

# **Applications**

Test and Measurement Electronic Warfare Radar Broadband Jamming Public Safety

## **Quality & Certifications**

AS9100 Rev C ISO9001:2008 RoHS compliance Conflict Minerals Compliant



### PA0021-500W, SOLID STATE HIGH POWER AMPLIFIER SYSTEM

### **FEATURES**

Rack mounted system
Class AB linear LDMOS design
Instantaneous wide bandwidth
Suitable for AM, FM, Pulse and other modulations standards
Built-in protection circuits
High reliability and ruggedness



### **ELECTRICAL SPECIFICATIONS**

Parameter	Specification	Notes
Operating Frequency Range	20 - 1000 MHz	
Power Output @ Saturation	500 Watt Min	CW
Power Gain	57 dB Min	Pin=0dBm for nominal Pout
Power Gain Flatness	4.0 dB p-p Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD / IP3)	-30 dBc Min	47dBm/Tone, $\Delta$ = 1MHz
Noise Figure	10 dB Max	
Harmonics	>20 dBc	
Non Harmonic Spurious	>60 dBc	
Operating Voltage	180 - 240 VAC Single Phase	50/60Hz
Power Consumption	3500 Watt Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	5 : 1 Max	

### **ENVIRONMENTAL CHARACTERISTICS**

Parameter	Specification	Notes
Operating Ambient	0 to +50 °C	
Temperature		
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

#### **MECHANICAL SPECIFICATIONS**

Parameter	Specification	Notes
Dimensions W x H x D	430 x 222 x 560 mm	5U rack mount
Weight	40 Kg. Max	
RF Connectors In/Out	Type-N Female	Front Panel Standard
AC Power / Monitoring	IEC 60320-C14 / 9 Pin D-	Or equivalent
Connectors	Sub	
Safety Interlock Connector	15-Pin Subminiature D-	
	Sub	
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor &	Ethernet RJ-45	Remote Bluetooth application
Control	TCP/IP,RS-232 USB 2.0,	
FWD, REV, VSWR, GAIN, ALC, V	Optional GPIB/IEEE	
& I, TEMP	Interface	

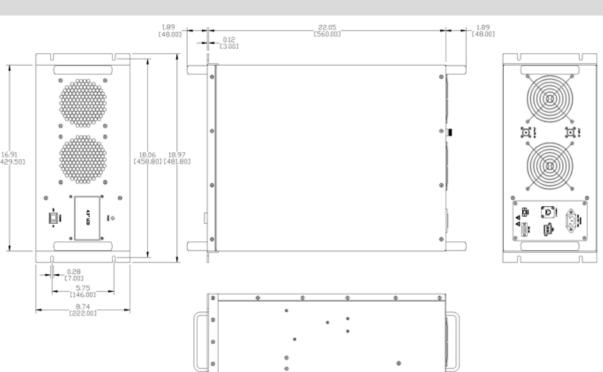
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## Connect with MtronPTI

### mtronpti.com



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# **Experienced**

MtronPTI continues nearly fifty years of service to aerospace, defense communication and control, Internet and mobile infrastructure, lab and field instrumentation EMs.

### Vertically integrated

MtronPTI provides High reliability, High Power Solid State Power Amplifier solutions for demanding applications. Our design and manufacturing capabilities cover 50KHz to 47GHz frequency range with power levels of 1W to 4kW for CW & Pulse application modules and over 10kW for such systems. Synergy between our engineering manufacturing-from concept, simulation, electrical & mechanical layouts to assembly & testing capabilities allow for quick engineering & manufacturing responses to customer requests.

### One-on-one technical relationships

Each project is unique in design, environmental, schedule and cost requirements. MtronPTI engineers work with your designers to select the best approach. Six sigma and AS9100 Rev C quality systems ensure reliable solutions.

### Long term support

MtronPTI uses Rapid Process Feedback, Lean Manufacturing and Demand Flow Technology for right product, right time, on specification. MtronPTI also manages the supply chain: aligning forecasts, qualifying purchased component suppliers and working with distributors, hubs and portals to make sure every time the production line reaches for an MtronPTI part, it'll be there.

















