 Ohm Female	Center	112.0	Half Wave
SHP-6CE-HW	6	1.9130	2.8171	6 1/8 inch 50 Ohm Female	End	120.0	Half Wave
SHP-7AC-HW	7	2.2170	3.4577	3 1/8 inch 50 Ohm Female	Off Center	39.0	Half Wave
SHP-7AC6-HW	7	2.2170	3.4577	6 1/8 inch 50 Ohm Female	Off Center	64.0	Half Wave
SHP-7BC-HW	7	2.2170	3.4577	6 1/8 inch 50 Ohm Female	Off Center	112.0	Half Wave
SHP-8AC-HW	8	2.5190	4.0123	3 1/8 inch 50 Ohm Female	Center	39.0	Half Wave
SHP-8AC6-HW	8	2.5190	4.0123	6 1/8 inch 50 Ohm Female	Center	64.0	Half Wave
SHP-8BC-HW	8	2.5190	4.0123	6 1/8 inch 50 Ohm Female	Center	112.0	Half Wave
SHP-9AC-HW	9	2.8230	4.5071	3 1/8 inch 50 Ohm Female	Off Center	39.0	Half Wave
SHP-9AC6-HW	9	2.8230	4.5071	6 1/8 inch 50 Ohm Female	Off Center	64.0	Half Wave
SHP-9BC-HW	9	2.8230	4.5071	6 1/8 inch 50 Ohm Female	Off Center	112.0	Half Wave
SHP-10AC-HW	10	3.1260	4.9499	3 1/8 inch 50 Ohm Female	Center	39.0	Half Wave
SHP-10AC6-HW	10	3.1260	4.9499	6 1/8 inch 50 Ohm Female	Center	64.0	Half Wave
SHP-10BC-HW	10	3.1260	4.9499	6 1/8 inch 50 Ohm Female	Center	112.0	Half Wave
SHP-11AC-HW	11	3.4290	5.3517	3 1/8 inch 50 Ohm Female	Off Center	39.0	Half Wave
SHP-11AC6-HW	11	3.4290	5.3517	6 1/8 inch 50 Ohm Female	Off Center	64.0	Half Wave
SHP-11BC-HW	11	3.4290	5.3517	6 1/8 inch 50 Ohm Female	Off Center	112.0	Half Wave
SHP-12AC-HW	12	3.7320	5.7194	3 1/8 inch 50 Ohm Female	Center	39.0	Half Wave
SHP-12AC6-HW	12	3.7320	5.7194	6 1/8 inch 50 Ohm Female	Center	64.0	Half Wave
SHP-12BC-HW	12	3.7320	5.7194	6 1/8 inch 50 Ohm Female	Center	112.0	Half Wave

ROTOTILLER®

Circularly Polarized FM Antenna

MP Model - Medium Power

Electrical Specifications

Type Number	Number of Bays	Power Gain	dB Gain	Input Type	Feed Configuration	Input Power Rating kW	Bay to Bay Spacing
MP-1E	1	0.4611	-3.3623	3 1/8 inch 50 Ohm Female	End	12.0	Full Wave
MP-2E	2	0.9971	-0.0128	3 1/8 inch 50 Ohm Female	End	18.0	Full Wave
MP-2C	2	0.9971	-0.0128	3 1/8 inch 50 Ohm Female	Center	18.0	Full Wave
MP-3E	3	1.5588	1.9278	3 1/8 inch 50 Ohm Female	End	18.0	Full Wave
MP-3C	3	1.5588	1.9278	3 1/8 inch 50 Ohm Female	Off Center	18.0	Full Wave
MP-4E	4	2.1332	3.2903	3 1/8 inch 50 Ohm Female	End	18.0	Full Wave
MP-4C	4	2.1332	3.2903	3 1/8 inch 50 Ohm Female	Center	18.0	Full Wave
MP-5E	5	2.7154	4.3384	3 1/8 inch 50 Ohm Female	End	18.0	Full Wave
MP-5C	5	2.7154	4.3384	3 1/8 inch 50 Ohm Female	Off Center	18.0	Full Wave
MP-6C	6	3.3028	5.1888	3 1/8 inch 50 Ohm Female	Center	18.0	Full Wave
MP-7C	7	3.8935	5.9034	3 1/8 inch 50 Ohm Female	Off Center	18.0	Full Wave
MP-8C	8	4.4872	6.5197	3 1/8 inch 50 Ohm Female	Center	18.0	Full Wave
MP-9C	9	5.0826	7.0608	3 1/8 inch 50 Ohm Female	Off Center	18.0	Full Wave
MP-10C	10	5.6800	7.5435	3 1/8 inch 50 Ohm Female	Center	18.0	Full Wave
MP-11C	11	6.2783	7.9785	3 1/8 inch 50 Ohm Female	Off Center	18.0	Full Wave
MP-12C	12	6.8781	8.3747	3 1/8 inch 50 Ohm Female	Center	18.0	Full Wave
MP-2E-HW	2	0.7020	-1.5366	3 1/8 inch 50 Ohm Female	End	18.0	Half Wave
MP-2C-HW	2	0.7020	-1.5366	3 1/8 inch 50 Ohm Female	Center	18.0	Half Wave
MP-3E-HW	3	1.0120	0.0518	3 1/8 inch 50 Ohm Female	End	18.0	Half Wave
MP-3C-HW	3	1.0120	0.0518	3 1/8 inch 50 Ohm Female	Off Center	18.0	Half Wave
MP-4E-HW	4	1.3070	1.1628	3 1/8 inch 50 Ohm Female	End	18.0	Half Wave
MP-4C-HW	4	1.3070	1.1628	3 1/8 inch 50 Ohm Female	Center	18.0	Half Wave
MP-5E-HW	5	1.6120	2.0737	3 1/8 inch 50 Ohm Female	End	18.0	Half Wave
MP-5C-HW	5	1.6120	2.0737	3 1/8 inch 50 Ohm Female	Off Center	18.0	Half Wave
MP-6C-HW	6	1.9130	2.8171	3 1/8 inch 50 Ohm Female	Center	18.0	Half Wave
MP-7C-HW	7	2.2170	3.4577	3 1/8 inch 50 Ohm Female	Off Center	18.0	Half Wave
MP-8C-HW	8	2.5190	4.0123	3 1/8 inch 50 Ohm Female	Center	18.0	Half Wave
MP-9C-HW	9	2.8230	4.5071	3 1/8 inch 50 Ohm Female	Off Center	18.0	Half Wave
MP-10C-HW	10	3.1260	4.9499	3 1/8 inch 50 Ohm Female	Center	18.0	Half Wave
MP-11C-HW	11	3.4290	5.3517	3 1/8 inch 50 Ohm Female	Off Center	18.0	Half Wave
MP-12C-HW	12	3.7320	5.7194	3 1/8 inch 50 Ohm Female	Center	18.0	Half Wave

