



## *Classic Line*

### *FM30, FM150, FM300, & FM600*

- 5-Year Warranty, *best in the industry*
- Best-in-Class Reliability, Efficiency, & Service & Support
- Optional Built-in Audio Processor for Transmitter Applications
- Optional Built-in DSP Based Receiver for Translator Applications



The Crown Classic line is a high-quality, robust, reliable FM transmitter system designed for years of 24/7 trouble-free. Many of our units are sent back for repair for the 1<sup>st</sup> time after 20 plus years of continuous service and often because of lightning or power surges, not product failure.

The Classic Line is available in models from 30 watts to 600 watts in three configurations. The E model (suffix not to be confused with the Ecseso E-Series) is the basic exciter with composite input only. The T model includes a built-in audio processor and stereo generator allowing it to operate as a “suitcase” transmitter in a box. The R model is the original “Translator” which utilizes a DSP that incorporates advanced algorithms to provide world-class receiver performance. Tuner parameters have been optimized by experts in FM reception to provide the best overall performance, eliminating the need for adjustments.

Reliable operation is still the major design criterion in all Crown Broadcast products. Our classic units function with less wear and improved life span. A high-quality switching power supply for superior operation runs cooler and weighs less than a few years ago.

## Classic FM30, FM150, FM300 and FM600 watt

Frequency Range .....	87 to 108MHz (Japanese frequency available 74 to 90MHz)
Frequency Setting .....	Front Panel
RF-Output .....	50 Ohms unbalanced
VSWR .....	2.0:1 Maximum with automatic fold-back at higher VSWR
Frequency Stability .....	Better than +/- 2kHz over operating range
Modulation Type .....	Direct frequency modulation of carrier (typical +/-200Hz)
Modulation Indication .....	LED indicators with peak indicators
FM S/N Radio (FM noise).....	Better than 60dB (70 to 80 dB typical)
Asynchronous AM S/N Ratio .....	Better than 50dB referenced to 100 modulation @ 100Hz de-emphasis
Synchronous AM S/N ratio.....	Better than 50dB with 100% modulation (typical >60dB)
RF Harmonics/Spurious Products.....	Better than -70dB (-80dB typical)
RF bandwidth .....	+/-120 kHz, better than -25dB, +/-240 kHz better than -35dB
Temperature Range .....	0 to 50 degrees C
Humidity Range .....	0 to 80% @ 20 degrees C (noncondensing)
Maximum Altitude .....	10,000 ft (3,000m)
AC Power .....	100 to 120 or 220 to 240 AC +/-10%, 50 to 60Hz
Power Factor.....	Greater than 97% (lagging)
DC power .....	36 to 72VDC (FM30/48VDC, 150/60VDC, 300/72VDC)
Power consumption 30, 150, 300 and 600 .....	100VA, 420Va, 700VA and 1.6KVA
Regulatory Notification for FCC part 73 and 74 .....	Meets FCC Requirements
RF output connector .....	Standard type N, 50 Ohm
Chassis Dimensions FM30, FM150 and FM300 .....	5.3 x 16.5 x 17.5 inches (13.4 x 41.9 x 44.5 cm)
Chassis Dimensions FM600.....	12.75 x 23.5 x 24.5 inches (32.38 x 59.69 x 62.2cm)
Weight FM30, 150, 300 and FM600 .....	21lbs, 25lbs, 25lbs and 38lbs
Heat output FM30, 150, 300 and 600 .....	100 BTU, 200 BTU, 400 BTU and 975 BTU
Warranty .....	5-Years <i>best in the industry</i>

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### Wide Band composite operation

- Composite Inputs.....	1
- Composite Input level .....	3.8 Vp-p for +/-75KHz deviation
- Composite total harmonic.....	< 0.05%, 50Hz to 15 Hz distortion + noise (0.03 typical)
- Sub-carrier inputs .....	3
- Sub-carrier input level .....	3.8 Vp-p for +/-7.5KHz deviation
- Sub-carrier amplitude response.....	+/-0.3 dB, 40Hz to 100KHz

### Monaural operation w/ built in Audio Processor

- Audio Input impedance .....	50 Kohms bridging, balanced, optional 600 ohm
- Audio Input level .....	3.8 Vp-p for +/-75KHz deviation
- Audio Frequency response .....	Conforms to 75uS pre-emphasis curve for +/-0.25 dB, 50Hz to 15KHz
- Pre-emphasis.....	Selectable 50, 75 uS or flat

### Stereo Operation w/ built in Audio Processor and Stereo Generator

- Audio Input impedance .....	50 Kohms bridging, balanced, optional 600 ohm
- Audio Input level .....	-10 dBm to +10 dBm selectable for 75KHz deviation @400Hz
- Frequency response.....	+/-0.3 dB, 50Hz to 10KHz, +/-1.0dB, 10Hz to 15KHz
- Total Harmonic distortion + Noise .....	0.4% or less @ 15KHz (0.2 typical)
- Stereo Separation .....	Better than 40 dB, 50Hz to 15KHz
- Linear Cross Talk.....	Main to sub and sub to main, -40 dB or better, 50 Hz to 15 KHz
- 38 KHz Sub-carrier suppression.....	>60dB
- Pilot Stability.....	+/- .5 Hz @ 9% modulation