THE GATES® SERIES

1, 2.5, 5 KW SOLID STATE MW TRANSMITTERS

THREE AFFORDABLE MW TRANSMITTERS WITH ONE PROUD NAME

HARRIS

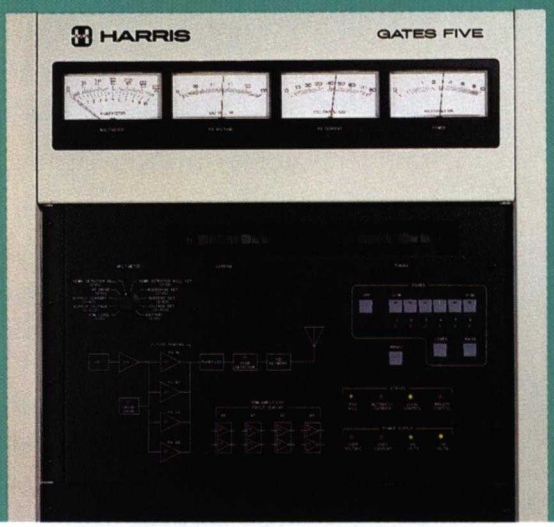
GATES ONE
100–1100 WATTS

GATES TWO
250–2750 WATTS

GATES FIVE
500–5600 WATTS

The Gates Series: Traditional value, today's superb MW technology.

- Reliable 100% solid state design means lower maintenance costs and NO tube replacement.
- Engineered for superior efficiency to cut power costs.
- Patented Polyphase Pulse Duration Modulation for high positive peak capability and superb audio performance.
- Simple, cost-effective controller uses rugged, dependable discrete logic components.
- ColorStat™ front panel with red LEDs and signal flow diagram streamlines operation and trouble-shooting.
- Six adjustable power levels standard to accommodate PSA/PSSA requirements.
- Remote control inputs compatible with both open collector and dry contact remote systems.
- Optional second RF exciter board can be switched locally or automatically.
- Standard T network provides tuning for real-world loads.
- Available in 50 or 60 Hz models and main/alternate configurations. Meets IEC 215 requirements.



STRAIGHTFORWARD DIAGNOSTICS
allow Gates Series operators to verify proper transmitter functioning with one glance. The ColorStat front panel includes a clear, easily readable signal flow diagram with red LEDs located at all key points.

The Gates Series lives up to its name with advanced fourth-generation solid state MW technology and outstanding value.

THE GATES NAME

is one of the oldest and proudest in radio—we couldn't put it on just any transmitter. The Gates Series had to deliver exceptional transmitter value by living up to established Gates values—simplicity, reliability, durability and performance. After all, 1946-vintage Gates transmitters are still on the air to remind us what the name stands for.

MEETING STANDARDS

this high isn't easy. But these three MW transmitters pass the test with flying colors, thanks to 100% solid state technology and patented Harris innovations like Polyphase Pulse Duration Modulation. Designed for 130% positive peak capacity and 100% sine wave modulation, the Gates Series is built to deliver great sound well into the next century.

Value is the heart of the Gates tradition, and the Gates Series is no exception. As in all transmitters we build, a built-in multimeter is standard equipment. So is output tuning. The remote control interface is compatible with the more modern open collector (TTL) systems as well as dry contact (relay-type) remote controls. You'll encounter no unexpected "hidden costs" when you purchase one of today's affordable Gates transmitters.

GATES TRANSMITTERS
have always been easy to own and operate. The Gates Series is no exception. Tube neutralization and cavity adjustment are problems of the past, thanks to solid state power amplifiers. The six standard power levels accommodating most PSA/PSSA power levels* are independently set from the front panel and may be varied ± 10% by remote control. Power levels can be selected by any remote control that has momentary closures, or automatically by using an optional external clock.

Automatic power cutback circuitry protects your Gates transmitter against VSWR overload conditions. The transmitter recycles three times at its preset operating power, then steps to the next lower operating level. The transmitter remains on the air at the highest power level consistent with safe operation.

AC power interruptions will cause minimal interference with your Gates transmitter's operation—the transmitter restarts automatically and instantly returns on the air. Operation and status indicators are retained in the controller's battery-backed-up memory, even during long interruptions in AC service.

SIMPLE OPERATION AND MAINTENANCE
is an important part of the Gates legacy, and one that we definitely haven't overlooked in the Gates Series. A standard T network allows adjustment to accommodate 1:1 matching loads for 1.5:1 VSWR.

The ColorStat front panel includes an easily readable signal flow diagram with red LEDs to indicate the exact location of a fault condition. Four large analog meters provide additional operation and status information. With one glance, an operator can be assured of proper transmitter operation.

Should repairs become necessary, you'll find that all parts are easily accessible. And this controller can be its own "spares kit." The simple design concept uses off-the-shelf identical parts, so components can be swapped to more essential positions in an emergency. 100% solid state Gates circuitry means you'll never worry about tube failure or replacement costs again ■

* For extremely low power levels, an external attenuator is available.

Power Levels

Gates One:
100-1100 watts

Gates Two:
250-2750 watts

Gates Five:
500-5600 watts

Available in main/alternate or combined configurations, 50 or 60 Hz.

