

E Series High Power 3 to 5kw FM Transmitters

The Crown E Series High Power by Ecreso is the culmination of 56 years of designing, building and delivering reliable high-quality broadcast systems while incorporating the latest technologies.

Available currently in 3, 4 and 5kW output power levels, The E Series High Power delivers an excellent cost/watt ratio in the industry and, over the lifetime of the transmitter, has the lowest heat dissipation available on the market today. The amplifier redundancy ensures that, even if an entire amplifier is lost, you will still have a very strong and usable on-air signal.

A crystal-clear signal is achieved using the ECRESO FM 100W exciter and its direct-to-channel digital modulator. The system can be fully controlled and monitored through the built-in Web interface and SNMP protocol, and several innovative features such as a digital stereo encoder, dynamic RDS encoder, automatic program input failover and FM Limiter can be incorporated. All modules used in Ecreso high power transmitters are designed with a common approach and are easy to

Features:

- *Direct-to-channel Digital Modulator*
- *Stereo Encoder built-in*
- *Multiple Analog and Digital Inputs*
- *Silent Detection and Intelligent Failover*
- *TCP/IP with Web Browser and SNMP*
- *Dynamic RDS Encoder*
- *Advanced Metering Interface*
- *GPIO's*



E-Series Configurations (Rack Optional)

FME3000 (total 11 Rack Units and 167 lbs)

- FME100 Exciter/Driver
- 2 x FME1500 Amplifiers
- Combiner

FME4000 (total 11 Rack Units and 175 lbs)

- FME100 Exciter/Driver
- 2 x FME2000 Amplifiers
- Combiner

FME5000 (total 14 Rack Units and 219 lbs)

- FME100 Exciter/Driver
- 3 x FME2000 Amplifiers
- Combiner

- ◆ **Redundant**
- ◆ **Reliable**
- ◆ **Robust**
- ◆ **Easy to Use**

Crown E Series Transmitters

Features and Specifications

Warranty— 3-Year standard

Overall Efficiency—Up to 74%

Frequency Range—87.5 to 108 MHz in 10 kHz steps

Inter-modulation Distortion—0.02% Typical

FM S/N Ratio—>80dB

Typical AM Noise 65dB RMS (20W/100W)
75dB RMS (>350W)

Bandwidth—0.05 dB

Stereo Separation—65 dB

Preemphasis—0, 50 or 75 microseconds adjustable

Audio Inputs—Analog and/or XLR up to 192 kb/s @ 16, 24,32 bits

MPX/SCA Inputs—2 BNC Type

Approvals—FCC Certified up to 1kW, FCC Approval >1kW,
Industry Canada and CE

Stereo Encoder—Built-In

Silent Detection—Yes, with Built-In failover

Remote Control—Yes, via Web Server, SNMP, RS 232C, GPIO

RDS Encoder—Yes, Dynamic

FSK Idler—Yes, adjustable from front panel

Limiters—Yes, with MPX power control (ITU-R 412)

Metering and Reporting—available via internet or network

Redundancy—Yes, N+1, 1+1

Antenna Input —1 5/8th EIA

Digital Modulator—”Direct to frequency” digital modulator for ultra clear audio quality.

Advanced Measurement Interface—Allows the end user to consult a real-time dashboard that provides an at-a-glance overview of the transmitter performance. Built-in instrumentation enables detailed analysis of the RF Spectrum, MPX Spectrum, Audio Spectrum and Peak Meters. All displayed simultaneously in a clear and easy to understand format. Available with full system.

TCP/IP: Web + SNMP Interface—Added as option to base E Series transmitters, the TCP/IP communication board offers an intuitive Web-based interface for remote monitoring and control, and support for the SNMP protocol including access to MIB files. In addition, the TCP/IP board supports capabilities like Advanced Measurement Interface and Expert Maintenance Reporting. Available with full system.

Dynamic RDS Encoder—The built-in RDS Encoder offers an exceptional value to the end user and offers all the functionality of external products for a fraction of the price. Used as the main Encoder or as a back up to your main Encoder thanks to SCA input loss detection plus automatic internal RDS activation. Supports PI, PS, TP, TA, MS, PTY, PTYN, DI, AF, RT with easy set up via RS232 software or Web. Available with full system.

Best-in-Class Crown Service and Support—The E series units will be serviced and supported with all the same contacts and phone numbers and email addresses that you currently use. Service and Support is available 24/7 365 days per year. Sales will be through our normal sales network so contact your favorite Crown Broadcast dealer for pricing and availability.

Powered by Ecreso—Crown Broadcast is excited to be the exclusive source of Ecreso Transmitters in the United States. Ecreso is part of WorldCast Systems headquartered in Bordeaux, France. WorldCast Systems also owns APT, a well known manufacturer of IP Audio Codecs, and Audemat, a well known highly respected producer of RDS and test and measurement devices.