

MICRONETIXX COMMUNICATIONS



DV-2000-CW-2

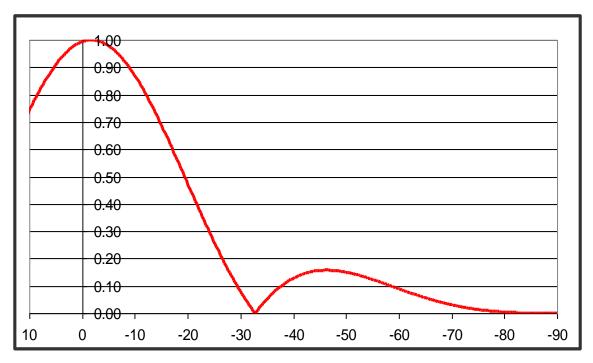
DV VHFStandby/Auxiliary slot antennas

The DV Series Antennas are rugged side-mounted slot antennas for standby and auxiliary applications. These Antennas are available from channel 7 to 13. Two azimuth patterns are available, an Omnioid and a Wide Cardioid. Input power ratings of the DV Series Antennas ranges from 20 to 50 kW.

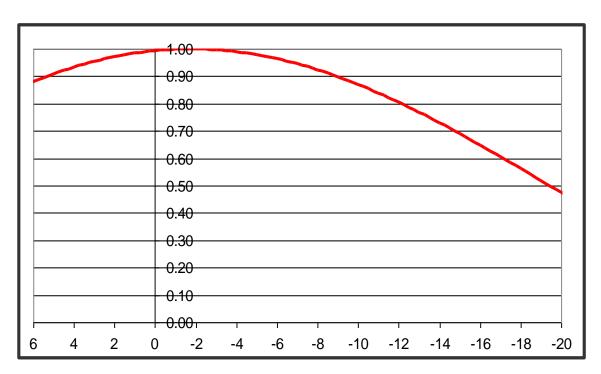
The **DV-2000** has a 3-1/8" EIA input and has an input power rating of 25 kW. The **DV-3000** has an input rating of 40 kW, using a 4-1/16" EIA input, while the **DV-4000** has a 50 kW input rating using a 6-1/8" EIA input. All DV VHF Antennas are end-fed.

Two-Bay and Three-Bay Models are available. All DV Antennas feature our **patented** SFN™ Slot Technology for higher elevation gains, higher aperture efficiency and extremely low RFR levels on the ground.

