

4DR series
PARAPANEL® UHF-TV
ANTENNAS AND ARRAYS
470 to 862 MHz

The Kathrein Scala Division Parapanel antennas offer high performance and low VSWR. Multi-panel arrays can be utilized to provide standard patterns shown below and custom patterns for specific coverage requirements. Arrays include power dividers and coax feeders, plus installation hardware.

The antenna is fabricated from corrosion resistant aluminum and stainless steel. All metal components are DC grounded. The rugged fiberglass radome assures reliable performance in heavy icing conditions.

Thousands of Kathrein Scala Division Parapanel antennas are in operation worldwide in translator and low-power UHF-TV television systems.

General Specifications:

Frequency	470 to 862 MHz	
Bandwidth	Any single 6, 7, or 8 MHz UHF-TV channel	
Impedance	50 ohms	
VSWR	< 1.1:1	
Polarization	Horizontal	
Maximum input power	500 watts (at 50° C)	
Connector	N female	
Wind survival rating*	120 mph (200 kph)	
Mounting	The following installation kits are included for mounting on 2.375 inch (60 mm) OD masts:	
	Antenna frequency range	Clamp kit
	470–560 MHz	MKPS-18
	560–862 MHz	MKPS-17

*Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



4DR-4S



4DR-4-2HW

PARAPANEL is a registered trademark of Kathrein Inc., Scala Division.



10264-F





4DR series

PARAPANEL® UHF-TV

ANTENNAS AND ARRAYS

470 to 862 MHz

Specifications:

