

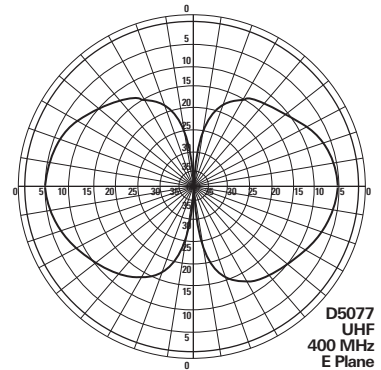
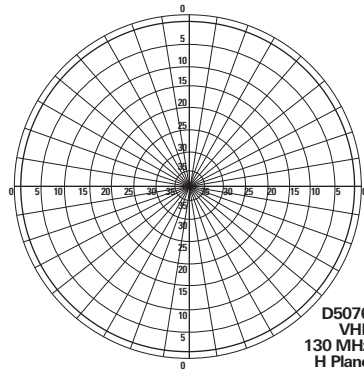
D5000 Series: FAA Muldipol Aviation Antennas



The MULDIPOL™ Multiple Dipole Collinear Array concept has been specifically developed by TACO for ground-air-ground, air traffic control and associated vehicular and base communications applications.

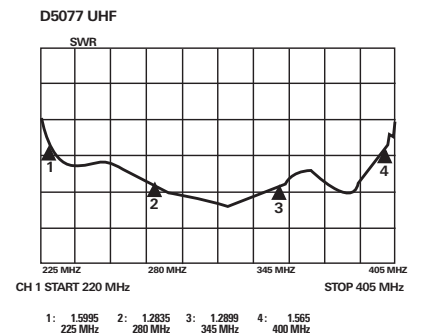
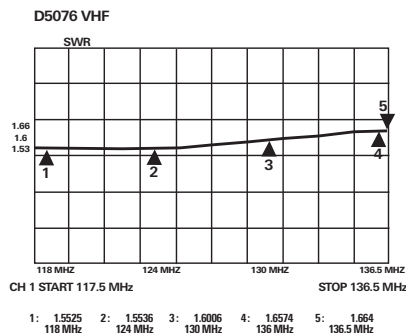
The MULDIPOL™ has a high degree of isolation between elements within a closely spaced array. The result is a small, rugged, easy to install antenna. A minimum of 30 dB isolation is realized between any two antenna elements in every MULDIPOL™ model. The low profile of this antenna plus the resulting decrease in the number of antennas required at any tower site also gives a much improved radiation pattern coverage.

ANTENNA PATTERNS:



FEATURES:

- Rugged lightweight construction
- Transportable and compact
- Combination of UHF and VHF
- High isolation between antenna elements
- Metallic Base (Fibreglass Base optional - *see D4000 series*)
- DC Grounded Dipoles (No DC Ground optional - *see D4000 series*)



TACO Antenna's ongoing policy of continuing development may result in specification changes to its products.

US AND INTERNATIONAL SALES AGENT

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D5000 Antenna Specifications



ELECTRICAL:

MODEL(S)	D5061A1	D5062A	D5071	D5072	D5073	D5074	D5076	D5077	D5078
Frequency Range (MHz)	V 118-136	U 225-400	U 225-400 V 118-136	V 118-136	U 225-400 V 118-136	U 225-400	V 118-136	U 225-400	U 225-400
Gain (dBic) +0dB/-1dB	4.5	4.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Number of Outputs	1	1	3	2	2	2	1	1	3
Number of Elements	2x V	2x U	U / V / U	V / V	U / V	U / U	V	U	U / U / U
VSWR:	Max	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	Typical	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
HPBW:	Horz.	360	360	360	360	360	360	360	360
	Vert.	40	40	75	75	75	75	75	75
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
1st Sidelobe Suppression	13 dB	13 dB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cross Pol. Suppression	20 dB	20 dB	20 dB	20 dB	20 dB	20 dB	20 dB	20 dB	20 dB
Isolation	N/A	N/A	> 30 dB	>30 dB	>30 dB	>30 dB	N/A	N/A	>30 dB
Impedance	50	50	50	50	50	50	50	50	50
Std. Connector (female)	N	N	N	N	N	N	N	N	N
Max. Input Power	600W	500W	250W	350W	250W	250W	350W	250W	250W
Operating Temperature (o F)	-40 to +158	-40 to +158	-40 to +158	-40 to +158	-40 to +158	-40 to +158	-40 to +158	-40 to +158	-40 to +158
DC Ground	YES	YES	YES	YES	YES	YES	YES	YES	YES

Rain, salt-fog, sand, dust and fungus to MIL-STD. 810F
 Temperature, barometric pressure and humidity to MIL-STD. 210C

MECHANICAL:

MODEL(S)	D5061A1	D5062A	D5071	D5072	D5073	D5074	D5076	D5077	D5078
Overall Length (in.)	121.5	69.5	111.5	153.0	85.0	85.0	55.5	30.5	121.5
Antenna Weight	19.0 lbs	13.5 lbs	17.0 lbs	17.0 lbs	12.0 lbs	12.0 lbs	6.0 lbs	5.0 lbs	17.0 lbs
* Total Shipping weight	23.5 lbs	15.0 lbs	19.0 lbs	22.0 lbs	14.0 lbs	14.0 lbs	10.0 lbs	8.0 lbs	19.0 lbs
Mounting Options									
Type	Mast	Mast	Mast	Mast	Mast	Mast	Mast	Mast	Mast
Mast Size (O.D.)	2.875"	1.66" or 2.875"	2.875"	2.875"	2.875"	2.875"	1.66" or 2.875"	1.66" or 2.875"	2.875"

* Weights are approximate values

WIND LOADING:

MODEL(S)	D5061A1	D5062A	D5071	D5072	D5073	D5074	D5076	D5077	D5078	
Wind Area: (Sq. Ft.)	(No Ice)	1.31	0.56	1.21	1.64	0.68	0.68	0.46	0.28	1.31
	(1/2" Radial Ice)	1.90	0.90	1.72	2.34	1.09	1.09	0.74	0.44	1.90
Wind Area: (Ft-Lbs at mast)	* (No Ice)	248.7	51.6	206.0	407	81.3	81.3	31.2	6.9	248.7
	** (1/2" Radial Ice)	103.4	24.4	85.7	169.2	38.4	38.4	14.7	3.3	103.4
Survival Rating:	*** (No Ice)	140mph	140mph	150mph	140mph	135mph	135mph	150mph	150mph	150mph

* Wind Speed = 100 MPH at sea level with One Hundred Percent Humidity at Seventy Degrees Fahrenheit.

** Wind Speed = 50 MPH at sea level with One Hundred Percent Humidity at Zero Degrees Fahrenheit.

*** Maximum Wind Speed at sea level with One Hundred Percent Humidity at Seventy Degrees Fahrenheit. Safety Factor of 1.65 included.