

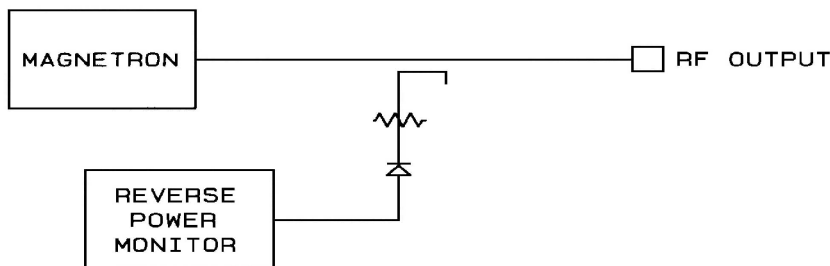
Model 337 Magnetron Transmitter

0.001
DUTY

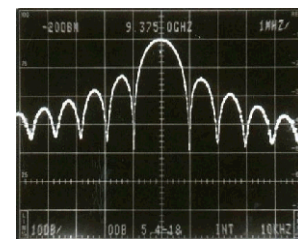


FEATURES:

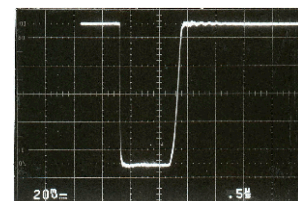
- Continuously Variable Pulse Width
- Magnetron Filament Program
Regulated Filament Voltage
- Complete Magnetron Protection
Arc Energy Limit
Magnetron Over Duty
Filament Voltage High / Low
HVPS Over Current
Input PRF, PW, and Duty Limit
Output Reflected Power
Over Temperature
- Custom Requirements
- Modular Construction
- Four Line Display
Operating Mode
HVPS Voltage and Current
Magnetron Average Current
Filament and Operate Time
- Front Panel Controls
Power On / Off
Operate
Standby
Fault Reset
Local / Remote



The Model 337 Power MOSFET Modulator, Magnetron Transmitter is designed to operate magnetrons up to 500 kW. The continuously variable pulse width range is 0.15 to 2.0 microseconds, or greater, at PRF up to 5 kHz. Maximum pulse width is determined by the pulse storage capacitor value and the magnetron capability. The Model 337 Modulator is not damaged by magnetron arcs. Arc energy to the magnetron is limited which actually helps to clean-up an arcing magnetron. The Model 337 Modulator is a proven, reliable design which fills a need for an inexpensive, versatile transmitter with excellent RF output fidelity. The modulator HVPS is a very efficient, duty cycle regulated DC to DC converter design. Both HVPS and modulator contain modular plug-in subassemblies. A higher power version of the Model 337 (designated Model 527) is available for operation of magnetrons up to 1MW. Photographs of the output spectrum and



Spectrum

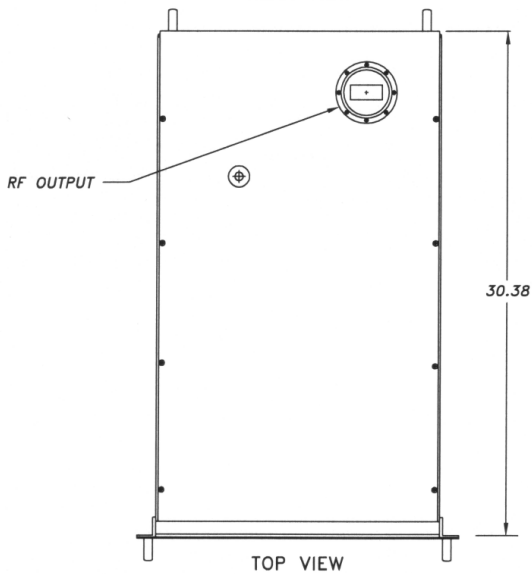
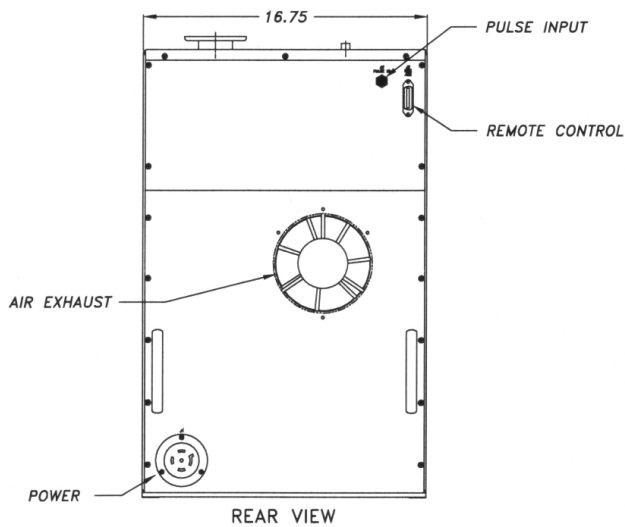
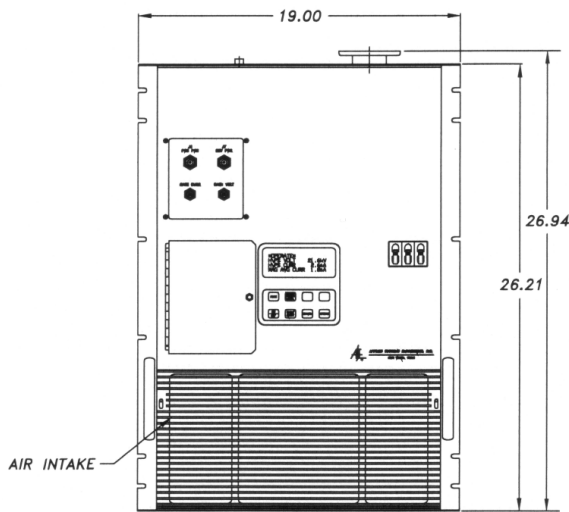


20mV / Division

0.5 us / Division

SPECIFICATIONS

Frequency Range	Determined by Magnetron
Output Power	Up to 500 kW
Duty Cycle	0.001
Pulse Width Range	0.15 to 2.0 us
PRF Range	0 to 5 kHz
RF Rise Time	100 ns, Nominal
RF Fall Time	250 ns, Nominal
RF Pulse Droop	0.5 dB, Maximum
Delay, Input to RF	1.0 us, Maximum
Amplitude Variation	0.1 dB, Maximum Pulse to Pulse
Input Pulse	5 Volts into 50 ohms
Input Voltage	3-Phase 208 VAC ± 10%, 60 Hz
Operating Temperature	0 to 50°C
Weight	530 lbs, Nominal
Dimensions	47.5x24x36 (in.)
Cooling	Internal Forced Air



Standard Equipment

- Reverse Power Monitor
- Filament / Operate Time
- RS-232/422 Remote Interface

Options

- Internal PRF Generator
- RF Sample Ports
- IEEE-488 Remote Interface
- Other Primary Power
- RF Connectors on Front Panel
- Output Isolator
- Servo Tuning



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