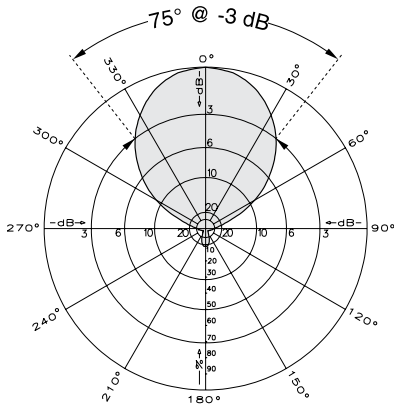
Model	Frequency MHz	Power Gain	Gain dBd	Weight lb (kg)	Dimensions	Equivalent Flat Plate Area	Number of Panels	Number of Bays
4DR-4S	470 to 560	8.91	9.5	26 (11.8)	48 x 18 x 9 inches (1220 x 458 x 229 mm)	7.1 ft ² (0.66 m ²)	1	1
	560 to 656	8.91	9.5	19 (8.7)	36 x 14.3 x 8 inches (915 x 364 x 204 mm)	4.3 ft ² (0.4 m ²)	1	1
	656 to 862	8.91	9.5	13 (5.9)	29 x 10.5 x 7 inches (737 x 267 x 178 mm)	2.5 ft ² (0.23 m ²)	1	1
4DR-8S	470 to 560	15.85	12.0	52 (23.6)	97 x 18 x 9 inches (2464 x 458 x 229 mm)	14.2 ft ² (1.32 m ²)	2	2
	560 to 656	15.85	12.0	38 (17.3)	73 x 14.3 x 8 inches (1855 x 364 x 204 mm)	8.6 ft ² (0.8 m ²)	2	2
	656 to 862	15.85	12.0	26 (11.8)	59 x 10.5 x 7 inches (1499 x 267 x 178 mm)	5 ft ² (0.46 m ²)	2	2
4DR-16S	470 to 560	28.18	14.5	104 (47.2)	195 x 18 x 9 inches (4953 x 458 x 229 mm)	28.5 ft ² (2.64 m ²)	4	4
	560 to 656	28.18	14.5	76 (34.5)	147 x 14.3 x 8 inches (3734 x 364 x 204 mm)	17.2 ft ² (1.6 m ²)	4	4
	656 to 862	28.18	14.5	52 (23.6)	119 x 10.5 x 7 inches (3023 x 267 x 178 mm)	10 ft ² (0.93 m ²)	4	4
4DR-4-2HN	470 to 560	15.85	12.0	52 (23.6)	48 x 41 x 9 inches (1220 x 1042 x 229 mm)	16.1 ft ² (1.5 m ²)	2	1
	560 to 656	15.85	12.0	38 (17.3)	36 x 33.6 x 8 inches (915 x 854 x 204 mm)	9.9 ft ² (0.92 m ²)	2	1
	656 to 862	15.85	12.0	26 (11.8)	29 x 26 x 7 inches (737 x 661 x 178 mm)	6.2 ft ² (0.58 m ²)	2	1
4DR-8-2HN	470 to 560	28.18	14.5	104 (47.2)	97 x 41 x 9 inches (2464 x 1042 x mm)	32.8 ft ² (3.05 m ²)	4	2
	560 to 656	28.18	14.5	76 (34.5)	73 x 33.6 x 8 inches (1855 x 854 x 204 mm)	20.2 ft ² (1.88 m ²)	4	2
	656 to 862	28.18	14.5	52 (23.6)	59 x 26 x 7 inches (1499 x 661 x 178 mm)	12.6 ft ² (1.17 m ²)	4	2
4DR-16-2HN	470 to 560	50.12	17.0	208 (94.4)	195 x 41 x 9 inches (4953 x 1042 x 229 mm)	66.6 ft ² (6.19 m ²)	8	4
	560 to 656	50.12	17.0	152 (69)	147 x 33.6 x 8 inches (3734 x 854 x 204 mm)	41.2 ft ² (3.82 m ²)	8	4
	656 to 862	50.12	17.0	104 (47.2)	119 x 26 x 7 inches (3023 x 661 x 178 mm)	25.8 ft ² (2.4 m ²)	8	4
4DR-4-2HW	470 to 560	3.98	6.0	52 (23.6)	48 x 27 x 27 inches (1220 x 686 x 686 mm)	10.6 ft ² (0.98 m ²)	2	1
	560 to 656	3.98	6.0	38 (17.3)	36 x 22.3 x 22.3 inches (915 x 567 x 567 mm)	6.6 ft ² (0.61 m ²)	2	1
	656 to 862	3.98	6.0	26 (11.8)	29 x 17.5 x 17.5 inches (737 x 445 x 445 mm)	4.2 ft ² (0.39 m ²)	2	1
4DR-8-2HW	470 to 560	7.08	8.5	104 (47.2)	97 x 27 x 27 inches (2464 x 686 x 686 mm)	21.8 ft ² (2.03 m ²)	4	2
