# **ES SERIES**

TRANSMITTERS & TRANSLATORS

FM 300ES FM 500ES FM 1050ES



## FM BROADCAST TRANSMITTERS



Frequency stability is ensured by using Direct Digital Synthesizer (DDS) with a highly stable crystal oscillator reference.

The series incorporates a complete, yet simple control system designed for long, trouble-free service. Digital front panel metering indicates forward and reverse RF power, deviation, final output volts and amps. The frequency is easily set from the front panel. Over-temperature protection and VSWR fold back protect the unit by automatically reducing power to a safe operating level.

Meets or exceeds all FCC standards. The FM300ES is FCC type certified for use on LPFM stations.

#### **KEY FEATURES**

- Totally solid-state
- Wide range input 88 to 264 VAC
- Frequency agile from 87.7 to 108 MHz
- True proportional (VSWR) fold back
- Built-in stereo generator
- Built-in FSK ID
- Front panel metering
- Remote control interface
- Rack mountable
- Compact chassis
- Designed and manufactured in the USA



The ES Series is conveniently designed to be used as an Exciter, a stand alone low power transmitter, or when combined with a receiver, can serve as a translator.

#### **BUILT TO LAST**

Robustly designed to withstand the harshest environments where ambient heat and humidity can render products ineffective.

Switch mode power supplies provide consistent performance even when there are frequent power outages and voltage fluctuations making stressful demands on products that depend on electric power.

These transmitters are perfect for small markets as a main analog transmitter, as well as for LPFM applications and can also be used as an emergency or back up at the largest stations.

MODEL SPECIFICATIONS	FM300ES	FM500ES	FM1050ES
RF Power Output	30 W - 330 W	50 W - 550 W	50 W - 1200 W
Packed Weight	20	22	24
Dimensions	19"x12"x 3U	19"x12"x 3U	19"x16"x 3U
Power Requirements	88 to 264 VAC	88 to 264 VAC	180 to 264 VAC

COMMON SPECIFICATIONS		
Frequency Range	87.7-108 MHz	
Audio Input Impedance	600 Ohms	
Audio Input Level (composite)	1.25 volts RMS (3.50 volts peak-to-peak) for +/- 75 kHz deviation	
Audio Input R & L Stereo Generator	-10 dBm	
Pre-emphasis	75 (or 50 µS to order)	
Harmonic Distortion	less than 0.1%	
Signal to Noise Ratio	>70 dB RMS	
RF Output Impedance	50 Ohms	
Output Connector	N-Type Female	
Harmonic Attenuation	Meets or exceeds FCC requirements	
Frequency Response (composite)	20 Hz—15 (90) KHz	

### YOUR MESSAGE MATTERS. PTEK DELIVERS.