

# Solid State Power Amplifier

## 2856 MHz, 240 Watts — Model SSPA2856-240

Stellant PST proudly introduces its SSPA series of amplifiers which operate in the S-Band with power levels of 240 watts peak. The Class “C” amplifiers are designed for maximum power output and maximum AC to RF efficiency with minimal size.

Typically used as driver amplifiers for Klystron PA’s within a linear accelerator. Applications include oncology treatment, electronic and medical pasteurization, and X-Ray cargo inspection.



### KEY FEATURES

- Internal Frequency Synthesizer
- AFC Control
- 17 dB Min Output Power Control
- Elapsed Time Meters
- Front Panel Power/Frequency Meter
- Remote Status/Control Interface (Ethernet)
- Applicable Uses In:
  - Oncology Treatment
  - Electronic Pasteurization
  - X-Ray Cargo Inspection
- Ethernet Control/Status
- Lightweight, Rugged and Reliable




### SPECIFICATIONS

Frequency Range	2856 MHz ± 4 MHz	Control Interface	Ethernet/Front Panel
RF Power Output (Peak)	240 Watts @12uS Pulse	Front Panel Controls	Display Power/Freq View IP Address Elapsed Time and Date
DC Bias	Class C	AC Input	85-265 Vrms
Modulation Format	Pulse	AC Frequency	40-63 Hz
Load VSWR	10:1 Max (Circ protected)	MTBF	20,000 Hrs
10 Minute Warm-Up Drift	20k Hz	<b>Connectors</b>	
Control Voltage (AFC Tuning)	± 10V	Trigger Input	BNC Female
Pulse Width Capability	3-13uS	RF Output	N-Female
Duty Factor	1.0% Max	Interface Connector	RJ-45
PRF	90-440 Hz	AC Power Connector	Terminal Block
Pulse Rise/Fall Time (10%-90%)	0.18uS Max	Operating Temperature	+15 to +50°C
Settling Time	500ns	Environmental	Shock/Vibration MIL-STD-810F
Available Options	RS422 and 232 Interfaces	Size	19" x 16.6" x 3.5"
	Internal Pulse Trigger	Weight	12 lbs
	Pulse to Pulse Width Control from 2.5-12.5uS in 250nS steps		

#### Power Systems Technology (PST)

105 Baylis Road | 417 Boston St.  
Melville, NY 11747 | Topsfield, MA  
T: 613-777-8900 | T: 978-997-5754



StellantSystems.com     
[Sales-PST@stellantsystems.com](mailto:Sales-PST@stellantsystems.com)  
[info@stellantsystems.com](mailto:info@stellantsystems.com)