	560 to 656	7.08	8.5	76 (34.5)	73 x 22.3 x 22.3 inches (1855 x 567 x 567 mm)	13.5 ft ² (1.25 m ²)	4	2
	656 to 862	7.08	8.5	52 (23.6)	59 x 17.5 x 17.5 inches (1499 x 445 x 445 mm)	8.5 ft ² (0.79 m ²)	4	2
4DR-16-2HW	470 to 560	12.59	11.0	208 (94.4)	195 x 27 x 27 inches (4953 x 686 x 686 mm)	45.3 ft ² (4.21 m ²)	8	4
	560 to 656	12.59	11.0	152 (69)	147 x 22.3 x 22.3 inches (3734 x 567 x 567 mm)	27.8 ft ² (2.58 m ²)	8	4
	656 to 862	12.59	11.0	104 (47.2)	119 x 17.5 x 17.5 inches (3023 x 445 x 445 mm)	17.9 ft ² (1.66 m ²)	8	4
4DR-4-3HC	470 to 560	3.63	5.6	78 (35.4)	48 x 36 x 27 inches (1220 x 915 x 686 mm)	14.2 ft ² (1.32 m ²)	3	1
	560 to 656	3.63	5.6	57 (25.9)	36 x 30.3 x 22.3 inches (915 x 770 x 567 mm)	8.9 ft ² (0.83 m ²)	3	1
	656 to 862	3.63	5.6	39 (17.7)	29 x 28 x 17.5 inches (737 x 712 x 445 mm)	6.7 ft ² (0.62 m ²)	3	1
4DR-8-3HC	470 to 560	6.31	8.0	156 (70.8)	97 x 36 x 27 inches (2464 x 915 x 686 mm)	28.4 ft ² (2.64 m ²)	6	2
	560 to 656	6.31	8.0	114 (51.8)	73 x 30.3 x 22.3 inches (1855 x 770 x 567 mm)	18.2 ft ² (1.69 m ²)	6	2
	656 to 862	6.31	8.0	78 (35.4)	59 x 28 x 17.5 inches (1499 x 712 x 445 mm)	13.6 ft ² (1.69 m ²)	6	2
4DR-16-3HC	470 to 560	11.22	10.5	312 (141.6)	195 x 36 x 27 inches (4953 x 915 x 686 mm)	58.5 ft ² (5.43 m ²)	12	4
	560 to 656	11.22	10.5	228 (103.5)	147 x 30.3 x 22.3 inches (3734 x 770 x 567 mm)	37.1 ft ² (3.45 m ²)	12	4
	656 to 862	11.22	10.5	156 (70.8)	119 x 28 x 17.5 inches (3023 x 712 x 445 mm)	27.7 ft ² (2.57 m ²)	12	4
4DR-4-4HO	470 to 560	2.69	4.3	104 (47.2)	48 x 36 x 36 inches (1220 x 915 x 915 mm)	14.2 ft ² (1.32 m ²)	4	1
	560 to 656	2.69	4.3	76 (34.5)	36 x 30.3 x 30.3 inches (915 x 770 x 770 mm)	8.9 ft ² (0.83 m ²)	4	1
	656 to 862	2.69	4.3	52 (23.6)	29 x 28 x 28 inches (737 x 712 x 712 mm)	6.7 ft ² (0.62 m ²)	4	1
4DR-8-4HO	470 to 560	4.79	6.8	208 (94.4)	97 x 36 x 36 inches (2464 x 915 x 915 mm)	28.4 ft ² (2.64 m ²)	8	2
	560 to 656	4.79	6.8	152 (69)	73 x 30.3 x 30.3 inches (1855 x 770 x 770 mm)	18.2 ft ² (1.69 m ²)	8	2
	656 to 862	4.79	6.8	104 (47.2)	59 x 28 x 28 inches (1499 x 712 x 712 mm)	13.6 ft ² (1.26 m ²)	8	2
4DR-16-4HO	470 to 560	8.51	9.3	416 (188.7)	195 x 36 x 36 inches (4953 x 915 x 915 mm)	58.5 ft ² (5.43 m ²)	16	4
	560 to 656	8.51	9.3	304 (137.9)	147 x 30.3 x 30.3 inches (3734 x 770 x 770 mm)	37.1 ft ² (3.45 m ²)	16	4
	656 to 862	8.51	9.3	208 (94.4)	119 x 28 x 28 inches (3023 x 712 x 712 mm)	27.7 ft ² (2.57 m ²)	16	4