ROTOTILLER®

Circularly Polarized FM Antenna

LP Model - Low Power

Electrical Specifications

Type Number	Number of Bays	Power Gain	dB Gain	Input Type	Feed Configuration	Input Power Rating kW	Bay to Bay Spacing
LP-1E	1	0.4611	-3.3623	1 5/8 inch 50 Ohm Female	End	9.0	Full Wave
LP-2E	2	0.9971	-0.0128	1 5/8 inch 50 Ohm Female	End	9.0	Full Wave
LP-2C	2	0.9971	-0.0128	3 1/8 inch 50 Ohm Female	Center	12.0	Full Wave
LP-3E	3	1.5588	1.9278	1 5/8 inch 50 Ohm Female	End	9.0	Full Wave
LP-3C	3	1.5588	1.9278	3 1/8 inch 50 Ohm Female	Off Center	12.0	Full Wave
LP-4E	4	2.1332	3.2903	1 5/8 inch 50 Ohm Female	End	9.0	Full Wave
LP-4C	4	2.1332	3.2903	3 1/8 inch 50 Ohm Female	Center	12.0	Full Wave
LP-5E	5	2.7154	4.3384	1 5/8 inch 50 Ohm Female	End	9.0	Full Wave
LP-5C	5	2.7154	4.3384	3 1/8 inch 50 Ohm Female	Off Center	12.0	Full Wave
LP-6C	6	3.3028	5.1888	3 1/8 inch 50 Ohm Female	Center	12.0	Full Wave
LP-7C	7	3.8935	5.9034	3 1/8 inch 50 Ohm Female	Off Center	12.0	Full Wave
LP-8C	8	4.4872	6.5197	3 1/8 inch 50 Ohm Female	Center	12.0	Full Wave
LP-9C	9	5.0826	7.0608	3 1/8 inch 50 Ohm Female	Off Center	12.0	Full Wave
LP-10C	10	5.6800	7.5435	3 1/8 inch 50 Ohm Female	Center	12.0	Full Wave
LP-11C	11	6.2783	7.9785	3 1/8 inch 50 Ohm Female	Off Center	12.0	Full Wave
LP-12C	12	6.8781	8.3747	3 1/8 inch 50 Ohm Female	Center	12.0	Full Wave
LP-2E-HW	2	0.7020	-1.5366	1 5/8 inch 50 Ohm Female	End	9.0	Half Wave
LP-2C-HW	2	0.7020	-1.5366	3 1/8 inch 50 Ohm Female	Center	12.0	Half Wave
LP-3E-HW	3	1.0120	0.0518	1 5/8 inch 50 Ohm Female	End	9.0	Half Wave
LP-3C-HW	3	1.0120	0.0518	3 1/8 inch 50 Ohm Female	Off Center	12.0	Half Wave
LP-4E-HW	4	1.3070	1.1628	1 5/8 inch 50 Ohm Female	End	9.0	Half Wave
LP-4C-HW	4	1.3070	1.1628	3 1/8 inch 50 Ohm Female	Center	12.0	Half Wave
LP-5E-HW	5	1.6120	2.0737	1 5/8 inch 50 Ohm Female	End	9.0	Half Wave
LP-5C-HW	5	1.6120	2.0737	3 1/8 inch 50 Ohm Female	Off Center	12.0	Half Wave
LP-6C-HW	6	1.9130	2.8171	3 1/8 inch 50 Ohm Female	Center	12.0	Half Wave
LP-7C-HW	7	2.2170	3.4577	3 1/8 inch 50 Ohm Female	Off Center	12.0	Half Wave
LP-8C-HW	8	2.5190	4.0123	3 1/8 inch 50 Ohm Female	Center	12.0	Half Wave
LP-9C-HW	9	2.8230	4.5071	3 1/8 inch 50 Ohm Female	Off Center	12.0	Half Wave
LP-10C-HW	10	3.1260	4.9499	3 1/8 inch 50 Ohm Female	Center	12.0	Half Wave
LP-11C-HW	11	3.4290	5.3517	3 1/8 inch 50 Ohm Female	Off Center	12.0	Half Wave
LP-12C-HW	12	3.7320	5.7194	3 1/8 inch 50 Ohm Female	Center	12.0	Half Wave

