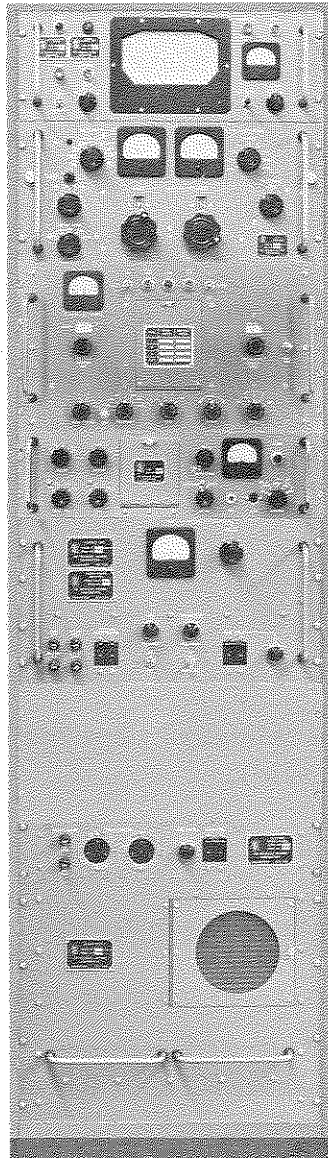
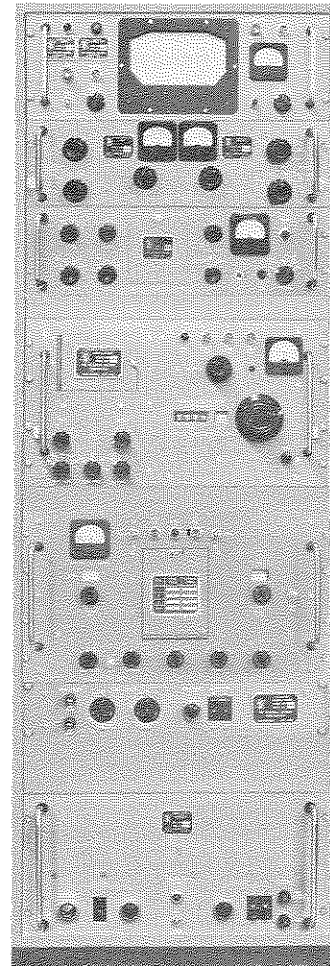


SALES SERVICE BULLETIN NUMBER 1002

General Purpose Transmitters
TMC Models GPT-1K
TMC Models GPT-350



PH-1529



PH-1530

TMC Models GPT-1K and Models GPT-350 are General Purpose Transmitters specifically designed to fulfill the requirement of general purpose communications over the frequency range of 2 to 32 megacycles. These transmitters will provide AM, CW, MCW, and FSK modes of operation with a selection of one of three oven stabilized crystal positions or external VMO, and a wide choice of audio inputs with push-to-talk operation available.

The modular type of construction of these transmitter groups affords many customer options as to modes of operation, methods of operation, shock mounts, or standard base mounts. The final

General Purpose Transmitters

amplifier for these two groups of transmitters are the PAL-1KA in the GPT-1K series, and the PAL-350 in the GPT-350 series. The PAL-350 has received OCDM and Canadian DOT certification.

The GPT-350 series of transmitters have been specifically designed to fulfill those requirements where licensing regulations limit the amount of RF power that can be put on the air.

The use of a linear RF final amplifier in these two models of transmitters affords an economical means of converting to the single sideband mode of communication by the substitution of the TMC Model SBE, Single Sideband Exciter for the GPE-1, General Purpose Exciter, when such a service is required.

TECHNICAL SPECIFICATIONS, Models GPT-1K and GPT-350

OUTPUT POWER:	GPT-1K 500 watts average AM, MCW, 1000 watts average CW, FSK GPT-350 175 watts average AM, CW, MCW, FSK
FREQUENCY RANGE:	2 to 32 megacycles
MODES OF OPERATION:	Refer to Specifications on Individual units in attached table.
OUTPUT IMPEDANCE:	50 or 70 ohms unbalanced (dependent upon SWR-1K/ATS-2 ordered).
FREQUENCY STABILITY:	Crystal controlled. 1 part 10^6 per day.
AUDIO RESPONSE:	350-3300 cps, flat within 3 db.
AUDIO INPUT:	1. 600 ohm balanced line, —20 dbm will produce full output. 2. High impedance mike, —50 dbm will produce full output. 3. Carbon mike.
TUNING:	All tuning and band switching controls on front panels (no plug-in components).
METERING:	Front panel meters indicate operation of all critical circuits.
ALDC:	ALDC (Automatic load and drive control) is furnished to improve linearity and limit distortion during high drive peaks or load changes.

