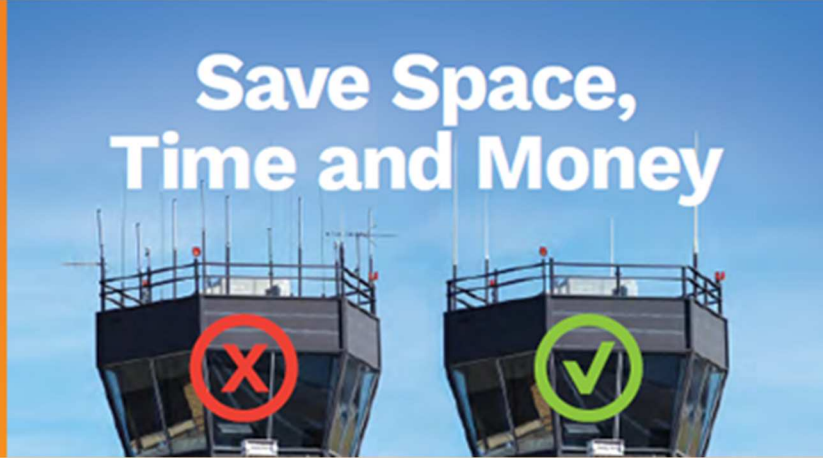
TACO™
ANTENNA

TACO MULDIPOL™
THE SMARTER ANTENNA



CONNECT UP TO THREE RADIOS TO A SINGLE ANTENNA

Save Space
A single TACO MULDIPOL can connect up to three radios in one antenna, making for cleaner towers and reduced interference.

Save Time
Fewer antennas to install and service saves time, now and over the long term.

Save Money
Fewer masts required, less weatherproofing, lower maintenance costs.

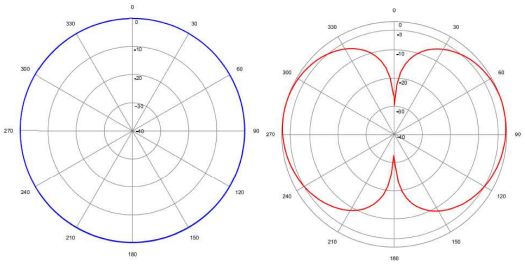
Civil Aviation Models: D5000 Series

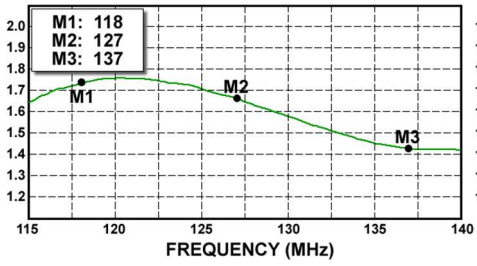
The MULDIPOL™ Multiple Dipole Collinear Array concept has been specifically developed by TACO for ground-air-ground, air traffic control and associated vehicular and base communications applications. The MULDIPOL™ has a high degree of isolation between elements within a closely spaced array. The result is a small, rugged, easy to install antenna. A minimum of 30 dB isolation is realized between any two elements in every MULDIPOL™ model. The low profile and resulting decrease in the number of antennas required at any tower site also gives a much improved radiation pattern coverage.

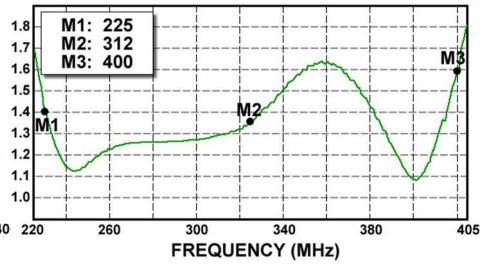
Features

. Rugged lightweight construction
. Transportable and compact
. Combination of UHF and VHF
. High isolation between antenna elements
. Metallic Base
. DC Grounded Dipoles

