

TACOTM

ANTENNA

TACO MULTIPOLTM

THE SMARTER ANTENNA

Save Space, Time and Money



CONNECT UP TO THREE RADIOS TO A SINGLE ANTENNA

Save Space

A single TACO MULTIPOL 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.



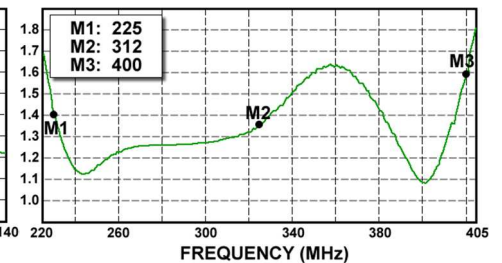
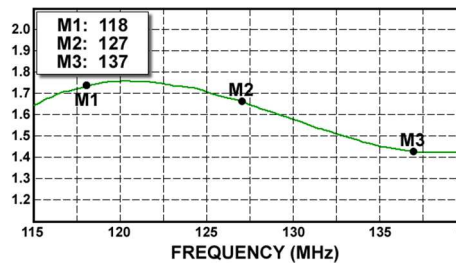
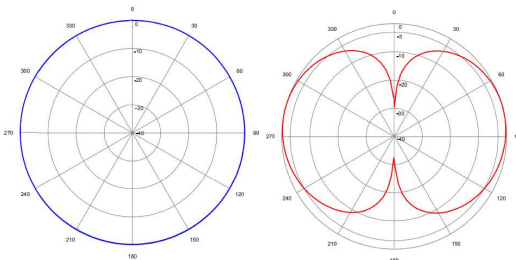
Civil Aviation Models: D5000 Series

The MULTIPOLTM 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 MULTIPOLTM 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 MULTIPOLTM 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
- . High isolation between antenna elements
- . Transportable and compact
- . Metallic Base
- . Combination of UHF and VHF
- . DC Grounded Dipoles

TYPICAL D5076 & D5077 PATTERNS



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SPEC0012_P01

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 |
| | TYPICAL | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| HPBW (°) | HORZ | 360 | 360 | 360 | 360 | 360 | 360 | 360 |
| | VERT | 40 | 40 | 75 | 75 | 75 | 75 | 75 |
| POLARIZATION | VERTICAL | VERTICAL | VERTICAL | VERTICAL | VERTICAL | VERTICAL | VERTICAL | VERTICAL |
| 1 ST 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

| MODEL | D5061-A-1 | D5062A | D5071 | D5072 | D5073 | D5074 | D5076 | D5077 |
|-------------------------------|---------------|-------------------------|---------------|---------------|--------------|--------------|-------------------------|-------------------------|
| OVERALL LENGTH - in (cm) | 137.2 (348.5) | 72.2 (183.4) | 111.5 (283.2) | 153.0 (388.6) | 85.0 (215.9) | 85.0 (215.9) | 55.5 (141.0) | 30.5 (77.5) |
| 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 OD - in (cm) | 2.875 (7.3) | 1.66-2.875 (4.2-7.3) | 2.875 (7.3) | 2.875 (7.3) | 2.875 (7.3) | 2.875 (7.3) | 1.66-2.875 (4.2-7.3) | 1.66-2.875 (4.2-7.3) |

*Weight values are approximate

WIND LOADING

| MODEL | D5061-A-1 | D5062A | D5071 | D5072 | D5073 | D5074 | D5076 | D5077 |
|---|-----------------|---------------|-------------|---------------|---------------|--------------|--------------|-------------|
| PROJECTED AREA ft ² (m ²) | *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) |
| | **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) |
| 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) |
| | **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) |
| ***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.