DV series 2 bay elevation patterns

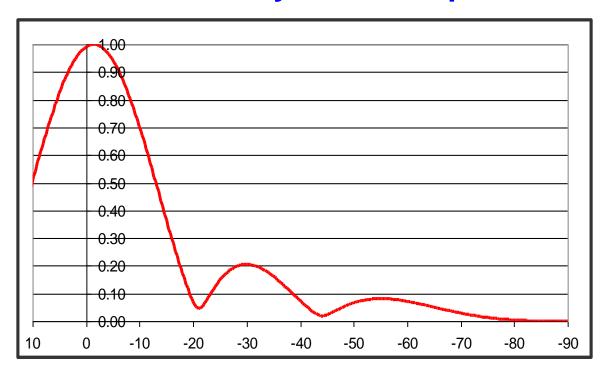


10 to -90 degree plot with 1.75 degrees of beam tilt

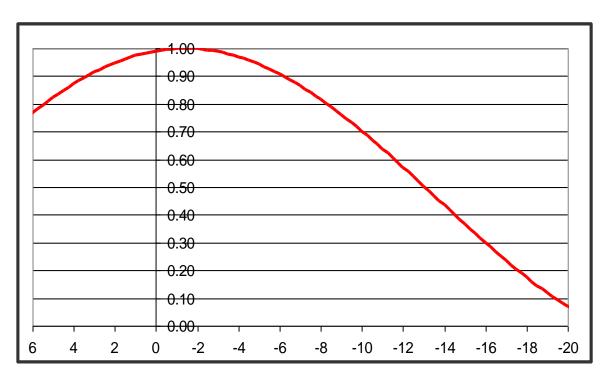


6 to -20 degree plot with 1.75 degrees of beam tilt

DV series 3 bay elevation patterns

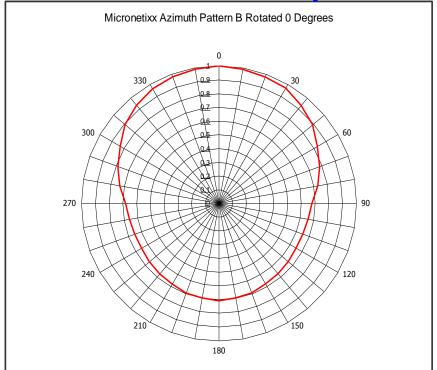


10 to -90 degree plot with 1.5 degrees of beam tilt

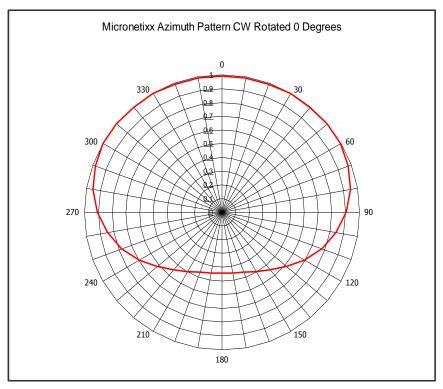


6 to -20 degree plot with 1.5 degrees of beam tilt

DV antenna azimuth patterns



B – Omnioid – azimuth gain 1.70 (2.30 dB)



CW – Wide Cardioid – azimuth gain 1.50 (1.76 dB)

Antenna Gains and Maximum ERP

Omnioid	Max	2 Bay B	Maximum ERP	3 Bay B	Maximum ERP
Model #	Input Power	Gain		Gain	
DV-2000-B	25 kW	4.40 (6.43 dB)	110 kW (20.41 dBk)	6.45 (8.10 dB)	161 kW (22.07 dBk)
DV-3000-B	40 kW	4.40 (6.43 dB)	176 kW (22.45 dBk)	6.45 (8.10 dB)	258 kW (24.11 dBk)
DV-4000-B	50 kW	4.40 (6.43 dB)	220 kW (23.42 dBk)	6.45 (8.10 dB)	322 kW (25.07 dBk)
Wide Cardioid	Max	2 Bay CW	Maximum ERP	3 Bay CW	Maximum ERP
Model #	Input Power	Gain		Gain	
DV-2000-CW	25 kW	3.90 (5.90 dB)	97 kW (19.86 dBk)	5.70 (7.55 dB)	142 kW (21.51 dBk)
DV-3000-CW	40 kW	3.90 (5.90 dB)	156 kW (21.93 dBk)	5.70 (7.55 dB)	228 kW (23.58 dBk)
DV-4000-CW	50 kW	3.90 (5.90 dB)	195 kW (22.90 dBk)	5.70 (7.55 dB)	285 kW (24.54 dBk)

The gains and maximum ERP's listed above are for horizontal polarized antennas. As an option Micronetixx DV Series Antennas are also available with Elliptical Polarization. The power division ratio is 70 H, 30 V. To calculate antenna gain when using Elliptical, multiply the gain shown in the table by 0.7. That will yield the gain in the Horizontal Plane. Likewise, multiply the antenna gain in the table by 0.3 and that will give you the gain in the Vertical Plane. For Elliptical operation, the TPO is 1.428 times higher than horizontal only.

Adding Elliptical Polarization can increase received signal levels by up to 15 dB in impaired areas where Faraday rotation has occurred.

