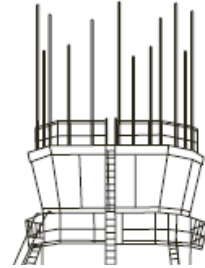


FAA, Air Traffic Control (ATC) Multiple Dipole (MULDIPOL™) Antennas

4000 Series

The MULDIPOL™ Multiple Dipole Collinear Array concept has been specifically developed for ground-air-ground, air traffic control and associated vehicular and base communications applications. This omni directional concept employs a unique method of shielding the feed cables to improve radiation pattern characteristics. The MULDIPOL™ also has a high degree of isolation between discrete elements within a closely spaced array. The result is a small, rugged, easy to install antenna. The lightweight and compact design minimizes space and lends itself to tactical transportable use in the most hostile environments. 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. The process employed in this series of antennas incorporates the patented MULDIPOL™ concept. The utilization of this technique results in a unit which has excellent broadband halfwave dipole characteristics over the entire operating frequencies. The desired "figure eight" radiation pattern is generally constant throughout the band. Through broadband suppression of extraneous currents upon the transmission line, the undesirable "Clover Leaf" pattern is avoided.

The 4000 series has a fibreglass (non metallic base) and therefore has no DC ground path for the dipoles. If DC ground is a requirement then please refer to 5000 series. Some models are available with a split or folding option to halve the stowed length for ease of transportation.



Split Option



Folding Option

General Electrical Specification (see table below for individual model specification)	
VSWR	2:1 maximum
Input Impedance	50Ω
Power Handling	100W
Polarisation	Vertical
Isolation	30dB min
Environmental Specification	Altitude, rain, vibration, shock, salt, fog, sand and dust to MIL-STD-810A & B. Temperature, barometric pressure and humidity to MIL-STD-210 & 210A

Model	VHF 118-136 MHz	UHF 225-400 MHz	Gain (dBic)	No. of Outputs	HPBW (degrees)	Mounting Diameter	Length (cms)	Weight (kg)	Colour	Split Option	Folding Option
D4061A1	XX		4	1	40	2.5" IPS	318.75	8.64	White	N	Y
D4062A		XX	4	1	40	2.5" IPS	165	6.14	White	N	Y
D4071	X	XX	1	3	75	2.5" IPS	293.37	7.63	White	N	Y
D4072	XX		1	2	75	2.5" IPS	381	8.39	White	N	Y
D4073	X	X	1	2	75	2.5" IPS	213.5	5.46	White	N	Y
D4074		XX	1	2	75	2.5" IPS	216	5.46	White	N	Y
D4076	X		1	1	75	2.5" IPS	130	2.73	White	N	N
D4077		X	1	1	75	2.5" IPS	84.3	2.16	White	N	N
D4078		XXX	1	3	75	2.5" IPS	293.37	7.63	White	N	Y

'X' indicate the number and frequency of antennas per assembly

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 Racal reserve the right to vary in detail from the description and specification in this publication.