

Applications

Omnidirectional antennas radiate maximum power uniformly in all directions, in the horizontal plane. These center-fed collinear antennas ensure consistent gain and impedance across the frequency band for a wide variety of applications, including land mobile radio services from 806-960 MHz. RFS has been supplying omni antennas since the early days of radio communication. The portfolio includes antennas for extensive rural coverage.

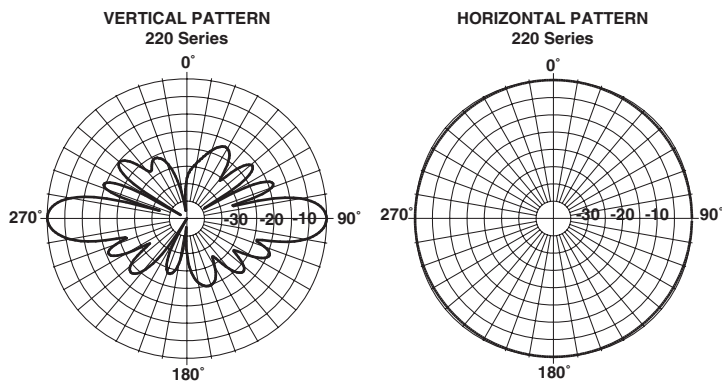
Antenna Brands:

- Super Stationmaster™
- Stationmaster II®
- Storm Chief™

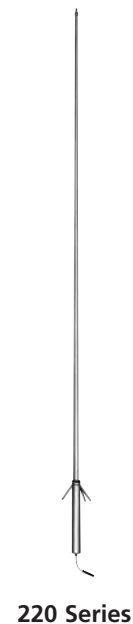
Features & Benefits

- Rugged construction assures system reliability in most environments
- Broad range of product families from 25 MHz to 1990 MHz
- Broadband options reduce backup inventory and the need for multiple antennas
- Careful choice of materials maximize system performance while minimizing the possibility of intermod.

