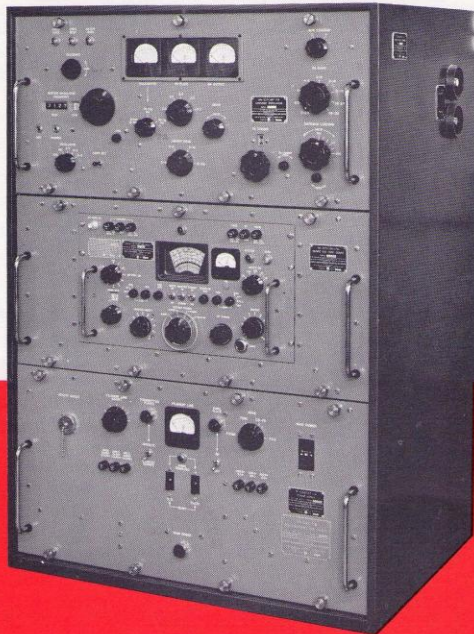


GENERAL PURPOSE SIDEBAND TRANSMITTER, 750 WATTS PEP

GPT-750F2



The GPT-750F2 Sideband Transmitter is a valuable addition to any transmitting station handling both sideband (SSB) and AM traffic. The transmitter not only provides for this condition, but can operate in the ISB (A3B), CW (F1), FSK (A7J) and FAX (A7J) modes as well. Ten ovenized crystals, pre-set to individual channels, or a built-in master oscillator determine the operating frequencies at better than one part in 10^6 stability. A variety of audio filters, either 3 KHz or 6 KHz wide, are available for each sideband.

The TMC Model SBE-8 exciter provides an adjustable RF drive for the linear and is mounted in the center deck. The automatic load and drive control acts to minimize the distortion products and to limit the drive during high modulation peaks or load changes. A voice-operated relay can be provided for keying the transmitter. All power supply components, including power and overload breakers, are located in the bottom deck. Each deck is mounted on track slides and equipped with interlock devices for protecting personnel when the decks are open. The transmitter can be mounted on shocks or on a 3-inch raised base. Installation can be completed in a matter of minutes.

Revised 1 August 1971



THE TECHNICAL MATERIEL CORPORATION

AND SUBSIDIARIES

TECHNICAL SPECIFICATIONS

FREQUENCY INFORMATION

- Range**
2 to 30 MHz
- Stability**
One part in 10^6 per day for 15°C
change in ambient, 0 to $+50^{\circ}\text{C}$
- Control**
Ten temperature-controlled crystals
External VFO input

OPERATING PARAMETERS

- Modes**
CW(A1) MCW(A2H) AM(A3)
USB(A3A,A3J) LSB; ISB(A3B)
- Power Output**
1000 Watts Average CW
750 Watts AM
750 Watts SSB/ISB
- Output Impedance**
50 ohms nominal, unbalanced
- Carrier Suppression**
Adjustable -55db to full output
- Tuning**
All tuning and bandswitching from
the front panel. Manual control.
- Metering**
Front panel meters for monitoring
output readings and critical circuits.
- Master Oscillator By-Pass**
Bypass switch permits continued operation
of the master oscillator oven
elements when the balance of the
transmitter is in power OFF status.
- Safety Features**
Overload relays protect against abnormal
operating levels of the final and
safety interlocks protect personnel.

DISTORTION AND NOISE

- Signal/Distortion**
At 750 watts PEP
40db below full PEP output
At 500 watts PEP
45db below full PEP output
- Harmonic Suppression**
Second Harmonics
Min. 40db below full PEP output
Third and Higher Harmonics
Min. 50db below full PEP output
RF filters are available on request
- Spurious**
Min. 50db down from full PEP output
- Hum and Noise**
Min. 55db down from full PEP output
- Unwanted Sideband Rejection**
500 Hz tone is down at least 60db
below full PEP output.

AUDIO

- Sideband Response**
250-3040 Hz (CCIR)
OPTIONAL: 250-6080 Hz (CCIR)
Other bandwidths available on request
- Input**
Two independent 600-ohm channels
-20 to 0dbm, balanced or unbalanced
Hi-Z or dynamic microphone
- Voice Operated Relay**
VOX provided with anti-trip feature,
adjustable gain and squelch.

KEYING INFORMATION

Refer to Technical Bulletin 2025A for data
on Model TIS-3D Audio Tone Keyer

ENVIRONMENTAL AND INSTALLATION

- Operating Conditions**
0 to $+50^{\circ}\text{C}$; up to 95% relative humidity
- Heat Dissipation**
Approximately 2000 watts
- Cooling**
High capacity filtered forced air
- Primary Power**
115/230 VAC, 50/60 Hz, single phase
- Size and Weight**
56" high X 39" wide X 31" deep
Approximately 1425 lbs.
- Loose Items**
Mating RF connectors
All interconnect cables
Base-mounted equipment rack
Two copies of Instruction Manual

OPTIONAL ACCESSORIES

- Model ATS-2A Antenna Tuning System
Manual tuning into a 35-foot vertical
Technical Bulletin 2053-1
- Model LPF-1K Low Pass RF Filter
Provides additional 25db RF suppression
Technical Bulletin 2045-1
- Model TIS-3D Audio Tone Keyer
Enables FSK/FAX (A7J) operation
Sales Bulletin 2025A
- Model SPU-2 Speech Processing Unit
Improves transmitted voice quality
Sales Bulletin 2026B
- Model SWR-1K Indicator
Provides forward/reflected power metering
Technical Bulletin 6030-1



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

www.radiopharos.it