Contact Kathrein Scala Division Sales Engineering for information on special arrays with higher **gain**, **asymmetrical patterns**, **electrical beamtilt**, **null fill**, **multichannel bandwidth**, and other features to meet your specific requirements.

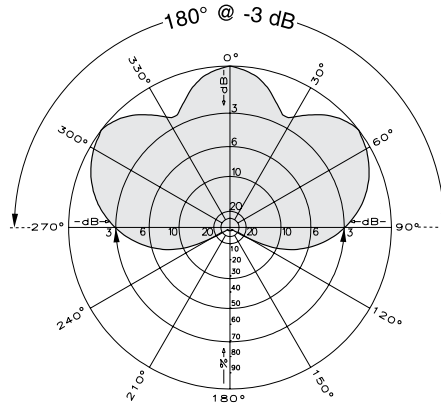
All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
 Email: broadcast@kathrein.com Internet: www.kathrein-scala.com

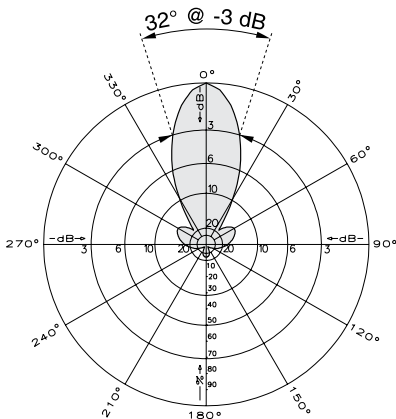
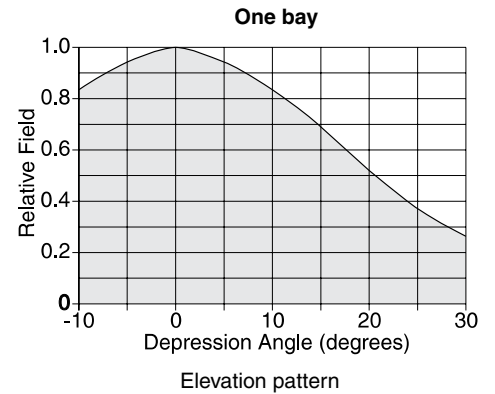
4DR series
PARAPANEL® UHF-TV
ANTENNAS AND ARRAYS
470 to 862 MHz



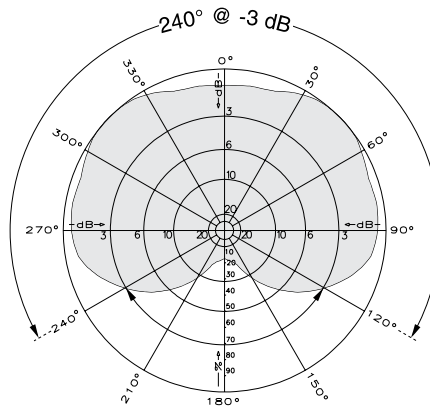
S series
Azimuth pattern



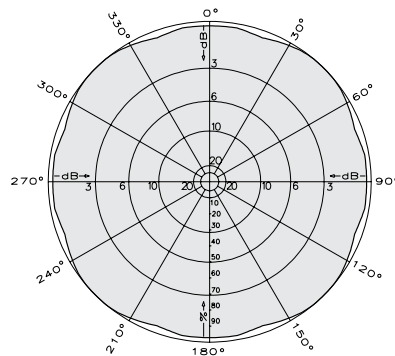
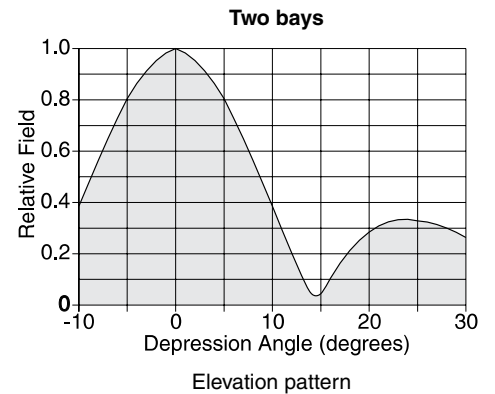
2HW series
Azimuth pattern



