

The DCR-C/HDR-C is circularly polarized with a power rating of 10 kW for a single bay, and is available in stacked arrays of up to 12 bays with an input rating to 40 kW. 14 and 16 bay arrays are available with special VSWR specifications. For situations where ice formation is common, the arrays can be equipped with optional electrical deicers or radomes. The antenna is DC grounded for lightning protection and does not require shorting stubs. Each array is supplied with an input fine matcher for field optimization.

### End-Fed or Center-Fed Arrays

Two power distribution methods are used with the DCR-C/HDR-C antenna. The array is usually end-fed unless it includes beam tilt and/or null fill. In this case, the sections are fed from a center point. The input connection in either case is 3-1/8" EIA.

### Beam Tilt and Null Fill

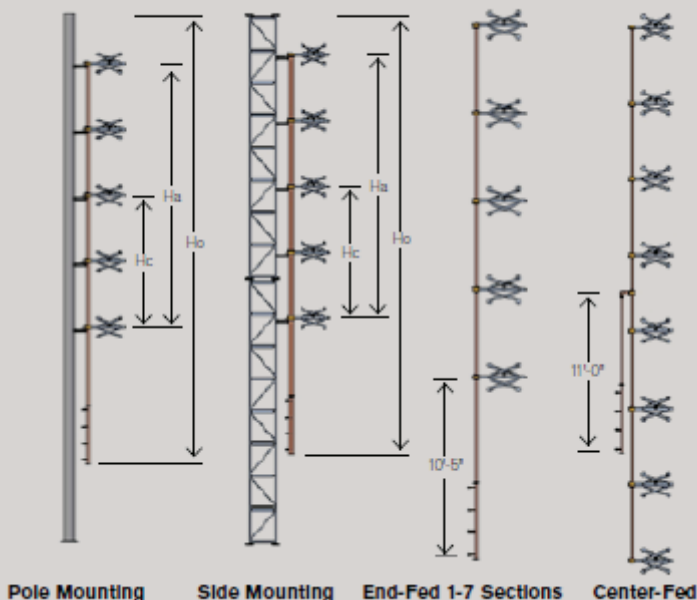
Beam tilt and/or null fill are optional extras on the DCR-C/HDR-C series. These options are ordinarily specified for arrays of 8 bays or more. Arrays with 6 bays or less may include one or both options and typically are designed as a center-fed array.

### Directional Arrays

The DCR-C/HDR-C antenna series is available in directional arrays which are custom-built to the needs of the station.

### Elevation

#### Mounting Dimensions



### Specifications:

- DCR-C: Right Hand Circularly Polarized
- HDR-C: Left Hand Circularly Polarized
- DCR-C/HDR-C IBOC compatible
- Interleaved provides -40dB of isolation
- Stainless steel elements
- Ideal for Class B and C stations
- 10 kW for a single bay
- Fine matcher included
- Radomes or integral deicers optional
- VSWR field adjustable

### Electrical Specifications

Antenna Type DCR-S or HDR-S	Gain Polarization Spacing (Spacing Power Gain	Gain Polarization Spacing (Spacing dB	Gain Polarization Spacing 1/2(Spacing Power Gain	Gain Polarization Spacing 1/2(Spacing dB	Power Rating - -
DCR-S1	0.46	-3.37	-	-	10
HDR-S1	0.46	-3.37	-	-	10
DCR-S2	1	0	0.7	-1.55	20
HDR-S2	1	0	0.7	-1.55	20
DCR-S3	1.5	1.76	1	0	30
HDR-S3	1.5	1.76	1	0	30
DCR-S4	2.1	3.22	1.3	1.14	40
HDR-S4	2.1	3.22	1.3	1.14	40
DCR-S5	2.7	4.31	1.6	2.04	40
HDR-S5	2.7	4.31	1.6	2.04	40
DCR-S6	3.2	5.05	1.8	2.55	40
HDR-S6	3.2	5.05	1.8	2.55	40
DCR-S7	3.8	5.8	2.1	3.22	40
HDR-S7	3.8	5.8	2.1	3.22	40
DCR-S8	4.3	6.34	2.4	3.8	40
HDR-S8	4.3	6.34	2.4	3.8	40
DCR-S10	5.5	7.4	3.1	4.91	40
HDR-S10	5.5	7.4	3.1	4.91	40
DCR-S12	6.6	8.2	3.7	5.68	40
HDR-S12	6.6	8.2	3.7	5.68	40