ROTOTILLER®

Circularly Polarized FM Antenna

SHP Model - Super High Power

Mechanical Specifications

Type Number	Weight								C _A							
	Antenna		Antenna & ½ in. radial ice		Antenna & radome		Antenna, radome, ½ in. radial ice		Antenna		Antenna & ½ in. radial ice		Antenna with radome		Antenna, radome, & ½ in. radial ice	
	lbm	kg	lbm	kg	lbm	kg	lbm	kg	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²
SHP-1AE	114.00	41.71	189.00	85.73	184.00	83.46	334.00	151.50	4.45	0.41	5.74	0.53	9.54	0.89	11.00	1.02
SHP-1BE	136.00	61.69	216.00	97.98	206.00	93.44	361.00	163.75	5.11	0.47	6.18	0.57	10.03	0.93	11.29	1.05
SHP-2AE	227.00	102.97	375.00	170.10	362.00	164.20	655.00	297.10	8.92	0.83	11.48	1.07	18.87	1.75	21.72	2.02
SHP-2AC	259.00	117.48	416.00	188.69	400.00	181.44	706.00	320.24	9.27	0.86	11.77	1.09	19.60	1.82	22.50	2.09
SHP-2BE	273.00	123.83	432.00	195.95	408.00	185.07	712.00	322.96	10.33	0.96	12.88	1.20	19.94	1.85	22.79	2.12
SHP-2AC6	304.00	137.89	475.00	215.46	445.00	201.85	766.00	347.45	9.92	0.92	12.42	1.15	20.26	1.88	23.15	2.15
SHP-2BC	341.00	154.68	520.00	235.87	485.00	220.00	814.00	369.22	10.98	1.02	13.45	1.25	21.09	1.96	23.98	2.23
SHP-2CE	345.00	156.49	575.00	260.82	445.00	201.85	825.00	374.21	14.19	1.32	16.83	1.56	22.75	2.11	25.48	2.37
SHP-3AE	339.00	153.77	561.00	254.47	539.00	244.47	976.00	442.71	13.39	1.24	17.23	1.60	28.21	2.62	32.44	3.01
SHP-3AC	371.00	168.28	602.00	273.06	577.00	261.72	1027.00	465.84	13.74	1.28	17.52	1.62	28.93	2.69	33.22	3.07
SHP-3BE	410.00	185.97	648.00	293.93	610.00	276.69	1063.00	482.17	15.59	1.45	19.36	1.80	29.86	2.77	34.09	3.17
SHP-3AC6	416.00	188.69	661.00	299.83	622.00	282.13	1087.00	493.05	14.40	1.34	18.17	1.67	29.59	2.75	33.87	3.15
SHP-3BC	478.00	216.81	736.00	333.84	687.00	311.62	1165.00	528.44	16.19	1.50	19.94	1.85	31.00	2.88	35.28	3.28
SHP-4AE	452.00	205.02	747.00	338.83	717.00	325.23	1297.00	588.31	17.86	1.66	22.98	2.13	37.55	3.49	43.16	4.01
SHP-4AC	484.00	219.54	788.00	357.43	755.00	342.46	1348.00	611.44	18.21	1.69	23.27	2.16	38.27	3.56	43.94	4.08
SHP-4BE	546.00	247.66	864.00	391.90	811.00	367.86	1414.00	641.38	20.76	1.93	25.85	2.40	39.77	3.69	45.38	4.22
SHP-4AC6	529.00	239.95	847.00	384.19	800.00	362.87	1408.00	638.66	18.87	1.75	23.92	2.22	38.93	3.62	44.59	4.14
SHP-4BC	615.00	278.96	952.00	431.82	889.00	403.24	1516.00	687.65	21.41	1.99	26.42	2.45	40.91	3.80	46.57	4.33
SHP-4CE	695.00	315.25	1155.00	523.90	895.00	405.97	1655.00	750.70	30.08	2.79	35.39	3.29	47.20	4.39	52.70	4.90
SHP-5AE	565.00	256.28	933.00	423.20	895.00	405.97	1618.00	733.91	22.33	2.07	28.73	2.67	46.89	4.36	53.87	5.00
SHP-5AC	597.00	270.80	974.00	441.80	933.00	423.20	1669.00	757.05	22.68	2.10	29.02	2.70	47.61	4.42	54.66	5.08
SHP-5BE	683.00	309.80	1080.00	489.88	1013.00	459.49	1765.00	800.59	25.98	2.41	32.33	3.00	49.68	4.62	56.67	5.26
SHP-5AC6	642.00	291.21	1033.00	468.56	978.00	443.61	1729.00	784.26	23.34	2.17	29.66	2.76	48.27	4.48	55.30	5.14
SHP-5BC	751.00	340.65	1168.00	529.80	1090.00	494.42	1867.00	846.86	26.63	2.47	32.90	3.06	50.82	4.72	57.86	5.38
SHP-6AC	710.00	322.05	1160.00	526.17	1111.00	503.94	1990.00	902.65	27.15	2.52	34.77	3.23	56.95	5.29	65.38	6.07
SHP-6AC6	755.00	342.46	1219.00	552.93	1156.00	524.35	2050.00	929.86	27.81	2.58	35.41	3.29	57.61	5.35	66.02	6.13
SHP-6BC	888.00	402.79	1384.00	627.77	1292.00	586.04	2218.00	1006.07	31.85	2.96	39.39	3.66	60.74	5.64	69.16	6.43
SHP-6CE	1045.00	474.00	1735.00	786.98	1345.00	610.08	2485.00	1127.18	45.97	4.27	53.96	5.01	71.66	6.66	79.91	7.42
SHP-7AC	822.00	372.85	1346.00	610.53	1288.00	584.23	2311.00	1048.25	31.62	2.94	40.52	3.76	66.28	6.16	76.10	7.07
SHP-7AC6	867.00	393.27	1405.00	637.30	1333.00	604.64	2371.00	1075.47	32.28	3.00	41.16	3.82	67.80	6.30	76.74	7.13
SHP-7BC	1025.00	464.93	1599.00	725.29	1494.00	677.67	2569.00	1165.28	37.06	3.44	45.87	4.26	70.65	6.56	80.45	7.47
SHP-8AC	935.00	424.11	1532.00	694.90	1466.00	664.97	2632.00	1193.86	36.10	3.35	46.27	4.30	75.62	7.03	86.81	8.06
SHP-8AC6	980.00	444.52	1591.00	721.67	1511.00	685.38	2691.00	1220.62	36.75	3.41	46.91	4.36	76.28	7.09	87.46	8.13
SHP-8BC	1162.00	527.07	1815.00	823.27	1696.00	769.29	2920.00	1324.49	42.28	3.93	52.35	4.86	80.56	7.48	91.74	8.52
SHP-9AC	1048.00	475.36	1718.00	779.27	1644.00	745.71	2953.00	1339.46	40.57	3.77	52.02	4.83	84.96	7.89	97.53	9.06
SHP-9AC6	1093.00	495.77	1777.00	806.03	1689.00	766.12	3012.00	1366.22	41.23	3.83	52.66	4.89	85.62	7.95	98.18	9.12
SHP-9BC	1299.00	589.22	2031.00	921.25	1898.00	860.92	3271.00	1483.70	47.50	4.41	58.84	5.47	90.47	8.40	103.04	9.57
SHP-10AC	1161.00	526.62	1904.00	863.64	1822.00	826.45	3274.00	1485.06	45.04	4.18	57.76	5.37	94.30	8.76	108.25	10.06
SHP-10AC6	1206.00	547.03	1963.00	890.40	1867.00	846.86	3333.00	1511.82	45.70	4.25	58.41	5.43	94.96	8.82	108.89	10.12
SHP-10BC	1436.00	651.36	2247.00	1019.22	2100.00	952.54	3622.00	1642.91	52.72	4.90	65.32	6.07	100.39	9.33	114.33	10.62
SHP-11AC	1273.00	577.42	2090.00	948.01	1999.00	906.73	3595.00	1630.67	49.51	4.60	63.51	5.90	103.63	9.63	118.97	11.05
SHP-11AC6	1318.00	597.83	2149.00	974.77	2044.00	927.14	3654.00	1657.42	50.17	4.66	64.16	5.96	104.29	9.69	119.61	11.11
SHP-11BC	1572.00	713.05	2463.00	1117.20	2301.00	1043.72	3973.00	1802.12	57.93	5.38	71.80	6.67	110.30	10.25	125.62	11.67
SHP-12AC	1386.00	628.68	2276.00	1032.38	2177.00	987.47	3916.00	1776.27	53.98	5.01	69.26	6.43	112.97	10.50	129.69	12.05
SHP-12AC6	1431.00	649.09	2335.00	1059.14	2222.00	1007.89	3975.00	1803.03	54.64	5.08	69.91	6.49	113.63	10.56	130.33	12.11
SHP-12BC	1709.00	775.19	2679.00	1215.17	2503.00	1135.34	4324.00	1961.33	63.15	5.87	78.29	7.27	120.21	11.17	136.92	12.72

