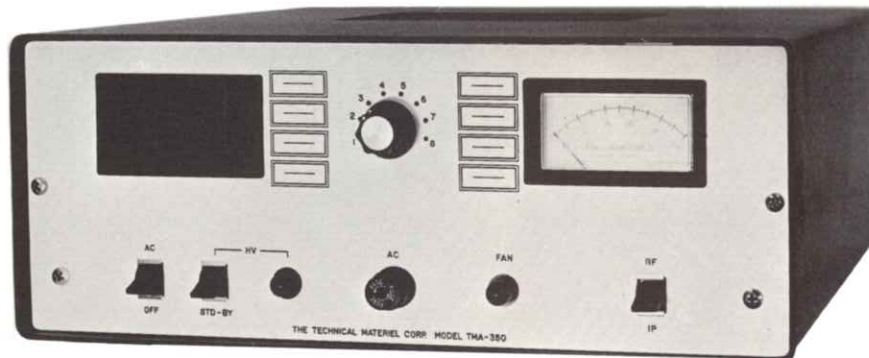


GENERAL PURPOSE LINEAR AMPLIFIER

TMA-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 5½ X 14-inch cabinet that is 15 inches deep. On, special order, it can be mounted on a 5¼-inch panel in a standard 19-inch relay rack.

Revised 1 August 1971



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

350 watts PEP; 175 watts avg

Output Impedance

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 humidity

Cooling

Filtered forced air

Primary Power

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

Size and Weight

5¼" high X 14" wide X 15" deep
Approximately 20 lbs.

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

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