

DIPOLE ANTENNA COUPLER

Series

DAC



The Model DAC Antenna Coupler is an impedance matching device that provides a balanced connection for the center of a receiving dipole to a 50 or 70 ohm unbalanced connection of a coaxial transmission line. The transformer used in the DAC provides a flat response over a wide frequency range. However, because dipole antennas are constructed for finite frequencies, the impedance match from the antenna to the coaxial transmission line is dependent on the frequency for which the dipole is cut. The DAC couplers are suitable for single or fan dipole antenna systems.

Stainless steel connector rings are provided for the antenna connector and for messenger tie points. The entire unit is contained within a sealed fiberglass reinforced plastic case, and additional strength and weather resistance is provided by potting the transformer and connectors in a plastic compound. A built-in lightning arrestor prevents the accumulation of static charges which might otherwise injure associated equipment.

A tensile test of a sample DAC was conducted by a leading research laboratory to determine the amount of applied tensile stress needed to damage the sample. The sample successfully passed a tensile strain of 2000 pounds between each of the antenna eye-bolts.

The Model DAC-500 Antenna Coupler (Bulletin 2052) is used for transmitting operation.

Revised 15 August 1971
Spersedes 8013



THE TECHNICAL MATERIEL CORPORATION

AND SUBSIDIARIES

Printed in U.S.A.

TECHNICAL SPECIFICATIONS

Transformer Frequency Response

Flat within ± 1.5 db throughout the frequency range of the module

Equipment Case

Reinforced fiberglass plastic

Input Terminals

Standard Ring-Type

Impedance Match

Refer to CHART "A" below

Size and Weight

12½" wide X 7¾" wide X 2¼" deep maximum including terminals

Mounting

Pole mounting plate or connector rings.

CHART "A"

MODELS AVAILABLE

Model	Balanced Input	Unbalanced Output	Frequency Range	Connector	TR-
DAC-1	70 ohms nom.	70 ohms nom.	2-32 MHz	N	030
DAC-4	200 ohms	70 ohms	2-32 MHz	BNC	068
DAC-5	70 ohms	70 ohms	2-32 MHz	UHF	030
DAC-6	70 ohms	50 ohms	2-30 MHz	N	120
DAC-9	475 ohms	50 ohms	2-30 MHz	N	010
DAC-14	200 ohms	50 ohms	2-30 MHz	PL-259	091



THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD • MAMARONECK, NEW YORK 10543

SPRINGFIELD, VIRGINIA • OTTAWA, CANADA • LUZERN, SWITZERLAND • TEMPE, ARIZONA

(914) 698-4800 • (613) 822-0244 • twx 710-566-1100 • telex 013-446