TYPICAL D5076 & D5077 PATTERNS







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TACO ANTENNA

D5000 SERIES: Civil Aviation Antennas

SPECIFICATIONS

ELECTRICAL

MODEL		D5061-A-1	D5062A	D5071	D5072	D5073	D5074	D5076	D5077
FREQUENCY RANGE - MHz		V 118-137	U 225-400	U 225-400 V 118-137	V 118-137	U 225-400 V 118-137	U 225-400	V 118-137	U 225-400
GAIN – dBi (+0/-1)		4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
NUMBER OF OUTPUTS		1	1	3	2	2	2	1	1
NUMBER OF ELEMENTS		V/V	U/U	U/V/U	V/V	U/V	U/U	V	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
1ST SIDELOBE SUPPRESSION - dB		13	13	N/A	N/A	N/A	N/A	N/A	N/A
CROSS POL. SUPPRESSION - dB		20	20	20	20	20	20	20	20
ISOLATION – dB		N/A	N/A	>30	>30	>30	>30	N/A	N/A
IMPEDANCE - Ohm		50	50	50	50	50	50	50	50
STD CONNECTOR		N FEMALE	N FEMALE	N FEMALE	N FEMALE	N FEMALE	N FEMALE	N FEMALE	N FEMALE
MAX INPUT POWER - W		600	500	250	350	250	250	350	250
OPERATING TEMP - °C (°F)		-40 TO +70 (-40 TO +158)	-40 TO +70 (-40 TO +158)	-40 TO +70 (-40 TO +158)	-40 TO +70 (-40 TO +158)	-40 TO +70 (-40 TO +158)	-40 TO +70 (-40 TO +158)	-40 TO +70 (-40 TO +158)	-40 TO +70 (-40 TO +158)
DC GROUND		YES	YES	YES	YES	YES	YES	YES	YES
NSN		5985-01- 050-7525	5985-01- 296-1904		5985-01- 053-5108	5985-01- 050-7524	5985-01- 050-7523	5985-01- 050-7522	5985-01- 050-7521

MECHANICAL

OVERALL LENGTH – in (mm)		137.2 (3485)	72.2 (1834)	111.5 (2832)	153.0 (3886)	85.0 (2159)	85.0 (2159)	55.5 (1410)	30.5 (775)
ANTENNA WEIGHT – lbs (kg)		19.0 (8.6)	13.5 (6.1)	17.0 (7.7)	17.0 (7.7)	12.0 (5.4)	12.0 (5.4)	6.0 (2.7)	5.0 (2.3)
*TOTAL SHIP WEIGHT – lbs (kg)		23.5 (10.7)	15.0 (6.8)	19.0 (8.6)	22.0 (10.0)	14.0 (6.4)	14.0 (6.4)	10.0 (4.5)	8.0 (3.6)
**MAST – in (mm)	MIN ID	1.50 (38)	1.50 (38)	2.375 (70)	2.375 (70)	2.375 (70)	2.375 (70)	1.50 (38)	1.50 (38)
	OD	1.66 TO 2.875 (42 TO 73)	1.66 TO 2.875 (42 TO 73)	2.875 (73)	2.875 (73)	2.875 (73)	2.875 (73)	1.66 TO 2.875 (42 TO 73)	1.66 TO 2.875 (42 TO 73)

Weight values are approximate
****Clearance only. Values do not consider proper wall thickness.**

WIND LOADING

PROJECTED AREA ft² (m²)	*NO ICE	2.21 (0.21)	0.87 (0.08)	1.81 (0.17)	2.46 (0.23)	1.00 (0.09)	1.00 (0.09)	0.69 (0.06)	0.42 (0.04)
	**½" RADIAL ICE	3.19 (0.30)	1.40 (0.13)	2.62 (0.24)	3.55 (0.33)	1.63 (0.15)	1.63 (0.15)	1.10 (0.10)	0.66 (0.06)
BEND MOMENT ft-lbs (Nm)	*NO ICE	327.1 (443.5)	63.2 (85.7)	216.4 (293.4)	406.9 (551.7)	87.5 (118.6)	87.5 (118.6)	37.6 (51.0)	11.8 (16.0)
	**½" RADIAL ICE	119.0 (161.3)	26.3 (35.7)	78.9 (107.0)	147.9 (200.5)	36.3 (49.2)	36.3 (49.2)	15.7 (21.3)	4.9 (6.6)
***SURVIVAL RATING NO ICE - mph (km)		150 (240)	150 (240)	150 (240)	150 (240)	150 (240)	150 (240)	150 (240)	150 (240)

Wind Speed = 100 mph
***Wind Speed = 50 mph**
****Safety Factor of 1.65 included per TIA_329**

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

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