



DM N79-1-1 CONTROLLED RADIATION PATTERN ANTENNA

The DM N79-1-1 Controlled Radiation Pattern Antenna (CRPA) is the latest addition to our Global Positioning System (GPS) family of products.

The antenna is designed for high-performance aircraft that require GPS navigation with antijam capability. The antenna uses multiple radiating elements which, when used in conjunction with the AEI controller, steer nulls to avoid jamming signals.

The DM N79-1-1 antenna design incorporates several key mechanical features, which allow it to perform in the most severe environments:

- Each radiating element is protected by a radome manufactured from DuPont Tefzel, a teflon based product which is resistant to the effects of rain-erosion.
- A one-piece aluminum bezel secures the individual radomes and provides immunity to high acoustic noise levels.

These high-strength, low-profile antennas were developed to operate with the AE-1 (antenna electronics) on the F15E.

SPECIFICATIONS

ELECTRICAL	Frequency		L1, L2
	VSWR	REF Element	(L2) 1227.6 ±10.23 MHz 2.0:1
		AUX Element	(L1) 1575.42 ±10.23 MHz 3.0:1
	Gain	REF Element	-3.5 dBic (L1 and L2) over 160° cone of coverage
		AUX Element	Exceed Ref by +3 dB when summed
	Power		Receive only
	Impedance RF		50 Ohms
Polarization	REF Element	RHCP	
	AUX Element	Linear elements sum to RHCP	
MECHANICAL	Weight		6.8 lbs (w/cables)
	Time Delay	(REF to AUX)	0.8 ±0.1 nSEC
	Null Steering		30° to 60° width with AE unit
	Null Depth		>20 dB min, typically 30 dB with AE unit
	Military		MIL-STD-810

All data contained herein is subject to change without notice.

1099-186(M7)

NAVIGATION

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OUTLINE DIMENSIONS

Inches (Centimeters)

CONNECTORS AND CABLES NOT SHOWN IN THIS VIEW FOR CLARITY

