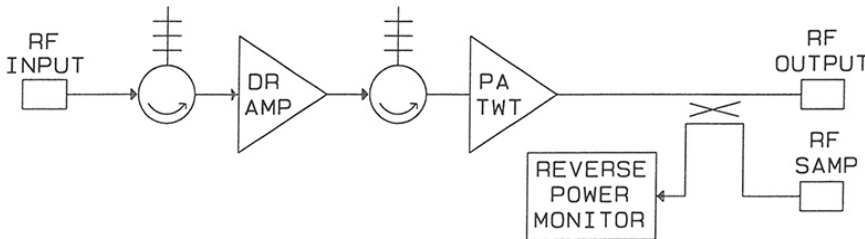


# Model 567 Pulse/CW TWT Amplifier



## FEATURES:

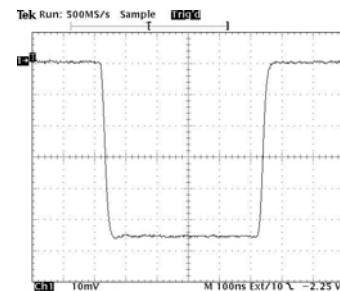
- Frequencies from 2-18 GHz  
Octave and Multi-Octaves Available
- Low Spurious Outputs
- Phase and Amplitude Stability
- RF Output Fidelity
- Complete TWT Protection
  - PRF Limit
  - Helix Overcurrent
  - Cathode Over/Undervoltage
  - Collector Overtvoltage
  - Filament Low Voltage
  - Overtemperature
  - Input Energy Limit
  - Reverse Power Monitor
- Custom Requirements
- Solid State Except for the TWT
- Front Panel Voltage Adjustments
- Front Panel Fault Isolation
- Modular Construction
- DC TWT Filaments
- Four Line Display
  - Operating Mode
  - Cathode Voltage
  - Collector Voltage(s)
  - Helix Current
  - Filament and Operate Time
- Front Panel Controls
  - Power On / Off
  - Operate
  - Standby
  - Fault Reset
  - Local / Remote
  - Pulse / CW



The Model 567 is a dual mode Pulse/CW TWT Amplifier which has been designed to operate TWT's in the 500 watt power range at frequencies up to 18 GHz. The RF output pulse is generated by the grid pulse without the use of RF switches. RF output pulse is controlled by the input video pulse.

The High Voltage Power Supplies are modular DC-DC converter designs. The Power supply design provides superior stability for optimum TWT phase noise and spurious performance.

The front panel 4-line vacuum fluorescent display, with multiple page modes, provides a monitor for the operating characteristics.



Detected RF Output



APPLIED SYSTEMS ENGINEERING, INC.

FORT WORTH, TEXAS

## Model 567 TWT Amplifier SPECIFICATIONS

Duty Cycle	Up to 50% Pulse or CW
Pulse Width Range	50 ns to CW
PRF Range	Up to 400 kHz
RF Rise / Fall Time	15 ns, Maximum
RF Pulse Droop	< 0.1 dB, Maximum
Delay, Input to RF	200 ns, Maximum
Phase Noise	< $\pm 1^\circ$ pk to pk
Amplitude Variation	0.1 dB, Maximum
Spurious Outputs	-50 dBc, Maximum
Input Pulse	5 Volts into 50 ohms
Noise Figure	35 dB, Nominal
Gain at Rated Power	57dB, Nominal
RF Connectors	Precision Type N or Waveguide
Primary Power	208 VAC 3-phase $\pm 10\%$ , 60 Hz
Operating Temperature	-20° to +50°C
Weight	150 lbs, Nominal
Dimensions	15.75x19x30.5(in.)

## Standard Equipment

- Filament / Operate Time
- Remote Power On/Off
- Ethernet Remote Control (TCP/IP or UDP/IP)
- Input Isolator
- Driver Amplifier
- IEEE-488 Remote Interface
- Reverse Power Monitor
- Forward RF Sample Port
- Switchable Pulse or CW Mode of Operation

## Options

- Other PRF and Pulse Width Ranges
- Reverse RF Sample Port
- Forward/Reverse Power Meter
- RS-232/422, or IEEE-488 Remote Control
- Other Primary Power
- RF Connectors on Front or Panel
- Rack Mount Slides
- Conformal Coated PC Boards
- Outdoor Enclosure
- Custom Requirements

