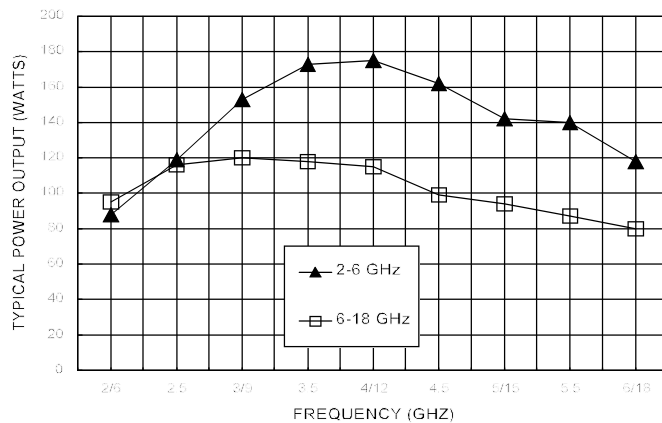


# Model 100 100 Watt CW TWTA



The Model 100 series CW TWT Amplifier has been designed to operate 100 watt traveling wave tubes up to 18 GHz. Internal power supplies are solid state DC-DC converter designs with fast loop response times so that output level variations are minimal. Both cathode and collector power supplies and the heater supply are duty cycle regulated designs. The cathode and collector power supplies have very low ripple, with attendant low phase noise in the TWT Amplifier. Output spurious signals are less than -50 dBc. The front panel 4-line vacuum florescent display, with 2 page modes, provides a monitor for the operating characteristics.

## *FEATURES:*

- Frequency 2-18 GHz  
Octave / Multioctave
- Low Spurious Outputs
- Phase and Amplitude Stability
- Complete TWT Protection
  - Helix Overcurrent
  - Cathode Over/Undervoltage
  - Collector Overvoltage
  - Overtemperature
  - Input Energy Limit
- Custom Requirements
- Solid State Except for the TWT
- Front Panel Fault Isolation
- DC TWT Filaments
- Four Line Display
  - Operating Mode
  - Cathode Voltage
  - Collector Voltage
  - Helix Current
  - Filament and Operate Time
  - Software Version
- Front Panel Controls
  - Power On / Off
  - Operate / Standby
  - Fault Reset
  - Local / Remote

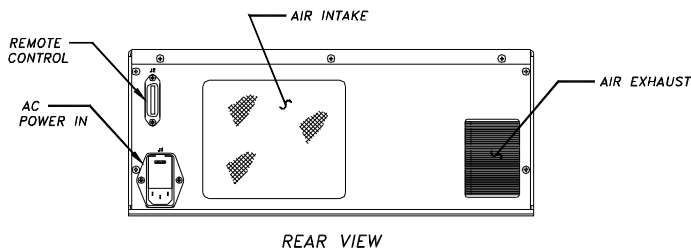
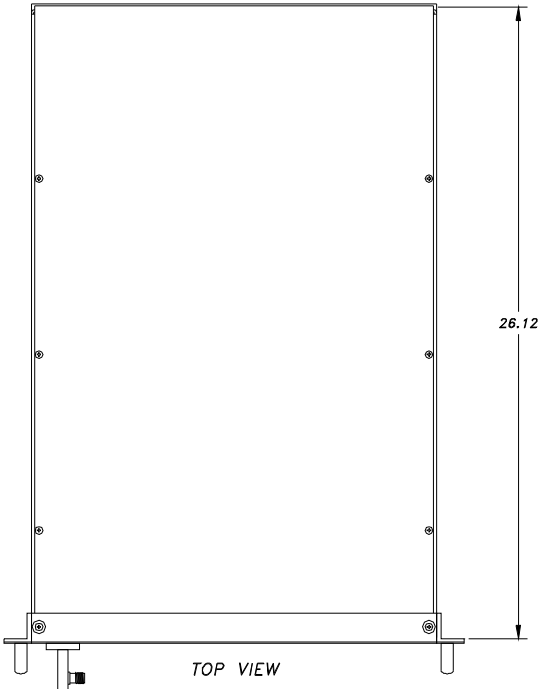
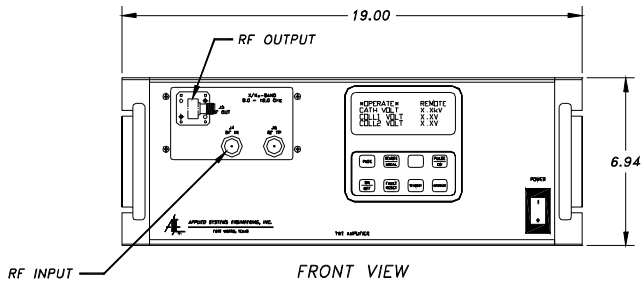


APPLIED SYSTEMS ENGINEERING, INC.

FORT WORTH, TEXAS

# Model 100 100 W CW TWTA SPECIFICATIONS

Duty Cycle	CW
Spurious Outputs	-50 dBc, Maximum
Phase Noise	Less than $\pm 1^\circ$
Amplitude Variation	0.1 dB, Maximum
Gain	35 dB, Minimum
Noise Figure	35 dB, Nominal
RF Connectors	Precision Type N Output is waveguide above 8 GHz
Primary Power	120/220/240VAC $\pm 10\%$ , 50/60 Hz
Operating Temperature	0 to 50°C
Weight	65 lbs, Nominal
Dimensions	7 x 19 x 26.5 (in.)



## Standard Equipment

- Input Isolator
- Filament / Operate Time
- IEEE-488 Remote Interface
- Reverse Power Monitor

## Options

- Driver Amplifier
- Gain Equalizer
- Extended Frequency Coverage
- Forward and Reverse RF Sample Ports
- Manual 20 dB Input Attenuator
- Harmonic Filters
- RF Connectors on Front or Rear Panel
- RS-232/422 Remote Interface
- Chassis Slides



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