

# Solid State Power Amplifier Modules

## Medical Modules

### 2856MHz, 240 to 300 Watts

#### Features:

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



#### Performance Specifications

- Frequency Range: 2856MHz  $\pm$ 4MHz
- RF Power Output (Peak): 240-300 Watts
- DC Bias: Class C
- Modulation Format: Pulse
- Load VSWR: 10:1 Max (Circ protected)
- 10 Minute Warm-Up Drift: 20kHz
- Control Voltage (AFC Tuning):  $\pm$ 10V
- Pulse Width Capability: 3-13uS
- Duty Factor: 1.0% Max
- PRF: 90-440Hz
- Pulse Rise/Fall Time (10%-90%): 0.18uS Max
- Settling Time: 500nS
- Available Options:
  - RS422 and 232 Interfaces
  - Internal Pulse Trigger
  - Pulse to Pulse Width Control from 2.5-12.5uS in 250nS steps

- Control Interface: Ethernet/Front Panel
- Front Panel Controls:
  - Display Power/Freq
  - View IP Address
  - Elapsed Time and Date
  - Unit ID, Mode Status
- AC Input: 85-265Vrms
- AC Frequency: 40-63Hz
- MTBF: 20,000Hrs
- Connectors:
  - Trigger Input: BNC-Female
  - RF Output:: N-Female
- Interface Connector: RJ-45
- AC Power Connector: Terminal Block
- Operating Temperature: +15 to +50°C
- Environmental: Shock/Vibration MIL-STD-810F
- Size: 19" x 16.6" x 3.5"
- Weight: 12 lbs.

COMTECH PST proudly introduces its SSPA series of amplifiers which operate in the S-Band with power levels of 240 to 300 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.