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TECHNICAL BULLETIN 2034A-1 [New Bulletin]

GENERAL PURPOSE LINEAR AMPLIFIER

TMA-350



TM-350 (in center) SHOWN WITH TM-125 TRANCEIVER
AND POLE MOUNT ATU-350

The TMA-350 linear amplifier, when driven by a previous transmitter capable of 50 watts PEP drive, will provide up to eight instantly selectable channels each with power outputs in excess of 350 watts peak. It is an ideal amplifier to be used with the TM-125 transceiver which supplies both the drive and the total number of channels required.

Information for channel change is supplied to the TMA-350 by means of a multiple socket located on the rear deck in the automated version. The newly designed 8875 tube is used in the final. Fan cooled and cathode driven, it is protected with a heat sensor to prevent over-dissipation. In addition, a simple switching technique enables the amplifier to be switched in or out of the amplification chain. The output of the amplifier nominally 50 ohms, will match the input of the ATU-350 antenna tuning unit allowing at the front panel completely automated tuning through to the antenna.

Adjustment to the various channel frequencies is simple accomplished from the top of the amplifier. When used with the companion TM-125 transceiver, the tuning elements are pre-set and ready for immediate operation as the appropriate channel is selected.

The entire amplifier is mounted in a $5\frac{1}{2}$ X 14-inch cabinet that is 16 inches deep. On, special order it can be mounted on a $5\frac{1}{4}$ -inch panel in a standard 19-inch relay rack.

Revised 1 May 1973



THE TECHNICAL MATERIEL CORPORATION

AND SUBSIDIARIES

TECHNICAL SPECIFICATIONS

FREQUENCY INFORMATION

Range

1.6 to 26 MHz 1.6 to 30 MHz OPTIONAL

OPERATING PARAMETERS

Modes

CW/AM/AME/USB/LSB/ISB

Input Signal

Between 30 and 50 watts avg

Input Impedance

50 ohms nominal, unbalanced

Power Output

50 ohms nominal single ended

VSWR Rating

Will match 2 1 VSWR

Tuning

8-channel, manual control
Automated switching OPTIONAL

Metering

Indications of relative power output and plate current.

Safety Features

Plate overload to protect final tube; heat sensor

Front Panel Control

CHANNEL SELECT AC ON/OFF HV ON/STAND-BY MULTIMETER SWITCH INDICATOR LAMPS

DISTORTION AND NOISE

Intermodulation

Distortion products are min. 30db below either tone of a standard two tone test at full rated PEP output

Harmonic Suppression

Second Harmonics
Min. 40db below full PEP output
Third and Higher Harmonics
Min. 50db below full PEP output
Filters available for added rejection

Hum and Noise

Min. 40db below full PEP output

ENVIRONMENTAL AND INSTALLATION

Operating Conditions

0 to +50°C, up to 90% relative humiditys,

Cooling

Fan with heat sensors.

Primary Power

115/230 VAC, 50/60 Hz, single phase

Size and Weight

5½" high X 14" wide X 16" deep Approximately 35 lbs (in Cabinet)

Added Features

Mating RF connectors
Power cable
CAB-20 equipment cabinet
Two copies of Instruction Manual

OPTIONAL ACCESSORIES

Model ATU-350 Antenna Tuner Forward/reflected Power Meter



We reserve the right to make engineering changes

THE TECHNICAL MATERIEL CORPORATION

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