Notes: 1) Antenna weight and wind load are approximate values for a typical structure assuming no top load. Final design loads will vary for specific projects and should be verified by an ERI representative. (2) Wind loads are calculated in accordance with the ANSI/TIA/EIA 222-F standard. Weight and effective wind area (C_A) includes antenna, inner transmission feed and typical support mast and mounting brackets with no ice.

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ROTOTILLER®

Circularly Polarized FM Antenna

SHP Model - Super High Power

Mechanical Specifications

Type Number	Weight								C _A							
	Antenna		Antenna & ½ in. radial ice		Antenna & radome		Antenna, radome, ½ in. radial ice		Antenna		Antenna & ½ in. radial ice		Antenna with radome		Antenna, radome, & ½ in. radial ice	
	<i>lbm</i>	<i>kg</i>	<i>lbm</i>	<i>kg</i>	<i>lbm</i>	<i>kg</i>	<i>lbm</i>	<i>kg</i>	<i>ft</i> ²	<i>m</i> ²	<i>ft</i> ²	<i>m</i> ²	<i>ft</i> ²	<i>m</i> ²	<i>ft</i> ²	<i>m</i> ²
SHP-2AE-HW	212.00	96.16	349.00	158.30	347.00	157.40	629.00	285.31	8.00	0.74	10.40	0.97	17.94	1.67	20.48	1.90
SHP-2AC-HW	244.00	110.68	390.00	176.90	385.00	174.63	680.00	308.44	8.49	0.79	10.88	1.01	18.66	1.73	21.27	1.98
SHP-2BE-HW	250.00	113.40	396.00	179.62	385.00	174.63	676.00	306.63	9.12	0.85	11.49	1.07	18.71	1.74	21.26	1.98
SHP-2AC6-HW	289.00	131.09	449.00	203.67	430.00	195.05	740.00	335.66	9.37	0.87	11.64	1.08	19.32	1.79	21.91	2.04
SHP-2BC-HW	319.00	144.70	483.00	219.09	462.00	209.56	778.00	352.90	10.04	0.93	12.18	1.13	19.85	1.84	22.34	2.08
SHP-2CE-HW	317.00	143.79	527.00	239.04	417.00	189.15	777.00	352.44	10.88	1.01	13.25	1.23	19.44	1.81	21.90	2.03
SHP-3AE-HW	309.00	140.16	509.00	230.88	509.00	230.88	924.00	419.12	11.59	1.08	15.03	1.40	26.34	2.45	29.96	2.78
SHP-3AC-HW	341.00	154.68	550.00	249.48	547.00	248.12	975.00	442.25	12.07	1.12	15.55	1.44	27.06	2.51	30.75	2.86
SHP-3BE-HW	365.00	165.56	575.00	260.82	565.00	256.28	990.00	449.06	13.15	1.22	16.56	1.54	27.38	2.54	31.01	2.88
SHP-3AC6-HW	386.00	175.09	609.00	276.24	592.00	268.53	1034.00	469.01	12.96	1.20	16.31	1.52	27.72	2.58	31.39	2.92
SHP-3BC-HW	433.00	196.41	663.00	300.73	642.00	291.21	1092.00	495.32	14.11	1.31	17.38	1.61	28.52	2.65	32.15	2.99
SHP-4AE-HW	407.00	184.61	669.00	303.45	672.00	304.81	1219.00	552.93	15.17	1.41	19.66	1.83	34.74	3.23	39.44	3.66
SHP-4AC-HW	439.00	199.13	710.00	322.05	710.00	322.05	1270.00	576.06	15.66	1.45	20.22	1.88	35.46	3.29	40.23	3.74
SHP-4BE-HW	479.00	217.27	754.00	342.00	744.00	337.47	1304.00	591.48	17.18	1.60	21.62	2.01	36.06	3.35	40.77	3.79
SHP-4AC6-HW	484.00	219.54	769.00	348.81	755.00	342.46	1329.00	602.82	16.54	1.54	20.98	1.95	36.12	3.36	40.87	3.80
SHP-4BC-HW	548.00	248.57	842.00	381.93	821.00	372.40	1407.00	638.20	18.19	1.69	22.58	2.10	37.20	3.46	41.96	3.90
SHP-4CE-HW	611.00	277.15	1011.00	458.58	811.00	367.86	1511.00	685.38	20.15	1.87	24.65	2.29	37.27	3.46	41.96	3.90
SHP-5AE-HW	505.00	229.06	829.00	376.03	835.00	378.75	1514.00	686.74	18.76	1.74	24.29	2.26	43.14	4.01	48.92	4.54
