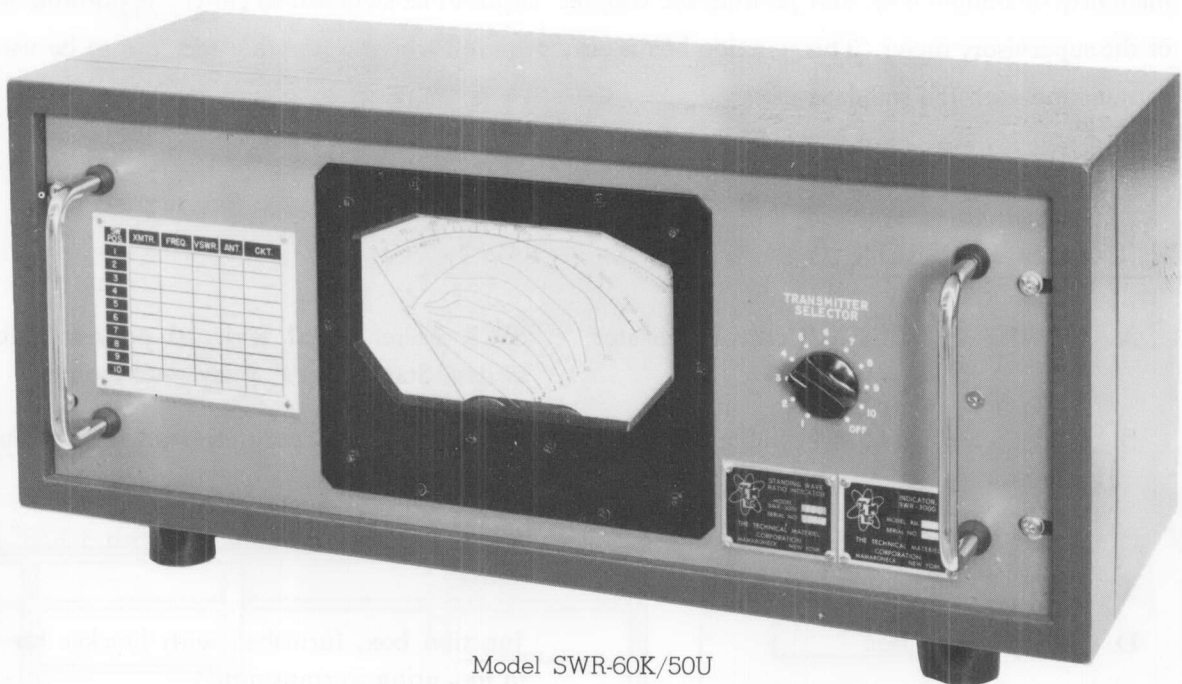




TECHNICAL BULLETIN NUMBER 2029

Standing Wave Ratio Indicator
TMC Model SWR-60K/50U



Model SWR-60K/50U

The TMC Model SWR-60K/50U, Standing Wave Ratio Indicator, provides an accurate indication of the voltage standing wave ratio for up to ten 50 ohm transmission circuits over the frequency range of 2 to 30 megacycles. The unique design of the instrument permits simultaneous indications of incident RF power, reflected RF power and direct readings of Standing Wave Ratio. A ten position switch is used to select the transmission line on which measurements are to be made.

The power rating of the system is 60,000 watts average RF power with a maximum VSWR of 5:1. The equipment consists of two units, the SWR Meter and SWR Coupling Unit. The meter is available in two forms:

Standing Wave Ratio Indicator

1. Mounted on standard 19" rack panel with a ten position selector switch which is used in a supervisory position in conjunction with up to 10 coupling units.
2. Same as above but mounted in a cabinet.

The coupling unit should be placed in the coaxial line as close to the transmitter as possible. The coupling unit output is DC and is connected back to the meter panel by means of coaxial cables for RF shielding.

The junction box allows a portable meter to be connected at a transmitter position either permanently or temporarily, and permits the coupler output to be switched to either the portable meter or the supervisory meter. This junction box is only required where a portable meter is to be used in conjunction with the standard meter.

UNIT DESCRIPTION

A. Model SWR-60KRM Control Indicator	SWR Meter Panel with 10 position selector switch. Standard 19" relay rack mount.
B. Model SWR-60KPM Portable Control Indicator	Portable SWR Meter unit, hand held or bracket mounted.
C. Model SWR-60K CU-50 Directional Coupler	50 ohm system coupling unit with 3-1/8" EIA flange.
D. JB-1 Junction Box	Junction box, furnished with bracket for ease in mounting to transmitter.

