

PA92382 2.0 - 4.0GHz, 250W 54dB SOLID STATE HIGH POWER AMPLIFIER SYSTEM

FEATURES

Rack mounted system
Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for all modulations standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 4.0 GHz	
Power Output @ Psat	250 Watt Min	CW
Nominal Input Power	0dBm	
Power Gain	54 dB Min	
Power Gain Flatness	3 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	43dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	>20 dBc Typ	At rated output
Non Harmonic Spurious	60 dBc Min	
Operating Voltage	180 - 240 VAC	
Power Consumption	2600 Watt Max	At rated output
Max Input Power Protection	+8 dBm	Note 1
Load VSWR Protection	5 : 1	Note 2

Notes:

1. Nominal Input Power is 0dBm. +8dBm is allowed for up to 10Sec with no damage.
2. 1 Minute Max @ rated min Pout

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	R5U Rack Mount Chassis	5U
Weight	35 Kg. Max	
RF Connectors In/Out	Type-N Female	Front Panel Standard
AC Power	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent
Cooling	Built in Fan Cooling	Variable speed
Digital Monitor & Control	Ethernet RJ-45 TCP/IP, RS422/485	Remote Bluetooth application
FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Optional GPIB Interface	Pulse operation in manual mode only.

Applications

Test and Measurement
Electronic Warfare
Radar
Broadband Jamming
Public Safety

Quality & Certifications

AS9100 Rev C
ISO9001:2008



Connect with MtronPTI

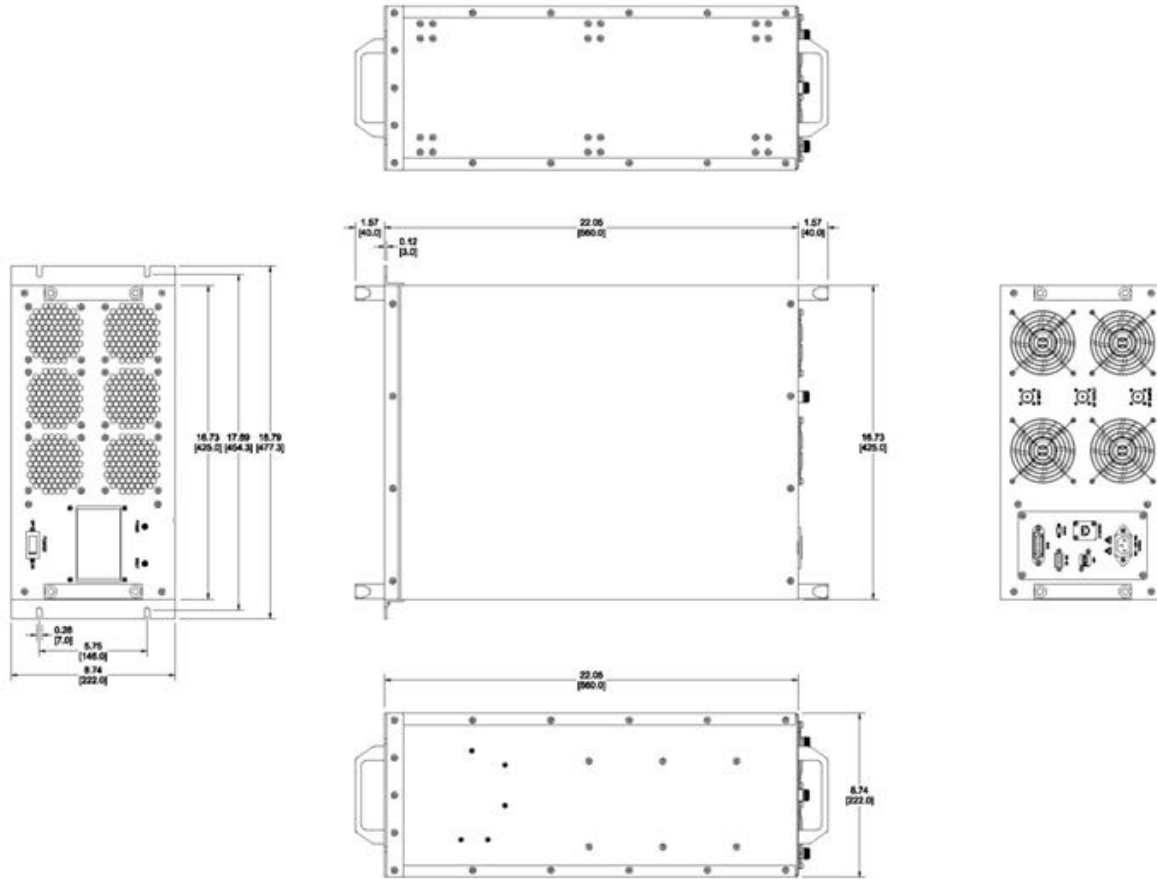
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Experienced

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

Vertically integrated

MtronPTI provides High reliability, High Power Solid State Power Amplifier and TWT solutions for demanding applications. Our design and manufacturing capabilities cover 250KHz 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.