SHP-5AC-HW	537.00	243.58	870.00	394.63	873.00	395.99	1565.00	709.87	19.24	1.79	24.86	2.31	43.86	4.07	49.71	4.62
SHP-5BE-HW	594.00	269.43	934.00	423.66	924.00	419.11	1619.00	734.37	21.21	1.97	26.69	2.48	44.73	4.16	50.52	4.69
SHP-5AC6-HW	582.00	263.99	929.00	421.29	918.00	416.40	1624.00	736.63	20.13	1.87	25.61	2.38	44.52	4.14	50.35	4.68
SHP-5BC-HW	662.00	300.28	1022.00	463.57	1001.00	454.05	1721.00	780.63	22.22	2.06	27.65	2.57	45.87	4.26	51.71	4.80
SHP-6AC-HW	635.00	288.03	1029.00	466.75	1036.00	469.92	1860.00	843.68	22.82	2.12	29.49	2.74	52.26	4.85	59.19	5.50
SHP-6AC6-HW	680.00	308.44	1089.00	493.96	1081.00	490.33	1919.00	870.44	23.71	2.20	30.24	2.81	52.92	4.92	59.83	5.56
SHP-6BC-HW	776.00	351.99	1201.00	544.76	1180.00	535.24	2036.00	923.51	26.25	2.44	32.71	3.04	54.55	5.07	61.47	5.71
SHP-6CE-HW	905.00	410.50	1495.00	678.12	1205.00	546.58	2245.00	1018.32	29.41	2.73	36.06	3.35	55.10	5.12	62.01	5.76
SHP-7AC-HW	732.00	332.03	1189.00	539.32	1198.00	543.40	2155.00	977.49	26.41	2.45	34.12	3.17	60.66	5.64	68.67	6.38
SHP-7AC6-HW	777.00	352.44	1249.00	566.64	1243.00	563.82	2214.00	1004.25	27.29	2.54	34.87	3.24	61.32	5.70	69.32	6.44
SHP-7BC-HW	891.00	404.15	1381.00	626.41	1360.00	616.89	2350.00	1065.94	30.28	2.81	37.78	3.51	63.22	5.87	71.23	6.62
SHP-8AC-HW	830.00	376.48	1349.00	611.90	1361.00	617.34	2450.00	1111.30	29.99	2.79	38.75	3.60	69.06	6.42	78.15	7.26
SHP-8AC6-HW	875.00	396.89	1409.00	639.11	1406.00	637.75	2509.00	1138.06	30.88	2.87	39.50	3.67	69.72	6.48	78.80	7.32
SHP-8BC-HW	1005.00	455.86	1560.00	707.60	1539.00	698.08	2665.00	1208.82	34.31	3.19	42.85	3.98	71.90	6.68	80.98	7.52
SHP-9AC-HW	928.00	420.93	1509.00	684.47	1524.00	691.27	2745.00	1245.00	33.58	3.12	43.38	4.03	77.46	7.20	87.63	8.14
SHP-9AC6-HW	973.00	441.35	1568.00	711.23	1569.00	711.69	2804.00	1271.87	34.46	3.20	44.13	4.10	78.12	7.26	88.28	8.20
SHP-9BC-HW	1120.00	508.02	1739.00	788.80	1719.00	779.73	2979.00	1351.25	38.34	3.56	47.91	4.45	80.57	7.49	90.74	8.43
SHP-10AC-HW	1026.00	465.39	1669.00	757.05	1687.00	765.21	3040.00	1378.92	37.16	3.45	48.01	4.46	85.86	7.98	97.11	9.02
SHP-10AC6-HW	1071.00	485.80	1728.00	783.81	1732.00	785.62	3099.00	1405.68	38.05	3.53	48.76	4.53	86.52	8.04	97.76	9.08
SHP-10BC-HW	1234.00	559.73	1919.00	870.44	1898.00	860.92	3293.00	1493.68	42.37	3.94	52.98	4.92	89.25	8.29	100.49	9.34
SHP-11AC-HW	1123.00	509.38	1829.00	829.62	1849.00	838.68	3334.00	1512.28	40.74	3.78	52.64	4.89	94.26	8.78	106.59	9.90
SHP-11AC6-HW	1168.00	529.80	1888.00	856.38	1894.00	859.10	3394.00	1539.49	41.63	3.87	53.40	4.96	94.20	8.75	107.24	9.96
SHP-11BCHW	1349.00	611.90	2098.00	951.64	2078.00	942.56	3608.00	1636.56	46.40	4.31	58.04	5.39	97.92	9.10	110.25	10.24
SHP-12AC-HW	1221.00	553.84	1989.00	902.20	2012.00	912.63	3629.00	1646.09	44.33	4.12	57.27	5.32	102.66	9.54	116.07	10.78
SHP-12AC6-HW	1266.00	574.43	2048.00	931.19	2057.00	936.17	3689.00	1663.49	45.21	4.20	58.03	5.39	103.32	9.61	116.72	10.85
SHP-12BC-HW	1463.00	663.61	2278.00	1033.28	2257.00	1023.76	3922.00	1778.99	50.43	4.69	63.11	5.86	106.60	9.90	120.00	11.15