TECHNICAL SPECIFICATIONS

FREQUENCY RANGE:	Broadband 2 to 30 mcs.
POWER CAPACITY:	60,000 watts maximum with VSWR of not more than 5:1.
ACCURACY:	Within $\pm 5\%$ for SWR readings.
DIAL CALIBRATION:	Analog isolines directly indicate VSWR. Power indication on linear scales.

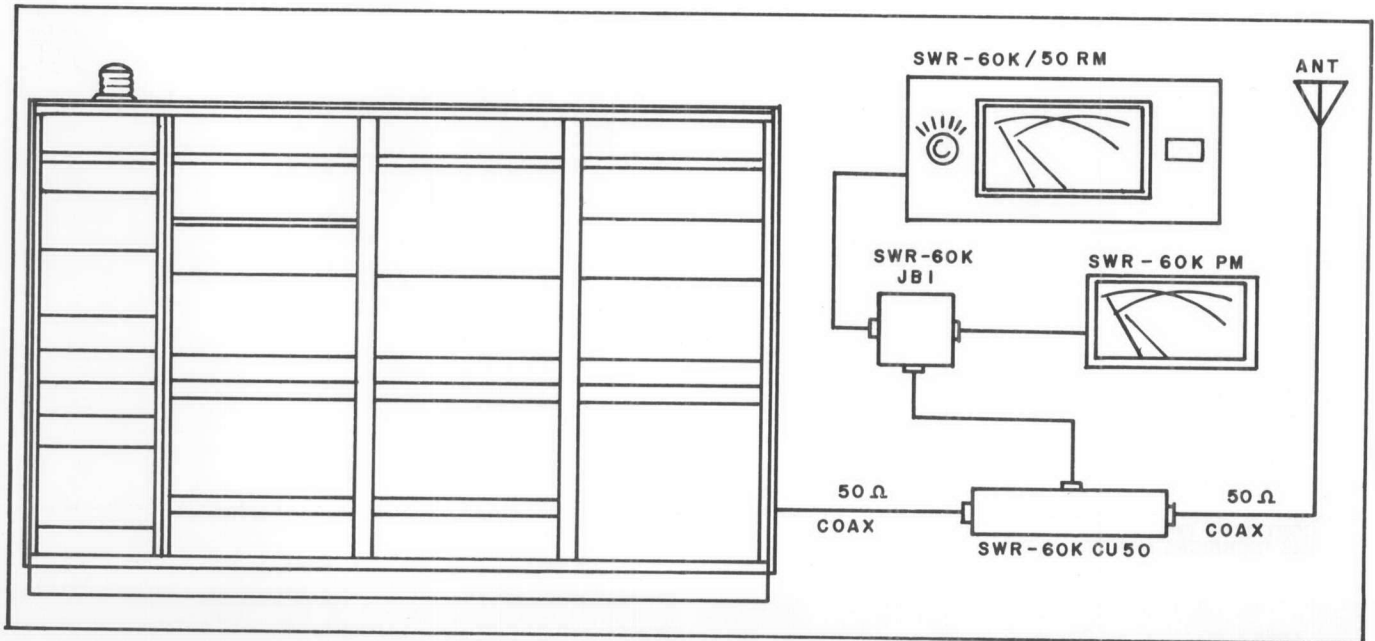
TMC Model SWR-60K/50U

SIZE AND WEIGHT:

	SIZE	WEIGHT
CONTROL INDICATOR (in cabinet)	$20\frac{1}{2}'' \times 8\frac{1}{2}'' \times 9\frac{3}{4}''$	20 lbs. (approx.)
CONTROL INDICATOR (for rack mount)	$19'' \times 7'' \times 8''$	16 lbs. (approx.)
PORTABLE CONTROL INDICATOR	$7'' \times 6'' \times 2''$	2 lbs. (approx.)
DIRECTIONAL COUPLER (cylindrical)	$7'' \times 5\text{-}1/16''$	15 lbs. (approx.)
JUNCTION BOX	$3'' \times 3'' \times 1\frac{1}{2}''$	1 lb. (approx.)

COMPONENTS AND CONSTRUCTION:

All equipment manufactured in accordance with JAN/MIL specifications wherever practicable.



FUNCTIONAL BLOCK DIAGRAM

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