

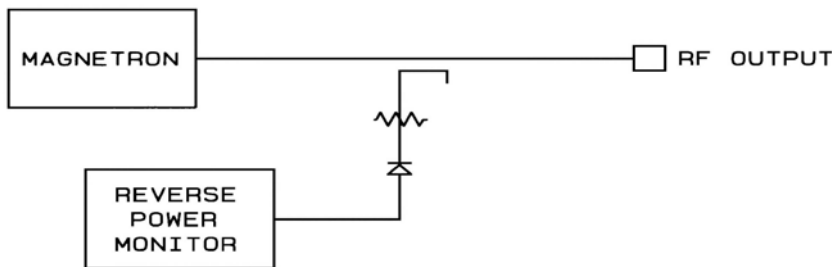
Model 327 Magnetron Transmitter

0.001
DUTY

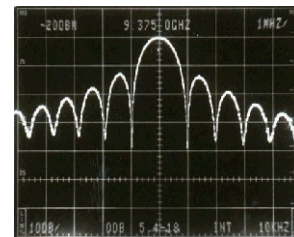


FEATURES:

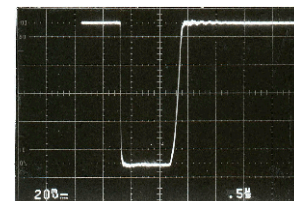
- Continuously Variable Pulse Width
- Magnetron Filament Program
Regulated Filament Voltage
- Complete Magnetron Protection
Arc Energy Limit
Magnetron Over Duty
Filament Voltage High / Low
HVPS Over Current
Input PRF, PW, and Duty Limit
Output Reflected Power
Over Temperature
- Custom Requirements
- 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 327 Power MOSFET Modulator, Magnetron Transmitter is designed to operate magnetrons up to 150 kW. The RF pulse is continuously variable, and the pulse width is determined by the magnetron capability. The Model 327 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 327 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. A higher power version of the Model 327 (designated Model 337) is available for operation of magnetrons up to 250 kW. Photographs of the output spectrum and detected RF are included.



Spectrum

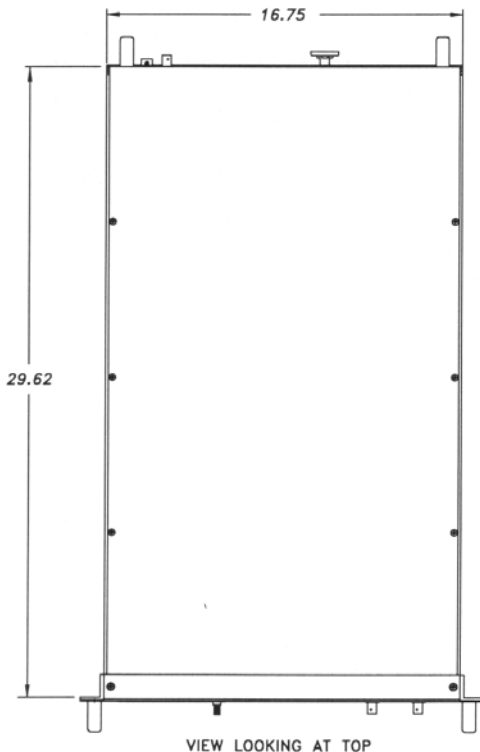
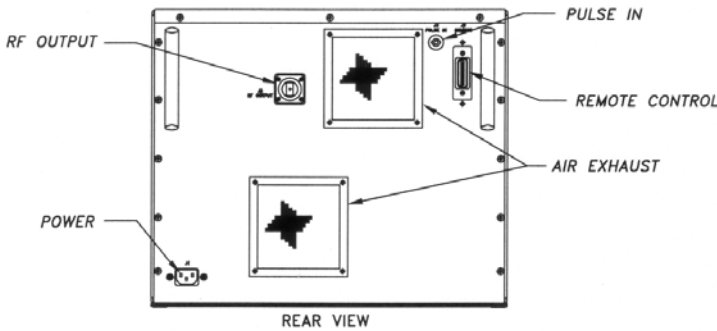
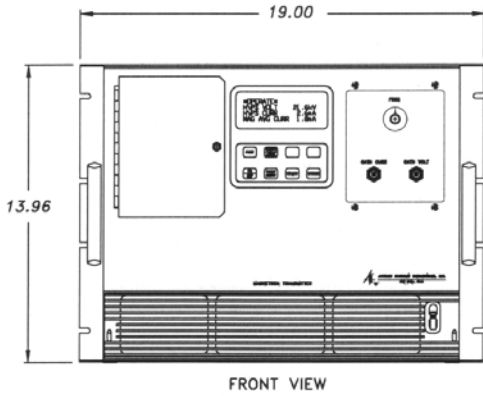


20mV / Division

0.5 us / Division

Model 327 Transmitter SPECIFICATIONS

Frequency Range	Determined by Magnetron
Output Power	Up to 150 kW*
Duty Cycle	0.001
Pulse Width Range	0.15 to 1.0 μ s
PRF Range	0 to 4 kHz
RF Rise Time	100 ns, Nominal
RF Fall Time	150 ns, Nominal
RF Pulse Droop	0.5 dB, Maximum
Delay, Input to RF	1.0 μ s, Maximum
Amplitude Variation	0.1 dB, Maximum
	Pulse to Pulse
Input Pulse	5 Volts into 50 ohms
Input Voltage	120/220/240 VAC
	\pm 10%, 50/60 Hz
Operating Temperature	-20° to +50°C
Weight	120 lbs, Nominal
Dimensions	19.25x19x26 (in.)
Cooling	Internal Forced Air
	<i>*Power and performance determined by Magnetron</i>



Standard Equipment

- Filament / Operate Time
- Remote Power On/Off
- Reverse Power Monitor
- Ethernet Remote Control (TCP/IP or UDP/IP)

Options

- Internal PRF Generator
- Forward and Reverse RF Sample Ports
- RS-232/422 or IEEE-488 Remote Control
- Other Primary Power
- Rack Mount Slides
- RF Connectors on Front or Rear Panel
- Output Isolator
- Manual or Servo Tuning
- Outdoor Enclosure
- Conformal Coated PC Boards
- Custom Requirements



APPLIED SYSTEMS ENGINEERING, INC.

7510 BENBROOK PKWY, FORT WORTH, TEXAS 76126
TELEPHONE: (817) 249-4180 FAX: (817) 249-3413

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