

# PULSAR

◆ 50,000 ◆

## SOLID STATE PDM AM TRANSMITTER

### Features:

- ◆ A STRONGER SIGNAL WITH 140% POSITIVE PEAK CAPABILITY AT RATED POWER LOWER POWER COST
- ◆ REDUNDANT MODULAR DESIGN AVOIDS DOWN TIME - INCORPORATES (24) 2.5KW POWER AMPS
- ◆ OUTPUT TUNING & LOADING CONTROLS FOR PERFECT MATCH TO ANTENNA
- ◆ VSWR FOLDBACK AND PROTECTION
- ◆ 3 TIMES FAULT RECYCLING
- ◆ OUTSTANDING PERFORMANCE FROM 2KW TO 55KW.
- ◆ 5 POWER LEVEL PRESETS
- ◆ SOLID STATE PDM DESIGN ACHIEVES BEST AUDIO QUALITY, BEST FREQUENCY RESPONSE AND LOWEST LEVELS OF DISTORTION

### ENERGY-ONIX QUALITY

Energy-Onix **Pulsar** transmitters are the most ruggedly-constructed, solid state AM transmitters available today. Designed for survivability in the most severe environments, **Pulsar** transmitters offer the combination of long-term reliability, unsurpassed audio performance and price economy made famous by Energy-Onix.

### UNIVERSAL PA DESIGN

The solid state design is field proven in hundreds of applications. All **medium and high power Pulsar** transmitters use identical broadband power amplifier modules. Amplifiers are fully interchangeable within any **Pulsar** transmitter. This permits a standardized spare complement to be located at one flagship station. Each 2.5KW drawer contains (4) 630 watt modules.

### DESIGNED TO KEEP YOU "ON THE AIR"

The **Pulsar** series is designed to remain "On The Air" in the unlikely event of a PA module failure. Remaining modules will continue to operate without any change in modulation capability. The transmitter contains (24) independent 2.5KW modules. In the event of a module problem, it will turn off, and the "inoperative" unit can be removed by simply sliding it out and then it can be troubleshot, returned to the factory, or can be replaced by a spare PA Drawer.



**ENERGY-ONIX**

*The Transmitter People*

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# PULSAR ..... SOLID STATE PDM AM FOR THE *REAL WORLD*

We know that broadcasters demand reliability along with impressive features. To keep you "ON THE AIR", every **Pulsar** incorporates extensive surge suppression and overload protection. A full range antenna line coupler is standard for less-than-ideal antenna systems. A simple, reliable conventional brute-force power supply is used with the hot-plugable power amp modules. Conservatively rated and cool running, the choice is **Pulsar -- *field proven by real broadcasters in the real world.***

## TECHNICAL AND MECHANICAL SPECIFICATIONS

<b>Configuration:</b>	Twenty-four independent power modules with integral cooling fans.	<b>Audio Input:</b>	600 ohms active balanced, -10 dBm to +10 dBm
<b>Power Output:</b>	50,000 watts (rated) 55,000 watts (capable)	<b>Power Input:</b>	198-460 volts (specify), 3-Phase, 50/60 Hz (specify), Single phase available by special order
<b>Power Control:</b>	Automatic via five (local or remote) selectable levels. 1 through 4 are pre-sets, #5 is front panel adjustable.	<b>Power Variation:</b>	± 10% voltage ± 2 Hz frequency
<b>Frequency Range:</b>	530 KHz to 1700 KHz	<b>Power Factor:</b>	0.9 or better (.92 typical)
<b>RF Output:</b>	50 ohms, 3 1/8" EIA	<b>Overall Efficiency:</b>	76%
<b>Maximum VSWR:</b>	1.5:1	<b>Power Consumption:</b>	66,000 W (0% modulation) 99,000 W (100% modulation)
<b>Modulator Type:</b>	Pulse Duration (PDM)	<b>Metering:</b>	Forward/Reflected Power, DC Current, DC and AC Voltage
<b>Audio Freq. Resp:</b>	± 0.5 dB, 30-10,000 Hz	<b>Remote Control:</b>	Transmitter ON/OFF, Power Level Selection, Overload Reset Telemetry Metering Samples
<b>Audio Dist. (THD):</b>	< 2% (95% Mod, 400 Hz)	<b>Ambient Temp.:</b>	-10°C to 50°C
<b>Mod. Capability:</b>	133% positive peak	<b>Humidity Range:</b>	0-95%
<b>Carrier Shift:</b>	<2% Max. (1% Typical)	<b>Altitude:</b>	0-4,000m (0-13,000 ft.)
<b>RF Harmonics:</b>	-80 dB or more below rated output	<b>Size:</b>	Five cabinets, combined dimensions 72 3/4" H x 169 1/2"W x 37 1/4" D
<b>Spurious Outputs:</b>	-80 dB or more below rated output	<b>Weight:</b>	9,500 lbs.
<b>Noise and Hum:</b>	-60 dB or better at 100% Mod		
<b>Freq. Stability:</b>	± 5 Hz		