Typical Patterns



Tower with RFS Omni Antennas



Omni Antennas

Selection Guide by Frequency Range

Antenna Series	Model Number	Frequency Range, MHz	Gain, dBi (dBd)	Overall Length, m (ft)	Vertical Beamwidth, deg	Connector Type
25-88 MHz OMNIDIRECTIONAL ANTENNAS						
1142 Series	1142-1N	25-30	2.1 (0)	5.73 (18.8)	75	N Female
1142 Series	1142-2AN	30-35	2.1 (0)	4.88 (16)	75	N Female
1142 Series	1142-2BN	35-42	2.1 (0)	4.27 (14)	75	N Female
1142 Series	1142-2CN	42-54	2.1 (0)	3.84 (12.6)	75	N Female
1142 Series	1142-3N	66-88	2.1 (0)	2.62 (8.6)	75	N Female
114-174 MHz OMNIDIRECTIONAL ANTENNAS						
BA1010 Series	BA1010-1	146-164	2.1 (0)	1.43 (4.7)	80	N Female
BA1010 Series	BA1010-2	154-174	2.1 (0)	1.4 (4.6)	80	N Female
BA1010 Series	BA1010-4	114-125	2.1 (0)	1.86 (6.1)	80	N Female
BA1010 Series	BA1010-5	120-132	2.1 (0)	1.52 (5)	80	N Female
118-174 MHz OMNIDIRECTIONAL ANTENNAS						
BA1012 Series	BA1012-0	118-174	2.1 (0)	1.43 (4.7)	80	N Female
BA1012 Series	BA1012-1	144-162	2.1 (0)	1.34 (4.4)	80	N Female
BA1012 Series	BA1012-2	154-174	2.1 (0)	1.13 (3.7)	80	N Female
118-174 MHz OMNIDIRECTIONAL ANTENNAS						
BA1312 Series	BA1312-0	118-174	5.1 (3)	2.68 (8.8)	35	N Female
BA1312 Series	BA1312-1	149-156	5.1 (3)	2.62 (8.6)	35	N Female
BA1312 Series	BA1312-2	156-163	5.1 (3)	2.62 (8.6)	35	N Female
BA1312 Series	BA1312-3	163-171	5.1 (3)	2.62 (8.6)	35	N Female
120-174 MHz STATIONMASTER II® OMNI ANTENNAS						
200N	200N	120-174	7.6 (5.5)	6.34 (20.8)	18	N Female
136-174 MHz SUPER STATIONMASTER™ OMNI ANTENNAS						
620 Series	620-3D	150-159	7.4 (5.25)	6.3 (20.6)	18	7-16 DIN Female
620 Series	620-3N	150-159	7.4 (5.25)	6.3 (20.6)	18	N Female
620 Series	620-6D	160-169	7.4 (5.25)	6.0 (19.7)	18	7-16 DIN Female
620 Series	620-6N	160-169	7.4 (5.25)	6.0 (19.7)	18	N Female
136-281 MHz SUPER STATIONMASTER™ OMNI ANTENNAS						
220 Series	220-1D	136-141	7.4 (5.25)	6.1 (20)	18	7-16 DIN Female
220 Series	220-1N	136-141	7.4 (5.25)	6.1 (20)	18	N Female
220 Series	220-2D	142-150	7.4 (5.25)	5.85 (19.2)	18	7-16 DIN Female
220 Series	220-2N	142-150	7.4 (5.25)	5.85 (19.2)	18	N Female
220 Series	220-3AD	150.5-158.5	7.4 (5.25)	6.31 (20.7)	18	7-16 DIN Female
220 Series	220-3AN	150.5-158.5	7.4 (5.25)	6.31 (20.7)	18	N Female
220 Series	220-3BD	151.5-159.5	7.4 (5.25)	6.34 (20.8)	18	7-16 DIN Female
220 Series	220-3BN	151.5-159.5	7.4 (5.25)	6.34 (20.8)	18	N Female
220 Series	220-4D	155-163	7.4 (5.25)	6.16 (20.2)	18	7-16 DIN Female
220 Series	220-4N	155-163	7.4 (5.25)	6.16 (20.2)	18	N Female
220 Series	220-5D	157-165	7.4 (5.25)	6.1 (20)	18	7-16 DIN Female
220 Series	220-5N	157-165	7.4 (5.25)	6.1 (20)	18	N Female
220 Series	220-6D	160-169	7.4 (5.25)	5.94 (19.5)	18	7-16 DIN Female
220 Series	220-6N	160-169	7.4 (5.25)	5.94 (19.5)	18	N Female
220 Series	220-7D	165-174	7.4 (5.25)	5.79 (19)	18	7-16 DIN Female
220 Series	220-7N	165-174	7.4 (5.25)	5.79 (19)	18	N Female
220 Series	220-8BD	220-225	8.1 (6)	5.73 (18.8)	16	7-16 DIN Female
220 Series	220-8BN	220-225	8.1 (6)	5.73 (18.8)	16	N Female
220 Series	220-8D	216-225	8.1 (6)	5.73 (18.8)	16	7-16 DIN Female
220 Series	220-8N	216-225	8.1 (6)	5.73 (18.8)	16	N Female
220 Series	220-9D	279-281	8.1 (6)	4.6 (15.1)	16	7-16 DIN Female
220 Series	220-9N	279-281	8.1 (6)	4.6 (15.1)	16	N Female
380-512 MHz OMNIDIRECTIONAL ANTENNAS						
BA6110 Series	BA6110-1	400-470	2.1 (0)	1.01 (3.3)	78	N Female
BA6110 Series	BA6110-2	450-512	2.1 (0)	0.94 (3.1)	78	N Female
BA6110 Series	BA6110-3	380-420	2.1 (0)	1.01 (3.3)	78	N Female