I.S. EN ISO 9001

HIGH EFFICIENCY DESIGN — Gates transmitters cut power costs with typical PA efficiency of over 85% and overall efficiency as high as 72%

OUTPUT TUNING CONTROL — A full T network provides matching capability for real-world loads, with adjustment to accommodate 1:1 matching for loads up to 1.5:1 VSWR

STRAIGHTFORWARD CONTROL — The discrete logic controller includes six independently adjustable power levels to accommodate most PSA/PSSA requirements

FRONT PANEL STATUS INFORMATION — An easy-to-read signal flow diagram, status LEDs and large eye-level analog meters let operators read transmitter status at a glance

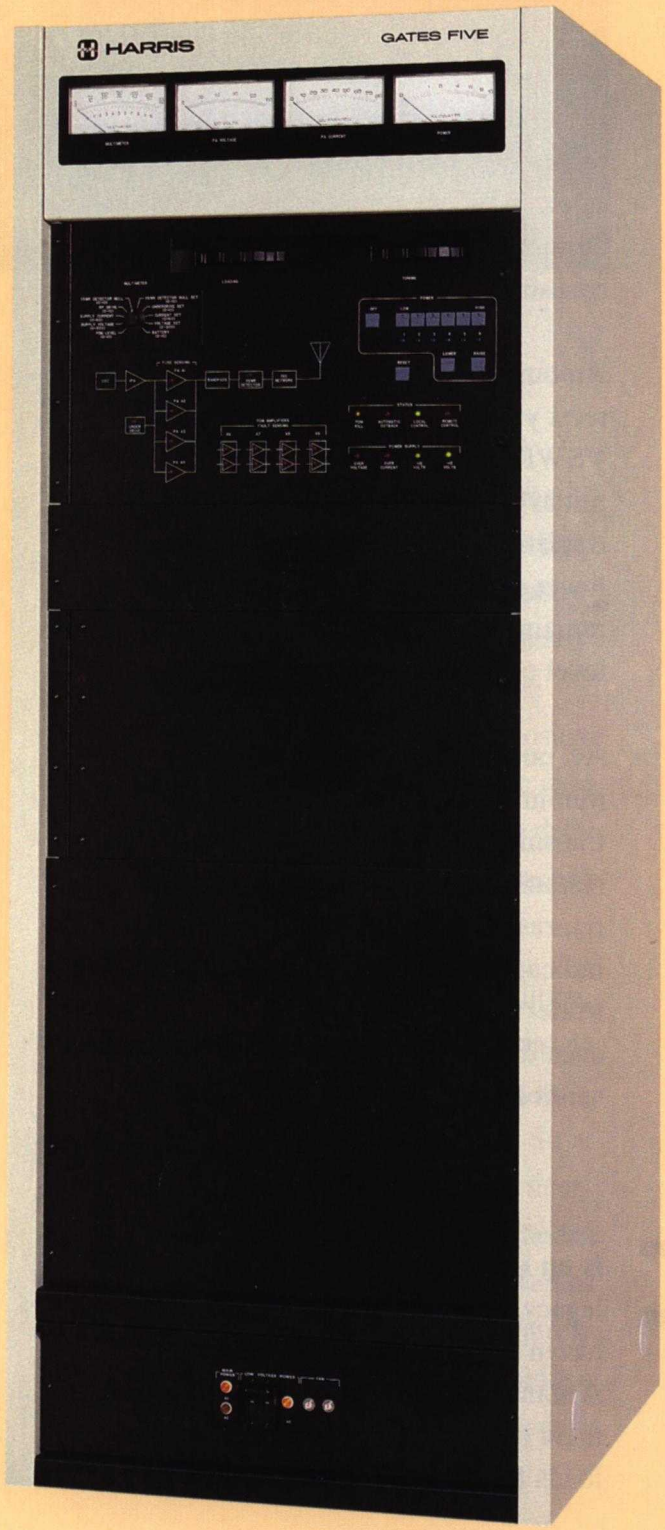
COMPREHENSIVE REMOTE CONTROL INTERFACE — A central panel offers easy connection to remote controls or other external equipment. Remote control status outputs are provided for all six power levels, overloads and automatic power cutback

POLYPHASE PULSE DURATION MODULATION — Harris' patented PPDM technology minimizes distortion and overshoot. So you get clean, crisp "ear-grabbing" sound and high average modulation levels for better reach

BANDPASS OUTPUT NETWORK — Provides exceptional mono and stereo performance with superior amplitude and phase linearity for low distortion and minimal overshoot. The network also helps protect against lightning

INTELLIGENT MECHANICAL DESIGN — Helps cut maintenance time and costs with modular construction techniques and easily accessible socketed PA MOSFETs

INNOVATIVE AIR HANDLING — "Chimney design" air handling—a Harris exclusive—directs the main air flow over the module heat sinks, not into the transmitter cabinet. Dust infiltration is kept to a minimum, and so is cleaning time



Harris Broadcast—

Serving broadcasters

in more than 150

countries

Since 1922, Harris has set the pace worldwide for the broadcast industry. Our more than 50 major "firsts" in RF technology have literally changed the way the world sees and hears itself, and our innovations have extended to customer support as well. We pioneered around-the-clock technical service and parts, and we sponsor the world's only full-time Broadcast Technology Training Center.

Beyond radio and television transmission products we manufacture in our ISO 9001-registered plants, we are the world's leading supplier of radio studio equipment. We currently distribute more than 10,000 different products from over 350 manufacturers, including many exclusive items. We also are a leader in the design and integration of custom studio, production/post-production, satellite communications, and RF systems for fixed and mobile applications.

You can count on us for any level of support you desire, from a single piece of equipment to a fully integrated broadcast system. We welcome the opportunity to be of service. ■

HARRIS

Contact Information

Harris Corporation, Broadcast Division
3200 Wismann Lane, P.O. Box 4290
Quincy, Illinois 62305-4290 USA
USA.: 217-222-8200; FAX: 217-224-1439
International: 217-222-8290; FAX: 217-224-2764