## SALES SERVICE BULLETIN NUMBER 178

Transmitting Antenna Coupler, Model TRC





The TMC Models TRC, Transmitting Antenna Couplers, are a newly designed series of broadband transformers capable of handling RF Power.

Two units are available at present, the TRC-100 which is rated at 100 watts and the TRC-500 rated at 500 watts.

Both Couplers provide impedance matchings from 72 ohms unbalanced to 150, 300 and 700 ohms balanced or unbalanced over the frequency range 2 to 30 megacycles. These are passive devices requiring no tubes, current supply or tuning adjustments.

The Model TRC Couplers are housed in water-proof cast aluminum cases, provided with insulated output terminals and input connections for RG-85/U or any other standard coaxial cable. Each case contains a hermetically sealed transformer which is further protected from the elements by potting in a special plastic compound. An adjustable spark gap provides protection from lightning.

## TECHNICAL SPECIFICATIONS

## MODEL TRC-100 and TRC-500

Input Impedance:	72 ohm unbalanced.
Output Impedance:	150 - 300 and 700 ohms balanced or unbalanced.
Frequency Range:	2 to 30 Megacycles.
Input Terminal:	Standard Input. Connection is a boss designed to accommodate an RG-85/U End Seal. Other fittings can be supplied upon request.
Output Terminals:	Two Ceramic Insulators.
Mounting:	Pole mounting by means of four heavy cast mounted flanges.
Dimensions:	TRC-100 9'' high x 9'' wide x 5'' deep.
	TRC-500 12'' high x 12'' wide x 7'' deep.
Weight:	Less Connector: TRC-100 - 15 lbs.
	TRC-500 - 25 lbs.
Shipping Weights:	TRC-100 approximately 25 lbs.
	TRC-500 approximately 35 lbs.
Composition Construction:	All equipment is manufactured in accordance with JAN specifications wherever practicable.

NOTE: The broadband transformer issued in the TRC Couplers are available without the weather proof case. The TRC-100 transformer is ordered as TR047 and the TRC500 transformer as TR 103.

> Experience in the laboratory has indicated that this transformer technique may be applied to other specific frequency ranges and impedances other than those in the standard Model TRC units. We invite your inquiries for special applications.

We reserve the right to make changes in the design of our equipment consistent with good engineering practice in order to make improvements in design and to effect economies in manufacture.

FREQUENCY RESPONSE TRO47 TMC 300/70 1 DB N RELATIVE RESPONSE 0 -2 -4 - 6 -8 2 6 8 10 12 14 16 18 20 22 24 26 28 30 4 FREQUENCY (MC/S)





Typical input impedance characteristics when transformer is properly terminated, in a resistive load.

GP-126 GP-127

## THE TECHNICAL MATERIEL CORPORATION COMMUNICATION ENGINEERS

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