



FM5

- **5 Watts & a 5-Year Warranty**
- **Best-in-Class Reliability & Efficiency**
- **Service & Support**
- **Built-in Stereo Generator & Limiter**
- **Crown Sound in a 1RU**

Front Panel



Back Panel



The Crown Broadcast FM5. A high quality, robust reliable FM transmitter system designed for years of 24/7 trouble-free operation for your unique venue. Can be adjusted from 5 watts down to 0.

The FM5 includes a built-in stereo generator. The same quality design used in our Classic Transmitters for FM Radio broadcasting. Unit can be adjusted from stereo to mono.

Also included is a limiter which makes sure the FM5 stays within the bandwidth and will not splatter into other channels.

Reliable operation is still the major design criterion in all Crown Broadcast products. All of our units are designed and built in America.

FM5

Frequency Range	87 to 108MHz
Frequency Setting.....	Front Panel
Frequency Stability.....	Better than +/- 2kHz over operating range
Modulation Type.....	Direct frequency modulation of carrier (typical +/-200Hz)
FM S/N Ratio (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 AC +/-10%, 50 to 60Hz
Power Factor.....	Greater than 97% (lagging)
RF output connector.....	Standard type N, 50 Ohm
Chassis Dimensions	11 x 16.5 x 1 inches (27.94 x 41.91 x 2.54 cm)
Weight	6 lbs
Heat output	50 BTU
Warranty.....	5-Year

Stereo Operation w/ built in Stereo Generator

- Audio Input impedance.....	50 Kohms bridging, balanced
- Audio Input level.....	-10 dBm to +10 dBm selectable for 75KHz deviation @400Hz
- Frequency response.....	+/-0.3 dB from 50Hz to 10KHz, +/-1.0dB from 10Hz to 15KHZ
- Total Harmonic distortion + Noise.....	0.4% or less @ 15KHz (0.2 typical)

**** FM5 is FCC SDoC approved (Supplier Declaration of Conformity Title 47, 2.906). It can be turned down to 1 watt and if used with the antenna included, will *comply* with Part 15 transmission requirements. Please be aware that the FCC requires Part 15 Transmitters to be approved by the FCC. This transmitter does NOT have Part 15 approval and could be subject to heavy FCC fines for operating without a license. If using above 1 watt, the FCC requires either a STA (Special Temporary Authorization) or the normal FM broadcast license.**

If using to transmit and *comply* with Part 15 requirements, the customer must make sure that they are using a frequency that is open. Do NOT use adjacent to another current FM frequency in use because it could easily interfere. It is recommended that the customer listen to the open frequency on the outskirts of where they plan to broadcast and then listen again when transmitting to be sure their transmission is not outside the 250 μ V/m at 3 m required for Part 15. This transmitter will allow the customer to turn down the power to less than 1 watt in case it is needed.

Crown Broadcast
2524 Toledo Rd
Elkhart, IN 46516
574-262-8900
fmsales@irec1.com