

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



PA0920-085 20-3000MHz 100W SOLID STATE HIGH POWER AMPLIFIER SYSTEM

FEATURES

Rack mounted system
Ultra-broadband, class AB linear LDMOS and GaN design
Dual Band, One input - Two Outputs
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

| Parameter | Specification | | Notes |
|------------------------------|----------------|-----------------|----------------------|
| Band Designation | Α | В | |
| Operating Frequency Range | 20 - 1000 MHz | 1000 - 3000 MHz | |
| Power Output CW. | 100 Watt Min | | CW |
| Power Gain | 50 dB Min | | |
| Power Gain Flatness | 4.0 dB p-p Max | | Constant input power |
| Input Return Loss | 10 dB Min | | Relative to 50 Ohm |
| 2-Tone Intermodulation (IMD) | -30 dBc Typ | | 40dBm/Tone, Δ = 1MHz |
| Harmonics | -20 dBc Typ | | At rated Pout |
| Non-Harmonic Spurious | -60 dBc Max | | |
| Operating Voltage | 100 - 240 VAC | | |
| Power Consumption | 1000 Watt Max | | At rated Pout |
| Max Input Power | +8 dBm | | Without damage |
| Load VSWR Protection | 10 | :1 | |

ENVIRONMENTAL CHARACTERISTICS

| Parameter | Specification | Notes |
|---------------------|---------------|----------------|
| Operating Case | -20 to +75 °C | |
| Temperature | | |
| Storage Temperature | -40 to +85 °C | |
| Relative Humidity | 5 to 95 % | Non Condensing |

MECHANICAL SPECIFICATIONS

| Parameter | Specification | Notes |
|--|----------------------------------|------------------------------|
| Dimensions W x H x D | 483 x 178 x 560 mm | 4U, excluding handles |
| Weight | 30 Kg. Max | |
| RF Connectors In/Out A / Out B | Type-N Female | Front Panel Standard |
| AC Power / Interface Connector | IEC 60320-C14 / 9-Pin D-Sub | |
| Cooling | Built in Fan Cooling | |
| Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP | Ethernet RJ-45 TCP/IP, RS422/485 | Remote Bluetooth application |

Note: Used output must be terminated at all times

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

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



Connect with MtronPTI

Outline (ref. only)

mtronpti.com

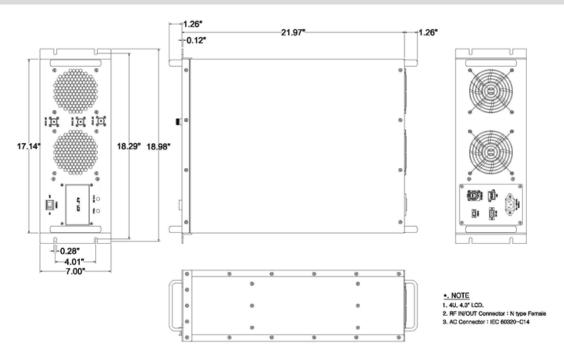
Orlando

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.

