TMC MODEL NUMBER	MILITARY NOMENCLATURE	CAPABILITIES				APP MODEL NO. Aux. Power Panel	COMPONENTS						INSTALLATION DATA					SHIPPING DATA (APPROX.)			LOGISTICS DATA	TMC MODEL NUMBER	
		AM	CW	MCW	FSK		PAL-550 LINEAR R.F. AMPLIFIER	PAL-1K LINEAR R.F. AMPLIFIER	SWR-1K STANDING WAVE RATIO INDICATOR	ATS-2 ANTENNA TUNING SYSTEM	GPE-1 GENERAL PURPOSE EXCITER	VOX VARIABLE FREQUENCY OSCILLATOR	XFK FREQUENCY SHIFT EXCITER	HEIGHT (in.)	WIDTH (in.)	DEPTH (in.)	APPROX. WEIGHT (lbs.)	APPROX. PRIMARY POWER WATTS	APPROX. WEIGHT (lbs.)	VOLUME (cu. ft.) (approx.)	APPROX. SIZE OF LARGEST CONTAINER		A. FSN w/spares B. FSN w/o spares C. TMC Inst. Book D. MIL. Inst. Book
GPT-350-A		•	•	•		6	X		X		X			41¾	20½	19	373	800	555	50	44" x 23" x 22"	A B C D	GPT-350-A
GPT-350-B		•	•	•		6	X			X	X			"	"	"	407	940	606	58	"	A B C D	GPT-350-B
GPT-350-C		•	•	•		6	X		X		X	X		"	"	"	440	950	658	62	"	A B C D	GPT-350-C
GPT-350-D		•	•	•		6	X		X	X	X			"	"	"	474	1090	714	65	"	A B C D	GPT-350-D
GPT-350-E		•	•	•	•	6	X		X		X	X	X	59¼	20½	22½	548	1100	820	72	63" x 23" x 26"	A B C D	GPT-350-E
GPT-350-F		•	•	•	•	6	X		X	X	X	X		59¼	20½	22½	582	1240	873	72	"	A B C D	GPT-350-F
GPT-1K-A		•	•	•		7		X	X		X			59¼	20½	22½	511	2000	767	65	63" x 23" x 26"	A B C D	GPT-1K-A
GPT-1K-B		•	•	•		7		X		X	X			"	"	"	545	2140	818	72	"	A B C D	GPT-1K-B
GPT-1K-C		•	•	•		7		X	X		X	X		"	"	"	578	2150	868	75	"	A B C D	GPT-1K-C
GPT-1K-D		•	•	•		7		X		X	X	X		"	"	"	612	2290	918	78	"	A B C D	GPT-1K-D
GPT-1K-E		•	•	•	•	7		X	X		X	Note 1	X	71¼	20¾	22½	591	2150	886	83	74" x 23" x 26"	A B C D	GPT-1K-E
GPT-1K-F		•	•	•	•	7		X		X	X	Note 1	X	71¼	20¾	22½	625	2290	938	85	"	A B C D	GPT-1K-F

FOR ADDITIONAL INFORMATION ON COMPONENTS REFER TO SALES SERVICE BULLETIN NUMBER:

2002 2003 2014 2001 2023 2018 2020

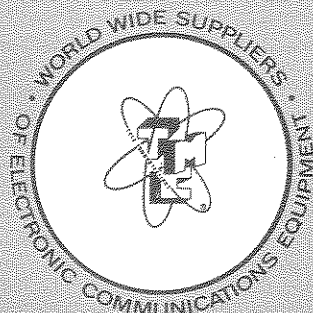
NOTE 1: If a VOX is desired for operation with this system, external rack or cabinet mounting is recommended.

TMC Models GPT-1K and GPT-350

T/R FUNCTION:	A coaxial antenna relay and receiver muting circuit is provided to facilitate half duplex operation.
COOLING:	Pressurized cabinet, filtered forced air for maximum heat dissipation.
SAFETY FEATURES:	<ol style="list-style-type: none">1. Full interlock protection.2. Full overload and fuse protection.
XFK FREQUENCY SHIFT:	Linear to 1000 cycles.
XFK KEYING SOURCES:	<ol style="list-style-type: none">1. Polar or neutral positive.2. Linear input 30,000 ohms impedance.
KEYING SPEED:	750 bauds (1000 WPM) maximum.
XFK KEYING IMPEDANCE:	Polar or neutral operation into 100,000 ohms, may be bridged by external 1800 ohm loop resistance.
XFK KEYING BIAS:	Not greater than 10% at 750 bauds.
STABILITY ON FSK OPERATION:	<ol style="list-style-type: none">1. 10 cycles for ambient temperature change of 0 to 50°C.2. 10 cycles per second for line voltage change of 10%.3. No drift for input signal variations of +25 to +150 volts (mark frequency)
XFK CRYSTAL FREQUENCY:	$F_c = \frac{F_o}{n} \text{ --- } 200 \text{ kc}$ <p>Where F_o = transmitter output frequency, n = transmitter multiplication factor.</p>
ENVIRONMENTAL CONDITIONS:	Designed to operate in any ambient temperature between 0° and 50°C. and any value of humidity up to 90%.
POWER REQUIREMENTS:	115/230 volts, 50-60 cycles, 1 ϕ .
POWER CONSUMPTION:	Refer to specifications on individual units.
SIZE AND WEIGHT:	Refer to specifications on individual units.
COMPONENTS AND CONSTRUCTION:	All equipment manufactured in accordance with JAN/MIL specifications wherever practicable.

TMC Models GPT-1K and GPT-350

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