Omni Antennas

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Antenna Series	Model Number	Frequency Range, MHz	Gain, dBi (dBD)	Overall Length, m (ft)	Vertical Beamwidth, deg	Connector Type
380-512 MHz OMNIDIRECTIONAL ANTENNAS						
BA6312 Series	BA6312-0	406-512	5.1 (3)	1.43 (4.7)	29	N Female
BA6312 Series	BA6312-1	449-467	5.1 (3)	1.34 (4.4)	29	N Female
BA6312 Series	BA6312-2	467-485	5.1 (3)	1.34 (4.4)	29	N Female
BA6312 Series	BA6312-5	380-400	5.1 (3)	1.34 (4.4)	29	N Female
BA6312 Series	BA6312-6	410-430	5.1 (3)	1.34 (4.4)	29	N Female
406-512 MHz SUPER STATIONMASTER™ OMNI ANTENNAS						
1151 Series	1151-1D	406-420	10.1 (8)	5.03 (16.5)	12	7-16 DIN Female
1151 Series	1151-1N	406-420	10.1 (8)	5.03 (16.5)	12	N Female
1151 Series	1151-2D	440-450	10.1 (8)	4.72 (15.5)	12	7-16 DIN Female
1151 Series	1151-2N	440-450	10.1 (8)	4.72 (15.5)	12	N Female
1151 Series	1151-3D	450-460	10.1 (8)	4.63 (15.2)	12	7-16 DIN Female
1151 Series	1151-3N	450-460	10.1 (8)	4.63 (15.2)	12	N Female
1151 Series	1151-4D	460-470	10.1 (8)	4.54 (14.9)	12	7-16 DIN Female
1151 Series	1151-4N	460-470	10.1 (8)	4.54 (14.9)	12	N Female
1151 Series	1151-5D	470-482	10.1 (8)	4.42 (14.5)	12	7-16 DIN Female
1151 Series	1151-5N	470-482	10.1 (8)	4.42 (14.5)	12	N Female
1151 Series	1151-6D	482-494	10.1 (8)	4.36 (14.3)	12	7-16 DIN Female
1151 Series	1151-6N	482-494	10.1 (8)	4.36 (14.3)	12	N Female
1151 Series	1151-7D	494-506	10.1 (8)	4.27 (14)	12	7-16 DIN Female
1151 Series	1151-7N	494-506	10.1 (8)	4.27 (14)	12	N Female
1151 Series	1151-8D	500-512	10.1 (8)	4.21 (13.8)	12	7-16 DIN Female
1151 Series	1151-8N	500-512	10.1 (8)	4.21 (13.8)	12	N Female
406-512 MHz STATIONMASTER II® OMNI ANTENNAS						
201 Series	201-1	406-426	7.1 (5)	2.73 (8.97)	18	N Female
201 Series	201-7	450-470	7.1 (5)	2.53 (8.3)	18	N Female
201 Series	201-8	470-490	7.1 (5)	2.46 (8.08)	18	N Female
