



SALES SERVICE BULLETIN NUMBER 6001

DEC 9 1961

RF Spectrum Analyzer
TMC Model PTE-3
AN/GRM-33A



PH-1454

TMC Model PTE-3 (AN/GRM-33A) Spectrum Analyzer is a versatile test instrument designed for RF spectrum analysis. Visual display of RF signals in tuning and aligning single sideband exciters and transmitters provides analysis of intermodulation distortion, hum and noise. Manual Sweep Control provides detailed analysis of any portion of the RF spectrum within the frequency range of 2 to 64 Mcs.

The unit is mounted in a sturdy 19" relay rack with four heavy duty casters which permit the analyzer to be moved to the equipment to be tested. All controls and test connections are made on the front of the unit. The PTE-3 is supplied with all cables and connections necessary for instant operation. The TMC Model VOX, Variable Frequency Oscillator, is incorporated as a part of this unit permitting accuracy and stability for easy tuning and long term testing. TMC's Model TTG provides two AF and two RF tones. The frequency of the AF tones are so chosen to permit visual analysis of the third, fifth, and seventh order products. The two RF tones are provided for a system test of the PTE-3 itself.

TECHNICAL SPECIFICATIONS, TMC Model PTE-3

SWEEP WIDTHS:	Fixed — 150, 500 cps, 3.5 kc, 7 kc 14 kc Continuously variable — 0-100 kc
MARKER:	5 kc.
INPUT CENTER FREQUENCY:	500 kc.
BANDPASS REGION: (after input mixer)	450-550 kc.
IMAGE REJECTION:	Better than 130:1 at input center frequency.
INPUT IMPEDANCE:	50 ohms at each of the two terminals.
INPUT ATTENUATOR:	0-65 db attenuation of the input signal in 5 db steps. Accuracy $\pm 2\%$ to 30 mc.
AMPLITUDE SCALES:	Linear or 40 db log scales, selectable by front panel switch. A front panel 20 db I. F. attenuator may be removed to extend log range to 60 db.
TWO TONE TEST:	All in-band residual (odd order) intermodulation products better than 60 db below level of the two equal reference signals, provided that reference signals are separated so that their intersection is at least 60 db down.
FREQUENCY RANGE:	2-64 megacycles continuously tuned.
AF TEST TONES:	935 cps, 2805 cps
RF TEST TONES:	1999 kc crystal controlled 2001 kc crystal controlled
HARMONIC DISTORTION: TEST TONES:	AF: more than 65 db down RF: more than 60 db down
AF OUTPUT IMPEDANCE:	600 ohms balanced
AF OUTPUT LEVEL:	0-0.5 volts continuously variable
POWER REQUIREMENTS:	115 v, 50 or 60 cps single phase
POWER CONSUMPTION:	Approximately 315 watts average or 465 watts peak depending upon cycling of oven heating element. Line regulator supplied. Special regulators available for 230 volt operation.
SIZE:	22 $\frac{1}{4}$ " x 22" x 48"
INSTALLED WEIGHT:	269 lbs.
SHIPPING WEIGHT:	593 lbs. Cube 36.7
COMPONENTS AND CONSTRUCTION:	Equipment manufactured in accordance with JAN specifications wherever practicable.
INSTRUCTION BOOK:	TMC IN-505 MIL
FSN: /wo Spares	SIG CORPS. 6625-897-4209 USN. F6625-893-4913



The TECHNICAL MATERIEL CORPORATION

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