Notes: (1) Antenna weight and wind load are approximate values for a typical structure assuming no top load. Final design loads will vary for specific projects and should be verified by an ERI representative. (2) Wind loads are calculated in accordance with the ANSI/TIA/EIA 222-F standard. Weight and effective wind area (CaC) includes antenna, inner transmission feed and typical support mast and mounting brackets with no ice.

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ROTOTILLER®

Circularly Polarized FM Antenna

MP Model - Medium Power

Mechanical Specifications

Type Number	Weight								C _A							
	Antenna		Antenna & ½ in. radial ice		Antenna & radome		Antenna, radome, ½ in. radial ice		Antenna		Antenna & ½ in. radial ice		Antenna with radome		Antenna, radome, & ½ in. radial ice	
	lbm	kg	lbm	kg	lbm	kg	lbm	kg	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²
MP-1E	84.00	38.10	144.00	65.32	149.00	67.59	244.00	110.58	3.69	0.34	4.99	0.46	6.91	0.64	8.19	0.76
MP-2C	199.00	90.26	326.00	147.87	330.00	149.69	526.00	238.59	7.96	0.74	10.65	0.99	14.34	1.33	16.89	1.57
MP-2E	167.00	75.75	285.00	129.27	292.00	132.45	475.00	215.46	7.47	.069	10.08	0.94	13.62	1.27	16.11	1.50
MP-3C	281.00	127.46	467.00	211.83	472.00	214.10	757.00	343.37	11.74	1.09	15.74	1.46	21.05	1.96	24.80	2.30
MP-3E	249.00	112.95	426.00	193.23	434.00	196.86	706.00	320.24	11.26	1.05	15.17	1.41	20.33	1.89	24.02	2.23
MP-4C	364.00	165.11	608.00	275.78	615.00	278.96	988.00	448.15	15.53	1.44	20.83	1.94	27.76	2.58	32.71	3.04
MP-4E	332.00	144.24	567.00	238.59	577.00	224.07	937.00	389.18	15.05	1.40	20.27	1.88	27.04	2.51	31.93	2.97
MP-5C	447.00	202.76	749.00	339.74	758.00	343.82	1219.00	552.93	19.32	1.80	25.92	2.41	34.47	3.20	40.63	3.77
MP-5E	415.00	188.24	708.00	321.14	720.00	326.59	1168.00	529.80	18.83	1.75	25.36	2.36	33.75	3.14	39.84	3.70
MP-6C	530.00	240.40	890.00	403.70	901.00	408.69	1450.00	657.71	23.10	2.15	31.02	2.88	41.19	3.83	48.54	4.51
MP-7C	612.00	277.60	1031.00	467.65	1043.00	473.10	1681.00	762.49	26.89	2.50	36.11	3.35	47.90	4.45	56.45	5.24
MP-8C	695.00	315.25	1172.00	531.61	1186.00	539.96	1912.00	867.27	30.68	2.85	41.20	3.83	54.61	5.07	64.36	5.98
MP-9C	778.00	352.90	1313.00	595.57	1329.00	602.82	2143.00	972.05	34.47	3.20	46.29	4.30	61.32	5.70	72.27	6.71
MP-10C	861.00	390.54	1454.00	659.52	1472.00	667.69	2374.00	1076.83	38.25	3.55	51.38	4.77	68.03	6.32	80.18	7.45
MP-11C	943.00	427.74	1595.00	723.48	1614.00	732.10	2605.00	1181.61	42.04	3.91	56.48	5.25	74.74	6.94	88.09	8.18
MP-12C	1026.00	465.39	1736.00	787.44	1757.00	796.96	2836.00	1286.39	45.83	4.26	61.57	5.72	81.45	7.57	96.00	8.92
MP-2C-HW	184.00	83.46	300.00	136.08	315.00	142.89	500.00	226.80	7.02	0.62	9.33	0.87	13.41	1.25	15.65	1.45
MP-2E-HW	152.00	68.95	259.00	117.48	277.00	125.65	449.00	203.66	6.53	0.61	8.84	0.82	12.68	1.18	14.87	1.38
MP-3C-HW	251.00	113.85	415.00	188.24	442.00	200.48	705.00	319.78	9.87	0.92	13.26	1.23	19.18	1.78	22.33	2.07
MP-3E-HW	219.00	99.34	374.00	169.64	404.00	183.25	654.00	296.65	9.38	0.87	12.70	1.18	18.45	1.71	21.54	2.00
MP-4C-HW	319.00	144.70	530.00	240.40	570.00	258.55	910.00	412.77	12.72	1.18	17.12	1.59	24.95	2.32	29.00	2.69
MP-4E-HW	287.00	130.18	489.00	221.81	532.00	241.31	859.00	389.64	12.23	1.14	16.55	1.54	24.23	2.25	28.22	2.62
MP-5C-HW	387.00	175.54	645.00	292.57	698.00	316.61	1115.00	505.76	15.57	1.45	20.97	1.95	30.72	2.85	35.68	3.31
MP-5E-HW	355.00	155.58	604.00	259.00	660.00	255.37	1064.00	447.24	15.08	1.57	20.41	2.09	30.00	2.76	34.89	3.34
MP-6C-HW	455.00	206.39	759.00	344.28	826.00	374.67	1320.00	598.74	18.42	1.71	24.83	2.31	36.50	3.39	42.35	3.94
MP-7C-HW	522.00	236.78	874.00	396.44	953.00	432.27	1525.00	691.73	21.27	1.98	28.68	2.66	42.27	3.93	49.02	4.55
MP-8C-HW	590.00	267.52	989.00	448.60	1081.00	490.33	1730.00	784.71	24.12	2.24	32.54	3.02	48.04	4.46	55.70	5.17
MP-9C-HW	658.00	298.46	1104.00	500.77	1209.00	548.39	1935.00	877.70	26.97	2.51	36.39	3.38	53.82	5.00	62.37	5.79
MP-10C-HW	726.00	329.31	1219.00	552.93	1337.00	606.45	2140.00	970.69	29.82	2.77	40.25	3.74	59.59	5.54	69.04	6.41
MP-11C-HW	793.00	359.70	1334.00	605.09	1464.00	664.06	2344.00	1063.22	32.66	3.03	44.10	4.10	65.36	6.07	75.72	7.03
MP-12C-HW	861.00	390.54	1449.00	657.26	1592.00	722.12	2549.00	1156.21	35.51	3.30	47.96	4.45	71.14	6.61	82.39	7.65