406-512 MHz SUPER STATIONMASTER™ OMNI ANTENNAS						
455 Series	455-1D	406-413	12.1 (10)	6.52 (21.4)	7	7-16 DIN Female
455 Series	455-1N	406-413	12.1 (10)	6.52 (21.4)	7	N Female
455 Series	455-2D	412-420	12.1 (10)	6.55 (21.5)	7	7-16 DIN Female
455 Series	455-2N	412-420	12.1 (10)	6.55 (21.5)	7	N Female
455 Series	455-3D	420-430	12.1 (10)	6.34 (20.8)	7	7-16 DIN Female
455 Series	455-3N	420-430	12.1 (10)	6.34 (20.8)	7	N Female
455 Series	455-4D	430-440	12.1 (10)	6.34 (20.8)	7	7-16 DIN Female
455 Series	455-4N	430-440	12.1 (10)	6.34 (20.8)	7	N Female
455 Series	455-5D	440-450	12.1 (10)	6.16 (20.2)	7	7-16 DIN Female
455 Series	455-5N	440-450	12.1 (10)	6.16 (20.2)	7	N Female
455 Series	455-6D	450-460	12.1 (10)	6.1 (20)	7	7-16 DIN Female
455 Series	455-6N	450-460	12.1 (10)	6.1 (20)	7	N Female
455 Series	455-7D	460-470	12.1 (10)	5.94 (19.5)	7	7-16 DIN Female
455 Series	455-7N	460-470	12.1 (10)	5.94 (19.5)	7	N Female
455 Series	455-8D	470-482	12.1 (10)	5.79 (19)	7	7-16 DIN Female
455 Series	455-8N	470-482	12.1 (10)	5.79 (19)	7	N Female
455 Series	455-9D	480-490	12.1 (10)	5.73 (18.8)	7	7-16 DIN Female
455 Series	455-9N	480-490	12.1 (10)	5.73 (18.8)	7	N Female
455 Series	455-10D	494-506	12.1 (10)	5.73 (18.8)	7	7-16 DIN Female
455 Series	455-10N	494-506	12.1 (10)	5.73 (18.8)	7	N Female
455 Series	455-11D	500-512	12.1 (10)	5.73 (18.8)	7	7-16 DIN Female
455 Series	455-11N	500-512	12.1 (10)	5.73 (18.8)	7	N Female
406-512 MHz STORM CHIEF™ RUGGED BROADBAND OMNI						
458 Series	458-1D	406-420	10.1 (8)	4.39 (14.4)	12	7-16 DIN Female
458 Series	458-1N	406-420	10.1 (8)	4.39 (14.4)	12	N Female
458 Series	458-2D	450-470	10.1 (8)	4.05 (13.3)	12	7-16 DIN Female
458 Series	458-2N	450-470	10.1 (8)	4.05 (13.3)	12	N Female
458 Series	458-3D	470-494	10.1 (8)	3.9 (12.8)	12	7-16 DIN Female
458 Series	458-3N	470-494	10.1 (8)	3.9 (12.8)	12	N Female