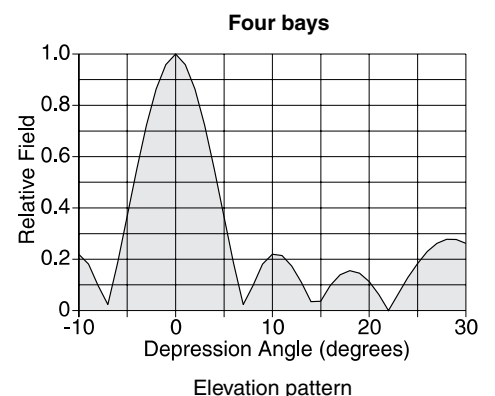
2HN series
Azimuth pattern



3HC series
Azimuth pattern

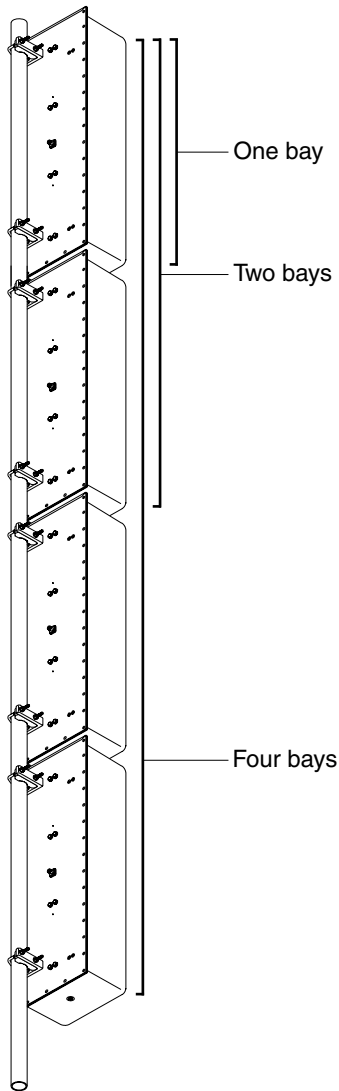
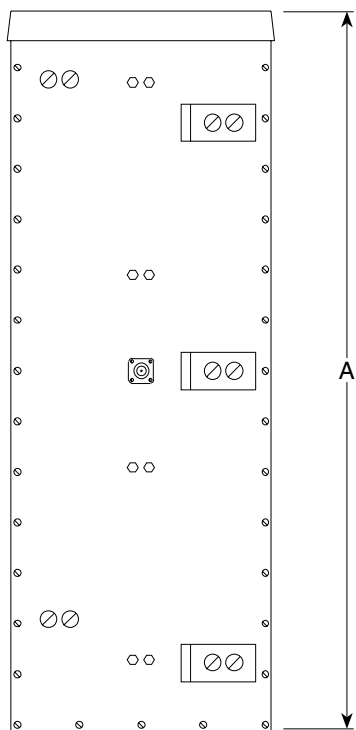
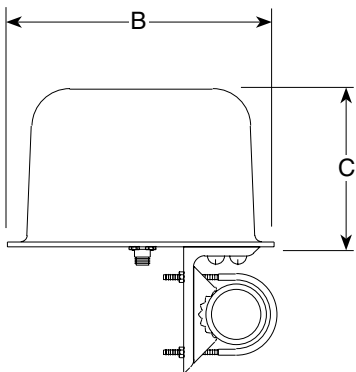


4HO series
Azimuth pattern

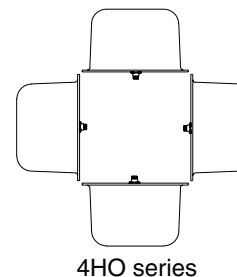
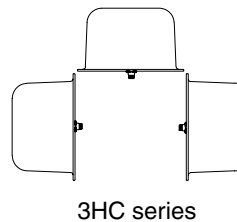
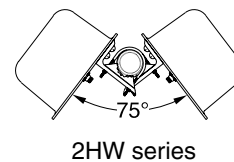
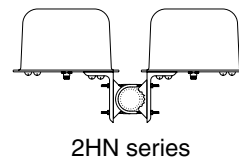
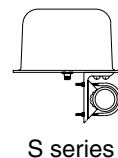


All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

4DR series
PARAPANEL® UHF-TV
ANTENNAS AND ARRAYS
470 to 862 MHz



**4DR Array
Top Views**



	A	B	C
470 to 560 MHz	48 inches (1220 mm)	18 inches (458 mm)	9 inches (229 mm)
560 to 656 MHz	36 inches (915 mm)	14.3 inches (364 mm)	8 inches (204 mm)
656 to 862 MHz	29 inches (737 mm)	10.5 inches (267 mm)	7 inches (178 mm)

Order Information:

Contact Kathrein Scala Division Customer Service for order information.

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.