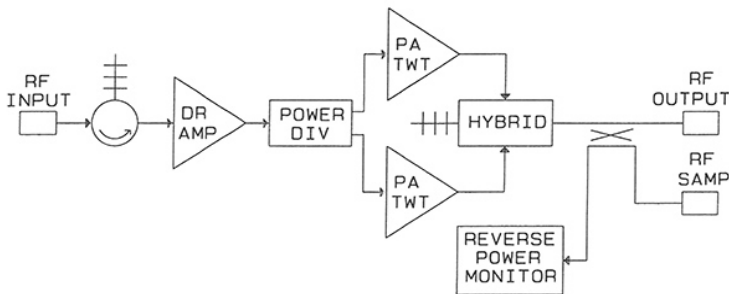


Model 400K 450 Watt CW TWTA



The Model 400K, CW TWT Amplifier has been designed for parallel operation of 250 watt traveling wave tubes in the 17.7 to 22.0 GHz frequency range, providing up to 400W of output power.

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. Plug-in PC boards are accessible through the front panel. The PC card cover contains a legend for PC card located test points and controls.

The modular design of the Model 400K provides convenient accessibility to all elements in the TWT amplifier. High voltage modules are encapsulated, plug-in assemblies. There is no exposed high voltage. Most modules are interchangeable between units.

FEATURES:

- Frequency 17.7-22.0 GHz
- 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



APPLIED SYSTEMS ENGINEERING, INC.

FORT WORTH, TEXAS

Model 400K 450W CW TWTA SPECIFICATIONS

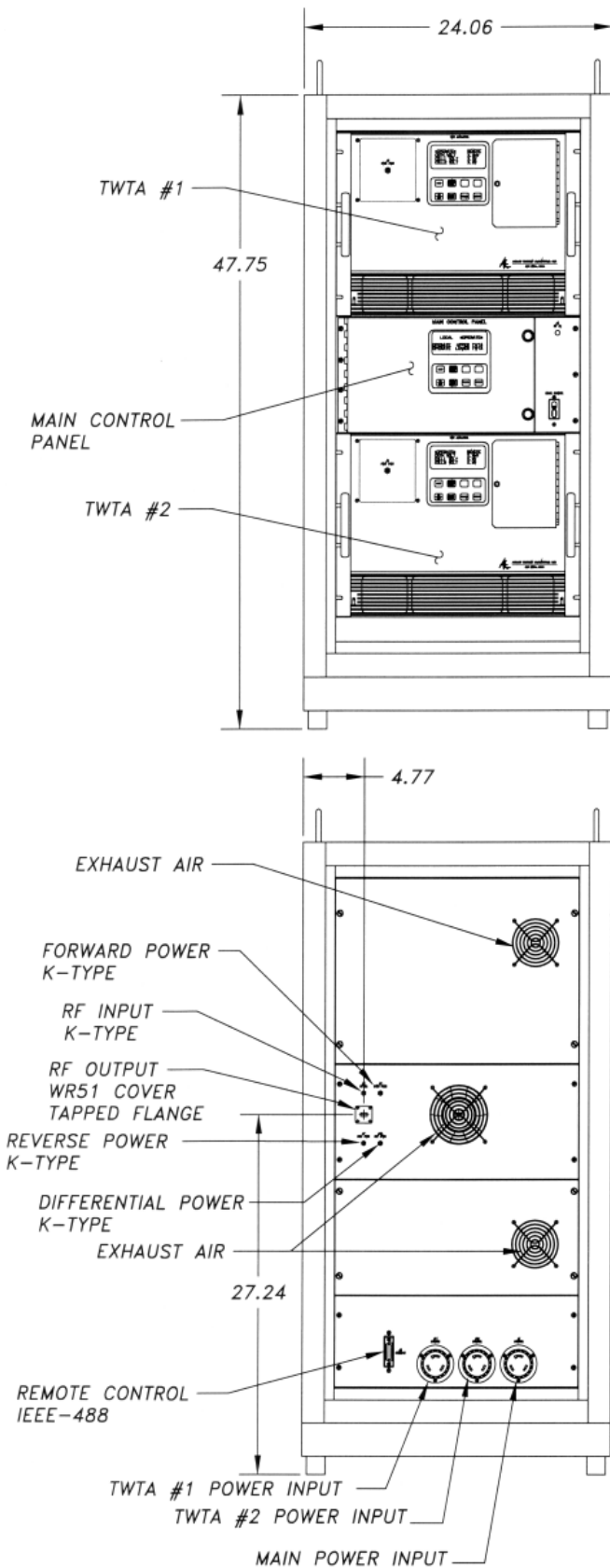
Duty Cycle	CW
Spurious Outputs	-50 dBc, Maximum
Phase Noise	Less than $\pm 1^\circ$
Amplitude Variation	0.1 dB, Maximum
Gain	57 dB, Minimum
Noise Figure	35 dB, Nominal
RF Connectors	WR-51 Waveguide
Primary Power	3 Phase, 208 VAC $\pm 10\%$, 50/60 Hz
Operating Temperature	-20° to +50°C
Weight	580 lbs, Nominal
Dimensions	36x24x47.75 (in.)

Standard Equipment

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

Options

- Higher CW Power
- Reverse RF Sample Port
- RS-232/422 or IEEE-488 Remote Interface
- Other Primary Power
- RF Connectors on Front Panel
- Harmonic Filters
- Conformal Coated PC Boards
- Outdoor Enclosure
- Custom Requirements



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