Notes:

(1) Antenna weight and wind load are approximate values for a typical structure assuming no top load. Final design loads will vary for specific projects and should be verified by an ERI representative.

(2) Wind loads are calculated in accordance with the ANSI/TIA/EIA 222-F standard. Weight and effective wind area (C_A) includes antenna, inner transmission feed and typical support mast and mounting brackets with no ice.

ROTOTILLER®

Circularly Polarized FM Antenna

LP Model - Low Power

Mechanical Specifications

Type Number	Weight								C _A							
	Antenna		Antenna & ½ in. radial ice		Antenna & radome		Antenna, radome, ½ in. radial ice		Antenna		Antenna & ½ in. radial ice		Antenna with radome		Antenna, radome, & ½ in. radial ice	
	lbm	kg	lbm	kg	lbm	kg	lbm	kg	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²
LP-1E	67.00	30.39	119.00	53.98	132.00	59.87	219.00	99.34	2.90	0.27	4.20	0.39	6.17	0.57	7.45	0.69
LP-2C	179.00	81.19	301.00	136.53	304.00	137.89	491.00	222.71	7.06	0.66	9.86	0.92	13.24	1.23	15.80	1.47
LP-2E	136.00	61.69	242.00	109.77	261.00	118.34	432.00	195.95	5.94	0.55	8.60	0.80	12.25	1.14	14.81	1.38
LP-3C	249.00	112.95	423.00	191.87	434.00	196.86	703.00	318.88	10.09	0.94	14.27	1.33	19.32	1.79	23.15	2.15
LP-3E	205.00	92.99	364.00	165.11	390.00	176.90	644.00	292.11	8.97	0.83	13.00	1.21	18.33	1.70	22.17	2.06
LP-4C	318.00	144.24	546.00	247.66	563.00	255.37	916.00	415.49	13.13	1.22	18.67	1.73	25.40	2.36	30.51	2.83
LP-4E	274.00	124.28	487.00	220.90	519.00	235.41	857.00	388.73	12.01	1.12	17.40	1.62	24.41	2.27	29.53	2.74
LP-5C	387.00	175.54	668.00	303.00	692.00	313.89	1128.00	511.65	16.17	1.50	23.07	2.14	31.48	2.92	37.87	3.52
LP-5E	343.00	155.58	609.00	276.24	648.00	293.93	1069.00	484.89	15.04	1.40	21.81	2.03	30.49	2.83	36.88	3.43
LP-6C	456.00	206.84	791.00	358.79	821.00	372.40	1341.00	608.27	19.20	1.78	27.47	2.55	37.56	3.49	45.23	4.20
LP-7C	525.00	238.14	914.00	414.58	950.00	430.91	1554.00	704.88	22.24	2.07	31.87	2.96	43.64	4.05	52.59	4.89
LP-8C	594.00	269.43	1036.00	469.92	1079.00	489.43	1766.00	801.04	25.27	2.35	36.28	3.37	49.72	4.62	59.95	5.57
LP-9C	663.00	300.73	1159.00	525.71	1208.00	547.94	1979.00	897.66	28.31	2.63	40.68	3.78	55.80	5.18	67.30	6.25
LP-10C	732.00	332.03	1281.00	581.05	1337.00	606.45	2191.00	993.82	31.34	2.91	45.08	4.19	61.88	5.75	74.66	6.94
LP-11C	801.00	363.33	1404.00	636.85	1466.00	664.97	2404.00	1090.44	34.38	3.19	49.48	4.60	67.96	6.31	82.02	7.62
LP-12C	870.00	394.63	1527.00	692.64	1595.00	723.48	2617.00	1187.05	37.42	3.48	53.89	5.01	74.04	6.88	89.38	8.30
LP-2C-HW	168.00	76.20	277.00	125.65	293.00	132.90	467.00	211.83	6.42	0.60	8.87	0.82	12.53	1.16	14.71	1.37
LP-2E-HW	124.00	56.25	218.00	98.88	249.00	112.95	408.00	185.06	5.30	0.49	7.61	0.71	11.54	1.07	13.73	1.28
LP-3C-HW	225.00	102.06	377.00	171.00	410.00	185.97	657.00	298.01	8.82	0.82	12.28	1.14	17.89	1.66	20.99	1.95
LP-3E-HW	182.00	82.55	318.00	144.24	367.00	166.47	598.00	271.25	7.70	0.72	11.02	1.02	16.91	1.57	20.00	1.86
LP-4C-HW	282.00	127.91	476.00	215.91	527.00	239.04	846.00	383.74	11.22	1.04	15.69	1.46	23.26	2.16	27.26	2.53
LP-4E-HW	239.00	108.41	417.00	189.15	484.00	219.54	787.00	356.98	10.10	0.94	14.42	1.34	22.28	2.07	26.27	2.44
LP-5C-HW	340.00	154.22	575.00	260.82	645.00	292.57	1035.00	469.47	13.62	1.27	19.10	1.77	28.63	2.66	33.54	3.12
LP-5E-HW	296.00	134.26	516.00	234.05	601.00	272.61	976.00	442.71	12.50	1.16	17.83	1.66	27.65	2.57	32.55	3.02
LP-6C-HW	397.00	180.08	675.00	306.18	762.00	345.64	1225.00	555.65	16.02	1.49	22.50	2.09	34.00	3.16	39.81	3.70
LP-7C-HW	454.00	205.93	774.00	351.08	879.00	398.71	1414.00	641.28	18.42	1.71	25.91	2.41	39.37	3.66	46.09	4.28
LP-8C-HW	512.00	232.24	873.00	395.99	997.00	452.23	1603.00	727.11	20.82	1.93	29.32	2.72	44.74	4.16	52.36	4.86
LP-9C-HW	569.00	258.09	973.00	441.35	1114.00	505.30	1793.00	813.29	23.22	2.16	32.73	3.04	50.11	4.66	58.63	5.45
LP-10C-HW	626.00	283.95	1072.00	486.25	1231.00	558.37	1982.00	899.02	25.62	2.38	36.14	3.36	55.48	5.15	64.91	6.03
LP-11C-HW	683.00	309.80	1172.00	531.61	1348.00	611.44	2172.00	985.20	28.02	2.60	39.55	3.57	60.84	5.65	71.18	6.61
LP-12C-HW	741.00	336.11	1271.00	576.52	1466.00	664.97	2361.00	1070.93	30.43	2.83	42.96	3.99	66.21	6.15	77.46	7.20

