



# T-500 SERIES

## High Power Traveling Wave Tube Amplifiers

500 Watts CW  
1.0-18.0 GHz

### Features Include:

- **Digital Display Monitors:** Collector Current, Collector Voltage, Helix Current, Helix Voltage, Forward RF Power, Reflected RF Power, Filament Hours, Beam Hours,
- **Status Indicators:** Power On, Standby, RF On/Operate,
- **Faults:** Helix Overcurrent, VSWR Overload, Thermal Overloads, Air Flow, Collector Overcurrent
- **Controls:** Power On/Off, Standby, RF On/Operate, Fault Reset, Local/Remote
- Ease of Maintenance
- Designed to meet the safety requirements of the IEC-348 and Underwriters Laboratory of American Standards
- Broadband Coverage
- Applications Include: MIL-STD-461/462, RTCA/D0-160, SAE Specifications, Radiated Susceptibility, Bellcore testing, Broadband Communications.
- Ruggedized Versions are available for Shipboard and Airborne applications



### RF Specifications

Model Number	Frequency Range (GHz)	Min Pwr Out* (Watts)	Min Sat Gain* (dB)	Max NF (dB)
T21-500	1-2	500	57	35
T251-500	1-2.5	500	57	35
T42-500	2-4	500	57	35
T2575-500	2.5-7.5	500	57	35
T82-500	2-2.5	150	53	35
	2.5-8.0	450	57	35
T84-500	4-7.5	500	57	35
	7.5-8	450	57	35
T128-500	8-12	500**	57	35
T1812-500	12-18	500**	57	35
T188-500	7.5-18	500**	57	35
T186-500	6-18	500**	57	35

\*Higher output power and gains available

\*\* 3 Drawers Rack Integrated (61.25 "Panel Space")

### INSTRUMENTS FOR INDUSTRY INC.

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[www.ifi.com](http://www.ifi.com) (英文) [www.quatronix-cn.com](http://www.quatronix-cn.com) (中文)

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## High Power Traveling Wave Tube Amplifiers

500 Watts CW  
1.0-18.0 GHz

### Prime Power:

100/115/220/230 or 240VAC  $\pm 10\%$  50/60 Hz, single phase  
115/208 or 200/220/230/240VAC  $\pm 10\%$  50/60 Hz,  
three phase Wye, Delta and/or 400 Hz power is available

### Mechanical

Dimensions: 14"H x 19"W x 27"D  
(Rack Mountable) (356mm x 483mm x 686mm)  
Weight: 170 pounds typical (77kg)  
Cooling: Internal forced air

### Remote Operation

GPIO, RS422, RS485, RS232, or TTL Remote Control

### Environmental

Operating Temperature: 0 - 50°C (40°C @ 10,000 Feet)  
Relative Humidity: 95% (non-condensing)  
Operating Altitude: 10,000 feet maximum  
Non-operating Temp.: -20 to 70°C  
Non-operating Altitude: 50,000 feet maximum

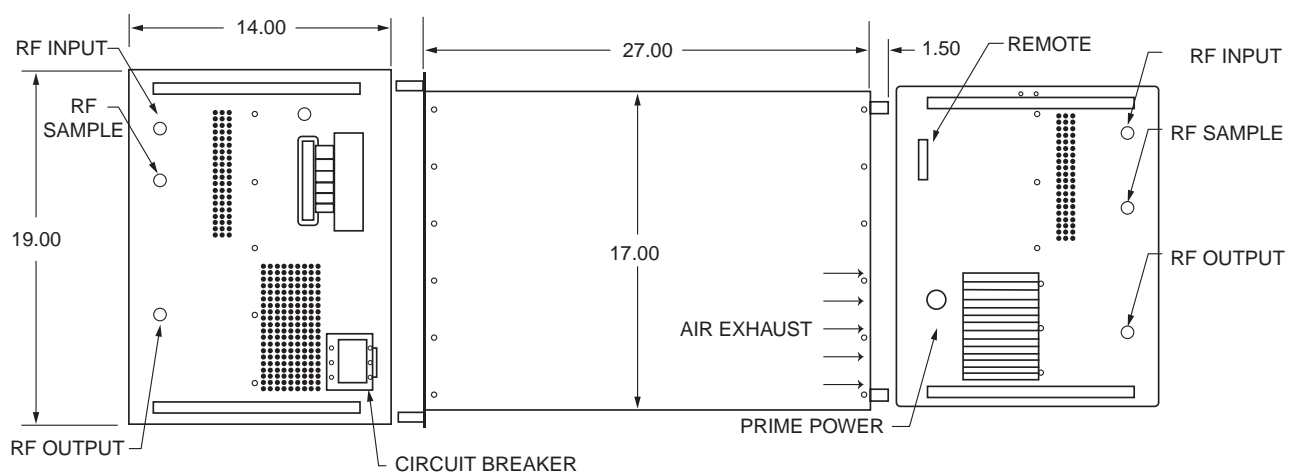
### RF Specifications

Spurious Outputs: -40 dBc, maximum.  
-50 dBc, available.  
Input Impedance: 50 Ohms, VSWR 2.0:1  
Output Impedance: 50 Ohms, VSWR 2.0:1  
2.5:1 maximum.  
Input Connector: Type N (Female).  
Output Connector: 1.0 to 8.0 GHz,  
Type SC (Female),  
8.0 to 12.0 GHz, WR90  
12.0 to 18.0 GHz, WR62  
7.5 to 18.0 GHz, WRD750  
6.0 to 18.0 GHz, WRD650  
(Other waveguides available  
Option 117)

To view typical performance data go to  
[www.ifi.com/typdata.htm](http://www.ifi.com/typdata.htm)

### Outline Drawing:

Specifications subject to change without notice



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