GATES / fm 3G
The soundest sound in FM
3,000 watt FM transmitter
www.americanradiohistory.com
All New Gates FM-3G 3 KW Transmitter

 Conservatively Rated at 3,000 Watts

Developed specifically for transmission of 3 kilowatts in both the horizontal and vertical plane under FCC rules for Class A stations, this superb new FM transmitter offers full power coverage for FM broadcasters.

LONG LIFE—Tops in conservative design and economical operation, the FM-3G uses the modern ceramic 4CX5000A power tube providing long-term useful life. This tube, now standard for 5 KW FM transmitters, coasts along in 3 KW service assuring long life and maintenance-free operation.

GREATER RELIABILITY—This 3000 watt transmitter—latest in the full line of Gates FM transmitters—incorporates solid-state rectifiers as standard equipment contributing directly to over-all greater reliability.

COMPACT—The FM-3G occupies only 42x32½ inches of floor space (less than nine square feet) and is completely self-contained except for the top mounted tee notch and harmonic filter.

FULL COLOR PERFORMANCE—Assuring full color sound fidelity from 30 to 15,000 cps., the Gates FM-3G delivers a new world of performance and sound. The Soundest Sound in FM Broadcasting can be yours with this, the newest 3 KW FM transmitter.

FURTHER INFORMATION—For further information on a full power Class A FM station with the new Gates FM-3G transmitter, contact your Gates sales engineer or Gates Radio Company, Quincy, Illinois.

Specifications:

POWER OUTPUT: 1 to 3 KW
FREQUENCY RANGE: 88-108 Mc.
RF OUTPUT IMPEDANCE: 50 ohms.
RF OUTPUT CONNECTOR: 3½” EIA flange.
FREQUENCY STABILITY: ± .001%.
TYPE OF MODULATION: Cascade with direct crystal control.
MODULATION CAPABILITY: ± 100 kc.
POWER INPUT: 208/240 volts. 3 Phase, 50/60 cycles. Crystal oven requires 115 volts, 50/60 cycles, single phase.
INPUT AC POWER REQUIREMENT: 6.5 KW @ 240 V, 500 W @ 115 V.
TUBES: (Exciter section) (6) 6A6S, (3) 6J6, (3) 6201, (3) 7025, (2) OA2 and (1 each) 12AX7, 6AQ5, 6080, 6360, 5AR4/GZ-34.
(Transmitter section) (1 each) 4CX250B, 4CX5000A.
POWER SUPPLY: Solid state.
MAXIMUM ALTITUDE: 7500 feet.
AMBIENT TEMPERATURE RANGE: -20 C to +45 C.
MAXIMUM VSWR: 1.7 to 1.
OVER-ALL CABINET SIZE: 42” wide, 78” high, 32½” deep. (NOTE: 32¾” is over-all depth dimension. With rear door and front door handles removed, minimum depth is 29¼”.)
FRONT DOOR SWING: 21½”.
FINISH: Two-tone aqua mist, trimmed in black and brushed aluminum.
WEIGHT AND CUBAGE: Packed (domestic) 1425 lbs., (export) 1550 lbs., cubage 117.

FM-3G MONOAURAL TRANSMITTER
AUDIO INPUT IMPEDANCE: 600 ohms.

FM-3G STEREO TRANSMITTER
AUDIO INPUT IMPEDANCE (left and right): 600 ohms.
AUDIO INPUT LEVEL (left and right): ± 5 dbm.
DISTORTION: 1% or less, 50 to 15,000 cps.
FREQUENCY STABILITY (10 kc. pilot): ± 1 cps.
PILOT OSCILLATOR: Crystal controlled in 60° C oven.
NOISE: -60 db.
PERCENT MODULATION OF MAIN CARRIER BY PILOT: 8 to 10%.
CROSSTALK (sub-channel to main channel): 40 db. or better.
STEREO SEPARATION: 30 db. typical.
CROSSTALK (main channel to sub channel): 40 db. or better.
SCA PROVISIONS: Space provided for 41 kc. and 67 kc. sub-channel generators.
ADDITIONAL TUBES: (2) 6201/12A7; (5) 7025/12AX7; (2) 68Y6; (1 each) 6AK5 & 6AK6. Power supply is solid state.

ORDERING INFORMATION
FM-3G: 3 KW Transmitter, one set of tubes, crystal and oven, silicon rectifiers, tee notch and harmonic filters
FM-3G: 3 KW Transmitter, one set of tubes, one crystal with oven, silicon rectifiers, tee notch, harmonic filters and M-6146 stereo generator (state frequency)
Spare 100% tube kit for FM-3G transmitter TK-408
S.C.A. sub-carrier generator 994-6160-001