Notes:

- (1) Antenna weight and wind load are approximate values for a typical structure assuming no top load. Final design loads will vary for specific projects and should be verified by an ERI representative.
- (2) Wind loads are calculated in accordance with the ANSI/TIA/EIA 222-F standard. Weight and effective wind area (C_A) includes antenna, inner transmission feed and typical support mast and mounting brackets with no ice.

ROTOTILLER® Circularly Polarized FM Antenna

Mounting Notes

The base price of ERI FM antennas include brackets for mounting on a tower leg or pole, up to 15-inches in diameter, or for face mounting on a uniform cross section tower section up to 42-inch face. Optional, standard fiberglass and steel anti-rotation brackets are available for uniform cross section tower faces up to 42-inches, center to center. For uniform tower faces greater than 42-inches steel anti-rotation brackets are generally used. Fiberglass anti-rotation brackets for face sizes larger than 42-inches may be available as a special order item. Please contact ERI with those requirements. Standard FM antenna mounting brackets and anti-rotation brackets assume that the tower face is unobstructed. If conduits, transmission lines, or other appurtenances are mounted on the tower face(s) they could interfere with standard bracket designs and may require an optional, extra cost, brackets to accommodate the obstruction. Contact ERI with details for further information. Brackets for mounting on tapered tower legs are available at additional cost. Contact ERI with tower details.

Anti-rotation brackets (one per bay) required for leg mounting if leg O.D. is:

Angle leg members

SHPX, SHP, SHP-H, MPX, MP, 300, and 350 Series: No Radomes - Leg sizes 3-inches (76 mm) or less or angle members. Randomed Antennas - Leg sizes 5-inches (127 mm) or less

LPX and LP Series Antennas: No Radomes - Leg sizes 2-inches (51 mm) or less or angle members.

Radomes Antennas - Leg sizes 3-inches (76 mm) or less.

Utilize the ERI Advantage

Combine an ERI antenna with an ERI Mounting Structure, Pattern Measurement and Installation. Assure yourself of the best antenna/tower interaction. ERI's Pattern Measurement service will provide the crucial answers concerning the relationship between the antenna mounting orientation and antenna pattern.

ERI Mounting Sections are designed to achieve optimum antenna performance while reducing weight and wind loads. Only ERI can offer you an antenna/tower/installation package that will achieve your highest expectations in a demanding FM market. Contact Electronics Research for complete electrical and mechanical specifications.

ROTOTILLER®

Circularly Polarized FM Antenna

Ordering Information

Type Number Definition

a - b c d e - f - g - h

a	Model: SHP, LP, MP
b	Number of Bays
c	Interbay Line Size: A = 3 1/8 inch, B = 4 1/16 inch, C = 6 1/8 inch
d	Input Feed Configuration: E = End Fed, C = Center fed for even number of bays, off center fed for odd number of bays
e	RF Input Size: Blank = 3 1/8 inch, 6 = 6 1/8 inch
f	Design Note 1: Blank = Omnidirectional, DA = Directional Azimuth Pattern
g	Design Note 2: Blank = Full wave length bay to bay spacing, HW = Half wave length bay to bay spacing
h	Design Note 3: Blank = Standard product, SP = Special Design

Example: SHP-4AC-DA-HW

Description: ERI Model SHP ROTOTILLER FM Antenna, four bay, 3 1/8 inch interbay line, center fed, directional azimuth pattern, half wave length bay to bay spacing.

Options*

- Anti-rotation brackets
- Beam tilt (center fed antennas only)
- First null fill (center fed antennas only)
- Second null fill (center fed antennas only); Second null fill not available for LP antennas
- Beam tilt and first null fill (center fed antennas only)
- Radomes
- Deicers (600w/220v)
- Stem heaters (300w/220v)
- Export packing

* Options available at additional cost.