Mechanical Information

2 Bay Models

2 Bay models									
Omnioid	Channel 7			Channel 10			Channel 13		
Model #	Length	Weight	Wind Load	Length	Weight	Wind Load	Length	Weight	Wind Load
DV-2000-B-2	15-1/2 feet	370 lbs.	27.0 ft ²	14-1/2 feet	320 lbs.	24.6 ft ²	13-1/2 feet	290 lbs.	23.2 ft ²
DV-3000-B-2	15-1/2 feet	375 lbs.	27.0 ft ²	14-1/2 feet	325 lbs.	24.6 ft ²	13-1/2 feet	295 lbs.	23.2 ft ²
DV-4000-B-2	15-1/2 feet	390 lbs.	27.0 ft ²	14-1/2 feet	340 lbs.	24.6 ft ²	13-1/2 feet	310 lbs.	23.2 ft ²
	2 Bay Models								
Wide Cardioid	Channel 7		Channel 10			Channel 13			
Model #	Length	Weight	Wind Load	Length	Weight	Wind Load	Length	Weight	Wind Load
DV-2000-CW-2	15-1/2 feet	400 lbs.	34.1 ft ²	14-1/2 feet	350 lbs.	30.5 ft ²	13-1/2 feet	320 lbs.	27.0 ft ²
DV-3000-CW-2	15-1/2 feet	410 lbs.	34.1 ft ²	14-1/2 feet	360 lbs.	30.5 ft ²	13-1/2 feet	330 lbs.	27.0 ft ²
DV-4000-CW-2	15-1/2 feet	435 lbs.	34.1 ft ²	14-1/2 feet	385 lbs.	30.5 ft ²	13-1/2 feet	345 lbs.	27.0 ft ²

	3 Bay Models								
Omnioid	Channel 7			Channel 10			Channel 13		
Model #	Length	Weight	Wind Load	Length	Weight	Wind Load	Length	Weight	Wind Load
DV-2000-B-3	21 feet	500 lbs.	37.6 ft ²	19-1/2 feet	410 lbs.	35.1 ft ²	18 feet	385 lbs.	32.4 ft ²
DV-3000-B-3	21 feet	515 lbs.	37.6 ft ²	19-1/2 feet	415 lbs.	35.1 ft ²	18 feet	390 lbs.	32.4 ft ²
DV-4000-B-3	21 feet	530 lbs.	37.6 ft ²	19-1/2 feet	430 lbs.	35.1 ft ²	18 feet	410 lbs.	32.4 ft ²
			•	3	Bay Mode	els			•
Wide Cardioid	oid Channel 7		Channel 10 Channel			Channel 13			
Model #	Length	Weight	Wind Load	Length	Weight	Wind Load	Length	Weight	Wind Load
DV-2000-CW-3	21 feet	545 lbs.	46.0 ft ²	19-1/2 feet	450 lbs.	42.9 ft ²	18 feet	420 lbs.	39.6 ft ²
DV-3000-CW-3	21 feet	560 lbs.	46.0 ft ²	19-1/2 feet	455 lbs.	42.9 ft ²	18 feet	425 lbs.	39.6 ft ²
DV-4000-CW-3	21 feet	575 lbs.	46.0 ft ²	19-1/2 feet	470 lbs.	42.9 ft ²	18 feet	440 lbs.	39.6 ft ²



Rugged Stainless Steel mounting brackets are included to mount to a round tower leg or outrigged pole. Custom mounts to a tower face or other structures are also available.

The DV Series Antennas present a V.S.W.R of under 1.10:1 over a single channel and feature a very low differential group delay over the channel. Utilizing our patented SFN™ slot antenna technology, the DV Antennas produce up to 10 dB less radiation at high depression angles than standard antennas.

Micronetixx DV Antennas Are Your Best value when A standby/Auxiliary VHF antenna is Needed. The FCC Antenna ID numbers are presented at the right.

Antenna	FCC Antenna	Antenna	FCC Antenna	
Model #	ID Number	Model #	ID Number	
DV-2000-B-2	1001110	DV-2000-CW-2	1001102	
DV-3000-B-2	1001111	DV-3000-CW-2	1001103	
DV-4000-B-2	1001112	DV-4000-CW-2	1001104	
DV-2000-B-3	1001113	DV-2000-CW-3	1001105	
DV-3000-B-3	1001114	DV-3000-CW-3	1001106	
DV-4000-B-3	1001115	DV-4000-CW-3	1001107	
	-			



70 Commercial Street Lewiston, ME 04240 V 207-786-2000 F 207-786-7444 www.micronetixxantennas.com