## Mechanical Specifications

Antenna Type	# of Bays	Without Radomes						With Radomes						With Deicers					
		Weight (lbs) (Spaced)	Weight (lbs) 1/2(Spaced)	CaArc ft <sub>2</sub> (Spaced)	CaArc ft <sub>2</sub> 1/2(Spaced)	Weight (lbs) (Spaced)	Weight (lbs) 1/2(Spaced)	CaArc ft <sub>2</sub> (Spaced)	CaArc ft <sub>2</sub> 1/2(Spaced)	Weight (lbs) (Spaced)	Weight (lbs) 1/2(Spaced)	CaArc ft <sub>2</sub> (Spaced)	CaArc ft <sub>2</sub> 1/2(Spaced)	Weight (lbs) (Spaced)	Weight (lbs) 1/2(Spaced)	CaArc ft <sub>2</sub> (Spaced)	CaArc ft <sub>2</sub> 1/2(Spaced)		
DCR-C1	1	145	-	5.4	-	175	-	9.2	-	148	-	5.7	-	-	-	5.7	-		
HDR-C1	1	145	-	5.4	-	175	-	9.2	-	148	-	5.7	-	-	-	5.7	-		
DCR-C2	2	228	213	10.4	8.9	288	273	18	16.5	234	219	10.9	9.4	219	219	10.9	9.4		
HDR-C2	2	228	213	10.4	8.9	288	273	18	16.5	234	219	10.9	9.4	219	219	10.9	9.4		
DCR-C3	3	310	280	15.5	12.5	400	370	27	24	319	289	16.25	13.3	289	289	16.25	13.3		
HDR-C3	3	310	280	15.5	12.5	400	370	27	24	319	289	16.25	13.3	289	289	16.25	13.3		
DCR-C4	4	393	348	20.5	16	513	468	35.8	31.3	405	360	21.5	17	360	360	21.5	17		
HDR-C4	4	393	348	20.5	16	513	468	35.8	31.3	405	360	21.5	17	360	360	21.5	17		
DCR-C5	5	475	415	24.4	18.4	625	565	43.5	37.5	490	430	25.7	19.7	430	430	25.7	19.7		
HDR-C5	5	475	415	24.4	18.4	625	565	43.5	37.5	490	430	25.7	19.7	430	430	25.7	19.7		
DCR-C6	6	558	483	30.7	23.2	738	663	53.6	46.1	576	501	32.2	24.7	501	501	32.2	24.7		
HDR-C6	6	558	483	30.7	23.2	738	663	53.6	46.1	576	501	32.2	24.7	501	501	32.2	24.7		
DCR-C7	7	640	550	35.6	26.6	850	760	62.3	53.3	661	571	37.4	28.4	571	571	37.4	28.4		
HDR-C7	7	640	550	35.6	26.6	850	760	62.3	53.3	661	571	37.4	28.4	571	571	37.4	28.4		
DCR-C8	8	766	661	41	30.5	1006	901	71.6	61.1	790	685	43	32.5	685	685	43	32.5		
HDR-C8	8	766	661	41	30.5	1006	901	71.6	61.1	790	685	43	32.5	685	685	43	32.5		
DCR-C10	10	901	766	51.1	37.6	1201	1066	89.3	75.8	931	796	53.6	40.1	796	796	53.6	40.1		
HDR-C10	10	901	766	51.1	37.6	1201	1066	89.3	75.8	931	796	53.6	40.1	796	796	53.6	40.1		
DCR-C12	12	1036	871	61.2	44.7	1396	1231	107	90.5	1072	907	64.2	47.7	907	907	64.2	47.7		
HDR-S12	12	1036	871	61.2	44.7	1396	1231	107	90.5	1072	907	64.2	47.7	907	907	64.2	47.7		