

PTX-150™

PAGING TRANSMITTER

FEATURES

Advanced Direct Digital DSP Design

Designed for POCSAG and high speed 2/4 level FLEX operation with simulcast

Full VHF Band Coverage

Complete no-tune coverage of the 138-174 MHz frequency range

Multichannel Capability

16 Channels gives maximum flexibility in providing multi-network coverage

Full 100 Watts Output

Conservatively rated at 100 Watts output continuous at 60° C. Adjustable 25-100 Watts

250 and 500 Watts Models

Available with add-on amplifiers to meet all your high power paging requirements

Flexible Network Interfaces

Can interface with conventional digital interfaces as well as C2000 and C-Net network interface units

Full Remote Diagnostics, Alarms and Programming

Advanced feature set provides ultimate in remote control and monitoring

Compact Profile

Saves on valuable rack space

"Black Noise" Dithering

Provides the most cost effective method for POCSAG simulcasting

Built-in Modem Port

For remote diagnostics and auto-dialing of alarm notifications

PTX-150™

DSP-BASED PAGING TRANSMITTER



The PTX-150 VHF Direct Digital Paging Transmitter is designed to meet the paging industry's latest standards for high speed FLEX and simulcast operation. It will operate with a wide range of standard network interfaces, and is ideal for both new systems as well as upgrading of existing paging networks.

This Direct Digital Paging Transmitter is designed to generate all modern paging formats including POCSAG, FLEX and ERMES. Standard output power is 100 watts continuous (adjustable 25-100 Watts). Optional amplifiers are available with 250 and 500 Watts output. Up to sixteen channels can be preset for multi-channel operation over the 138-174 MHz frequency range.

For simulcast operation, the standard internal 1 ppm TCXO may be supplemented by an external reference oscillator. Precision control over carrier offset and delay equalization is provided. For economical POCSAG simulcast operation, the PTX-150 also incorporates "black noise" dithering, which eliminates the need for a high stability reference.

The PTX-150 incorporates a wide variety of network interface and remote diagnostic capabilities. The standard unit includes an interface for conventional POCSAG controllers and paging terminals. The unit also includes an interface for C2000 and C-Net controllers. A separate data port provides comprehensive local or remote programming, real time diagnostics, and alarms for all key operational parameters. A Windows®-based software package is available to provide a convenient and easy-to-use remote monitoring capability.

The PTX-150 is ultra efficient in operation and is equipped with a built-in universal 115/230 VAC power supply. Housed in a compact 3RU high rack mounted case, the unit includes internal front to back cooling, optimized to maintain low PA junction temperatures. The PTX-150 is rated for 100% continuous duty at up to 60° C ambient temperature.

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PAGING TRANSMITTER

TECHNICAL SPECIFICATIONS

RF

RF Output Power	100 W \pm 0.5 dB into 50 Ω (Adjustable to 25 W)
Frequency Range	138 to 174 MHz
Key Up Time	<50 ms from TX ON signal to full power
Frequency Stability	\pm 1 ppm
External Frequency Reference	From 5 to 15 MHz at any level from -10 to 0 dBm/ 50 Ω ; External signal can be sinusoid or square wave
Spurious Performance	Conducted and radiated spurious better than 70 dBc
Adjacent Channel Performance	Better than 70 dBc

GENERAL

Operating Voltage	115/230 VAC auto select. 50/60 Hz
Operating Temperature	-15 to +60° C
Operating Humidity	0 to 95% RH @ 50° C
Modulation Scheme	DSP in conjunction with DDS
Modulation Modes	POCSAG 512, 1200 or 2400 FLEX™ 2 level and 4 level at up to 6400 bps
Modulation Characteristics	Rise and fall times default to standard settings as defined by FLEX™/POCSAG/ERMES recommendations
Modulation Rates	External clock dependant if not in POCSAG mode; Any rate up to 6400 bps
Channel Switching	Up to 16 preset channels selectable by 4 channel lines
Interface Connections	37 pin female DIN socket provided for connection to C-net, C2000, or other network interfaces; for POCSAG connection, Clock input line is not required and only TX DATA line is used
Diagnostics	Auto dial up system with Windows-based central station monitoring software; analog and digital inputs are supported by the diagnostics package; standard alarms are also made available on 37-pin DIN socket for connection to network interfaces
Carrier Offset	Up to \pm 3000 Hz in 1 Hz steps
Launch Time Delay	0 to 40 ms in 5 μ s steps

PHYSICAL

Dimensions (W x H x D)	19" x 7" x 18.3" (483 mm x 178 mm x 465 mm); rack mount and 3RU high
Shipping Weight	40 lbs (18 kg)

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