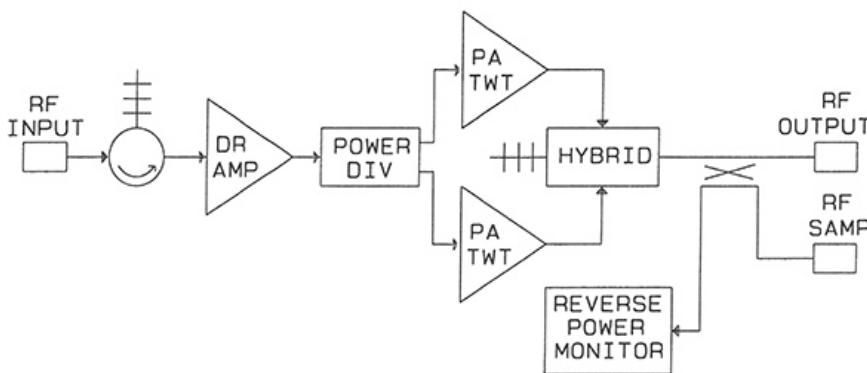


# Model 502X/Ku 500 Watt CW TWTA



## FEATURES:

- 500W CW Broadband Frequency coverage between 7.5-18.0 GHz
- Other Frequencies Available
- Low Spurious Outputs
- Phase and Amplitude Stability
- Complete TWT Protection
  - Helix Overcurrent
  - Cathode Over/Undervoltage
  - Collector Overvoltage
  - 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

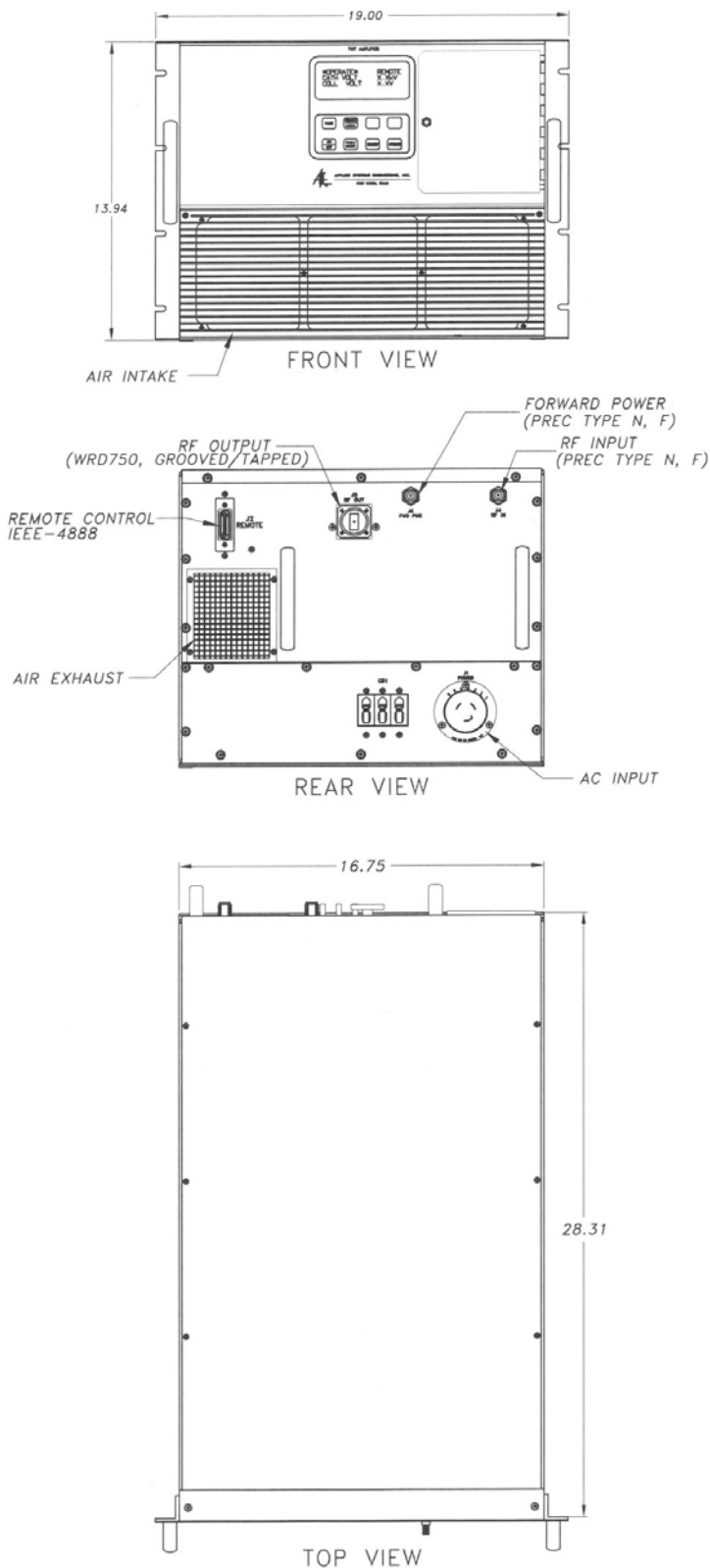


The Model 500, CW TWT Amplifier has been designed to operate broadband traveling wave tubes in parallel in order to provide 500W CW at the output between 7.5-18.0 GHz.

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.

# Model 502 500W 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	57 dB, Minimum
Noise Figure	35 dB, Maximum
RF Connectors	Input: Type N Output: Waveguide
Primary Power	3 Phase, 208 VAC $\pm 10\%$ , 50/60 Hz
Operating Temperature	$-20^\circ$ to $+50^\circ\text{C}$
Weight	170 lbs, Nominal
Dimensions	14x19x28.31(in.)

## Standard Equipment

- Filament / Operate Time
- Remote Power On/Off
- Ethernet Remote Control (TCP/IP or UDP/IP)
- Input Isolator
- Reverse Power Monitor
- Forward RF Sample Port

## Options

- Driver Amplifier
- Higher CW Power
- Extended Frequency Coverage
- Reverse RF Sample Port
- RS-232/422 or IEEE-488 Remote Control
- Other Primary Power
- Harmonic Filters
- RF Connectors on Front or Panel
- Rack Mount Slides
- Conformal Coated PC Boards
- Outdoor Enclosure
- Custom Requirements