

PA5459-001-4KW 5.4 to 5.9GHz 4KW Peak SOLID STATE POWER AMPLIFIER

FEATURES

Standard 19" rack mounted cabinet system
High power GaN pulse devices
Instantaneous bandwidth
Suitable for linear pulse applications
Microprocessor LCD controller
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes	
Operating Frequency Range	5.4 - 5.9 GHz				
Peak Output Power	4 KW Min/ 5 KW Typ			@ 10% Duty Cycle	
Output Power Flatness	3 dB p-p Max				
Input Power	0 dBm Nom				
Saturated Gain	66 dB Min			Pin = 0 dBm Nom	
Pulse Characteristics	Width	Duty	PRF	Rise/Fall	Droop
	100 μ S Max	10 % Max	1 KHz	<150nS	<0.8 dB
Input / Output VSWR	1.5 : 1 Min			Relative to 50 Ohm	
Harmonics	-30 dBc Max			At rated Output Power	
Spurious	-65 dBc Max			Non-harmonic	
Load VSWR Protection	5 : 1 Max			No damage	
AC Input Voltage	220 VAC, 50/60 Hz				
Efficiency	20 % Avg. Typ				

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50°C	
Storage Temperature	-20 to +70°C	
Relative Humidity	95% @ 40°C	
Altitude	5160 m	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	423 x 444 x 580 mm	10U without handles
Weight	90Kg. Max	
RF Connectors In/Out	Type-N Female / CPR187 Waveguide	Rear panel
Driver Input Connector	BNC Female	Rear Panel
RF Output Monitoring	SMA Female	50dB \pm 1dB coupled Port
AC Power	MS3102A24-10P	Rear panel, or equivalent
AC Power Switch	Circuit Breaker - LED	Front panel
Monitor & Control:	1 Ethernet RJ-45 TCP/IP, RS232/RS422/485, USB	Rear Panel
FWD, REV, VSWR, GAIN, ALC, V & I, TEMP		

General Protection: AC Overload, Over Temperature, load VSWR

Pulse Protection: Pulse width, Duty cycle

MtronPTI SSHPA Products: <http://www.mtronpti.com>

mtronpti.com

407-298-2000 MtronPTI 2525 Shader Road Orlando, FL 32804

Applications

Test and Measurement

Electronic Warfare

Radar

Broadband Jamming

Public Safety

Quality & Certifications

AS9100 Rev C

ISO9001:2008

Global Service Centers

Orlando, USA

Noida, India



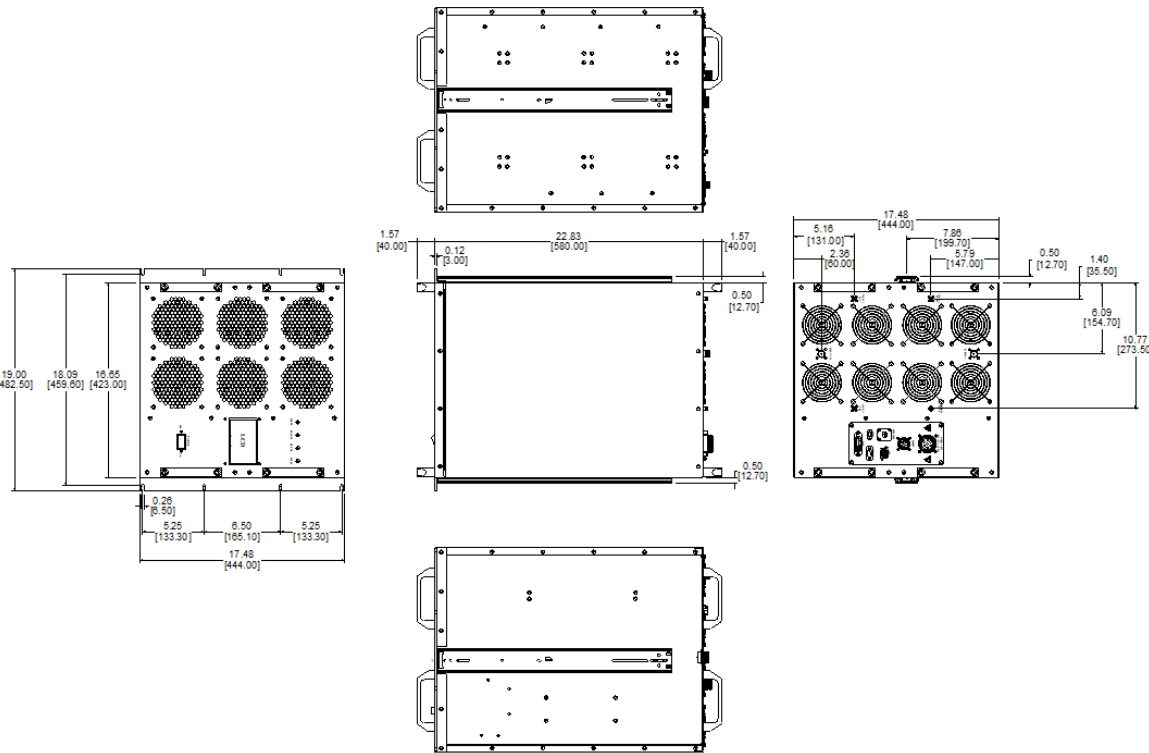
Connect with MtronPTI
mtronpti.com

Orlando

2525 Shader Rd
 Orlando, FL 32804 USA
 Phone: 407-298-2000
 Fax: 407-293-2979

Noida

SDF-D3 NSEZ,
 Noida - 201305 (U.P.), India



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.