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Antenna Series	Model Number	Frequency Range, MHz	Gain, dBi (dBd)	Overall Length, m (ft)	Vertical Beamwidth, deg	Connector Type
406-512 MHz OMNIDIRECTIONAL ANTENNAS						
BA6012 Series	BA6012-0	406-512	2.1 (0)	1.13 (3.7)	67	N Female
BA6012 Series	BA6012-1	449-471	2.1 (0)	0.82 (2.7)	67	N Female
BA6012 Series	BA6012-2	468-492	2.1 (0)	0.82 (2.7)	67	N Female
746-960 MHz SUPER STATIONMASTER™ OMNI ANTENNAS						
AO7606 Series	AO7606-24T0	746-776	8.1 (6.0)	2.62 (8.6)	12	N Female
AO7606 Series	AO7606-54T0	746-776	8.1 (6.0)	2.62 (8.6)	12	7-16 DIN Female
AO7806 Series	AO7806-24T0	764-806	8.1 (6.0)	2.62 (8.6)	12	N Female
AO7806 Series	AO7806-54T0	764-806	8.1 (6.0)	2.62 (8.6)	12	7-16 DIN Female
10017 Series	10017-1	800-836	12.1 (10)	4.56 (14.96)	5.5	N Female
10017 Series	10017-2	820-855	12.1 (10)	4.47 (14.67)	6	N Female
10017 Series	10017-3	845.5-880.5	12.1 (10)	4.36 (14.29)	6	N Female
10017 Series	10017-4	865-900	12.1 (10)	4.29 (14.06)	6	N Female
10017 Series	10017-4E	865-900	12.1 (10)	4.29 (14.06)	6	7/8 EIA Flange
10017 Series	10017-5	862-898	12.1 (10)	4.29 (14.06)	6	N Female
10017 Series	10017-6	925-960	12.1 (10)	4.05 (13.28)	6	N Female
10017 Series	10017-7	806-841	12.1 (10)	4.53 (14.87)	6	N Female
10017 Series	10017-8	900-935	12.1 (10)	4.14 (13.58)	6	N Female
10017 Series	10017-9	831-866	12.1 (10)	4.42 (14.5)	6	N Female
1108 Series	1108-1	806-869	8.1 (6)	2.47 (8.09)	12	N Female
1108 Series	1108-3	900-960	8.1 (6)	2.27 (7.46)	12	N Female
1109 Series	1109-1	806-869	10.1 (8)	3.14 (10.3)	8	N Female
1109 Series	1109-6	895-960	10.1 (8)	2.89 (9.47)	8	N Female
1110 Series	1110-1	800-836	11.1 (9)	3.54 (11.61)	6	N Female
1110 Series	1110-5	925-960	11.1 (9)	3.46 (11.34)	6	N Female
1110 Series	1110-6	806-841	11.1 (9)	3.86 (12.65)	6	N Female
1110 Series	1110-7	831-866	11.1 (9)	3.76 (12.34)	6	N Female
1110 Series	1110-8	862-898	11.1 (9)	3.65 (11.98)	6	N Female
1110 Series	1110-11	890-960	11.1 (9)	3.54 (11.61)	6	N Female
AO8410M Series	AO8410M-24T0	806-869	12.1 (10)	4.72 (15.5)	5.5	N Female
AO8410M Series	AO8410M-24T3	806-869	12.1 (10)	4.72 (15.5)	5.5	N Female
AO8410M Series	AO8410M-54T0	806-869	12.1 (10)	4.72 (15.5)	5.5	7-16 DIN Female
AO8410M Series	AO8410M-54T3	806-869	12.1 (10)	4.72 (15.5)	5.5	7-16 DIN Female
AO8609 Series	AO8609-24T0	824-894	11.1 (9)	3.69 (12.1)	6	N Female
AO8609 Series	AO8609-54T0	824-894	11.1 (9)	3.69 (12.1)	6	7-16 DIN Female
806-960 MHz OMNIDIRECTIONAL ANTENNAS						
AO8610 Series	AO8610-2T0	824-894	12.1 (10)	5.03 (16.5)	4.5	N Female
AO8610 Series	AO8610-5T0	824-894	12.1 (10)	5.03 (16.5)	4.5	7-16 DIN Female
10022 Series	10022-1	806-880	2.1 (0)	0.52 (1.7)	80	N Female
10022 Series	10022-2	836-896	2.1 (0)	0.52 (1.7)	80	N Female
10022 Series	10022-3	880-960	2.1 (0)	0.52 (1.7)	80	N Female
AO9009-3	AO9009-3	890-960	10.5 (8.4)	3.11 (10.2)	6.5	7-16 DIN Female
806-960 MHz OMNIDIRECTIONAL COLLINEAR ANTENNAS						
1610 Series	1610-1	806-866	6.1 (4)	1.07 (3.5)	25	N Female
1610 Series	1610-2	820-880	6.1 (4)	1.04 (3.4)	25	N Female
1610 Series	1610-3	836-896	6.1 (4)	1.01 (3.3)	25	N Female
1610 Series	1610-4	896-960	6.1 (4)	0.94 (3.1)	25	N Female
1710-1880 MHz OMNIDIRECTIONAL ANTENNAS						
AO1803-1	AO1803-1	1710-1880	5.5 (3.4)	0.63 (2.08)	20	N Female
AO1809-3	AO1809-3	1710-1880	10.5 (8.4)	1.8 (5.9)	6.5	7-16 DIN Female
1850-1990 MHz OMNIDIRECTIONAL ANTENNAS						
AO1903-1	AO1903-1	1850-1990	5.5 (3.4)	0.63 (2.08)	20	N Female
AO1909-3	AO1909-3	1850-1990	11.1 (9)	1.71 (5.6)	6.5	7-16 DIN Female