

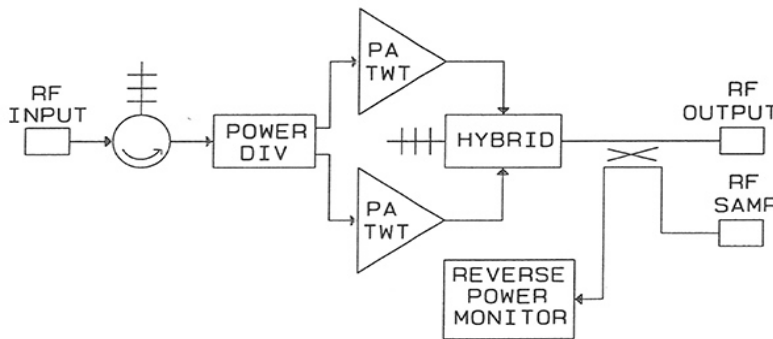
Model 877Ka 2800W* TWT Amplifier

UP TO
8.0%
DUTY*



FEATURES:

- Low Spurious Outputs
- Phase and Amplitude Stability
- Complete TWT Protection
 - Pulse Input Protection
 - Helix Overcurrent
 - Cathode HVPS Crowbar
 - Cathode Over/Undervoltage
 - Filament Low Voltage
 - Over temperature
 - 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
 - Helix Current
 - Filament and Operate Time
- Front Panel Controls
 - Power On / Off
 - Operate
 - Standby
 - Fault Reset
 - Local / Remote

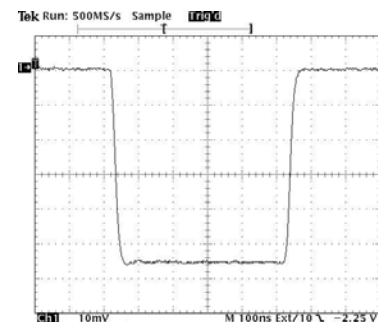


The Model 877Ka provides up to 1250-2800W* peak power at duty cycles up to 8% with traveling wave tubes in the 33 to 36 GHz range. Particular emphasis has been placed on the generation of the output RF pulse shape. The RF output pulse width tracks the input 5 volt video pulse.

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.

All high voltage modules are plug-in assemblies packaged in an aluminum oil tank with transformer oil as the dielectric medium. Transformer drivers feature power MOSFET's in a full wave bridge configuration. Imbedded processor provides control, monitor and interface functions, and multiple pages of monitored functions on the front panel 4-line vacuum fluorescent display.

*Tube Specific Parameters, call for options



Detected RF Output



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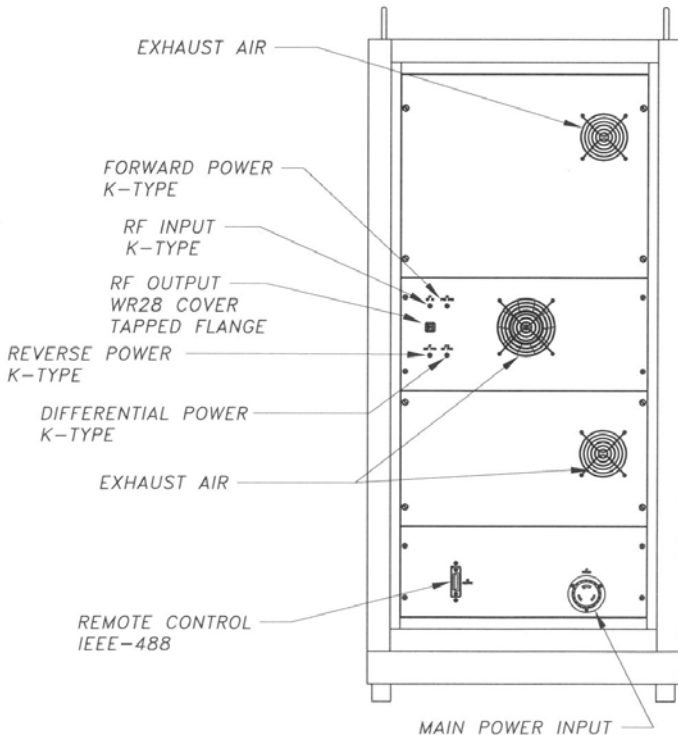
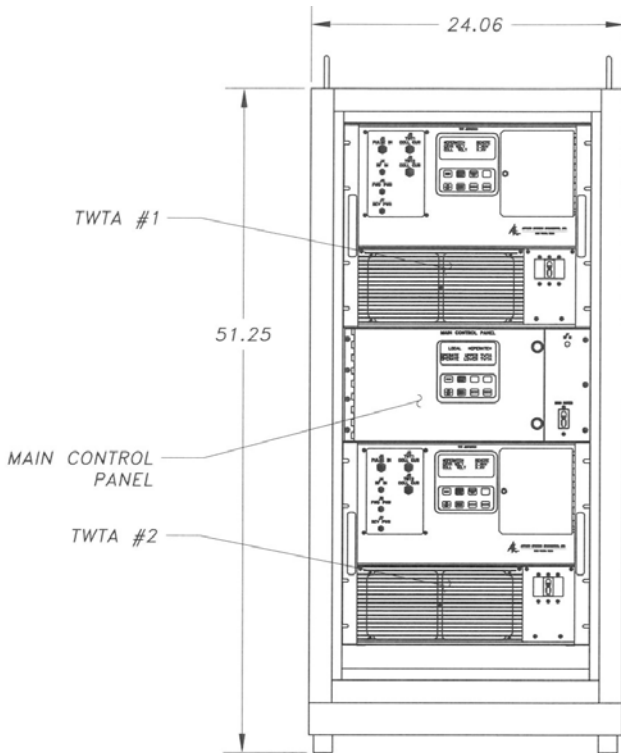
FORT WORTH, TEXAS

Model 877Ka TWT Amplifier

SPECIFICATIONS

Output Power	1250-2800 Watts, Peak*
Duty Cycle	8%, Maximum*
Pulse Width Range	0.05 to 10 μ s
PRF Range	0 to 100 kHz
RF Rise / Fall Time	15 ns, Maximum
Input Pulse / RF Pulse	300 ns, Maximum
Phase Noise	$\pm 1^\circ$ pk to pk
Amplitude Variation	0.1 dB, Maximum
Spurious Outputs	-50 dBc, Maximum
Harmonics	-30 dBc, Maximum
Input Pulse	5 Volts into 50 ohms
Noise Figure	20 dB, Nominal
RF Input Connector	3.5mm, Female
RF Output Connector	WR-28 Waveguide
Primary Power	208 VAC, 3-phase $\pm 10\%$, 50/60 Hz
Operating Temperature	-20° to +50°C
Weight	580 lbs, Nominal
Dimensions	36 x 24 x 51.25 (in.)

*Tube Specific Parameters, call for options



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

- Other PRF and Pulse Width Ranges
- Reverse RF Sample Port
- Detected RF Output
- RS-232/422 or IEEE-488 Remote Control
- Other Primary Power
- Outdoor Enclosure
- Conformal Coated PC Boards



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