



General Description

The P300/200W2-18CP SSPA is a high power, broadband, solid state power amplifier housed in a custom rack mount chassis. The amplifier incorporates a wide input range DC-DC power supply, fan-forced convective thermal management, and an internal low noise driver amplifier. The amplifier is appropriate for high-power wide-band testing, communications, radar, or any application requiring capability for simultaneous power amplification of signals across the 2.0-18.0 GHz spectrum.

The P300/200W2-18CP incorporates high efficiency GaN MMICs, spatially combined in a compact structure to achieve robust, high performance power amplification across the 2.0-18.0 GHz frequency range. The high speed gating feature gates off the spatium and low power driver to ensure ultra low noise interpulse in-band power levels.

Rear Panel Connections



P300/200W6-18CP



Product features

- 2.0-18.0 GHz - power vs. freq page 3
- 300/200 Watts saturated
- Gating frequency - 1MHz to 2MHz bursts
- 62 dB small signal gain
- 51 dB nominal power gain
- 28VDC input voltage (optional 220VAC)
- Weight 70lbs - depends on options
- Ethernet monitor and control
- Air cooling - forced air front to back
- Liquid or conduction cooled options
- Rack mountable

Applications

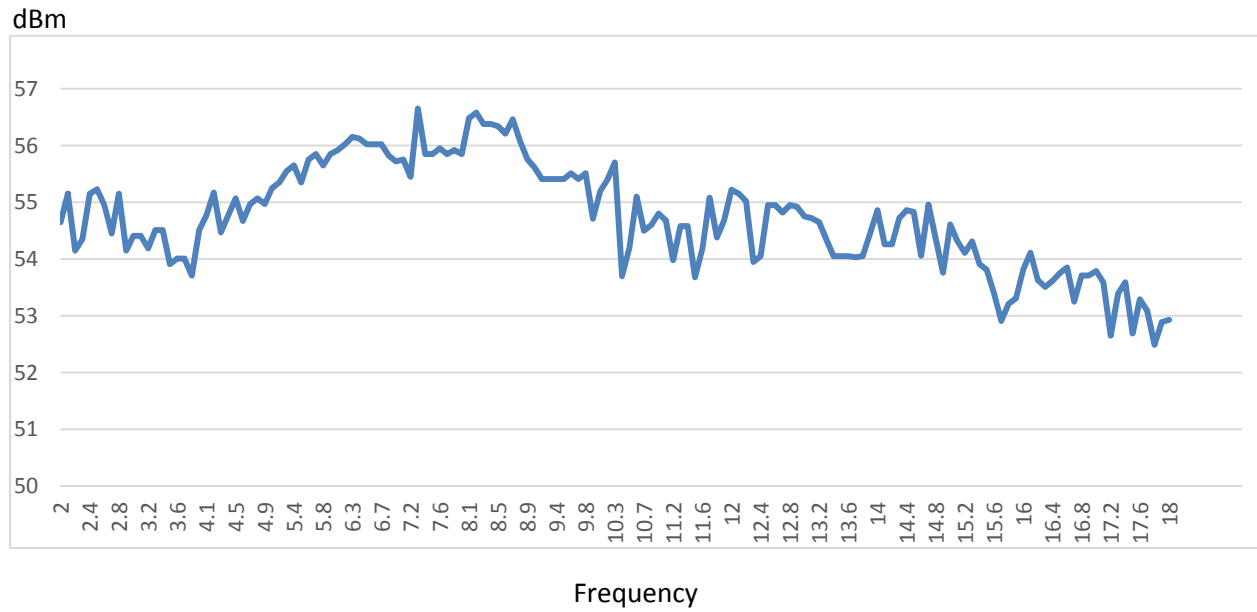
- Radar
- Communications
- Test and Measurement
- EMI Testing

Ordering Information

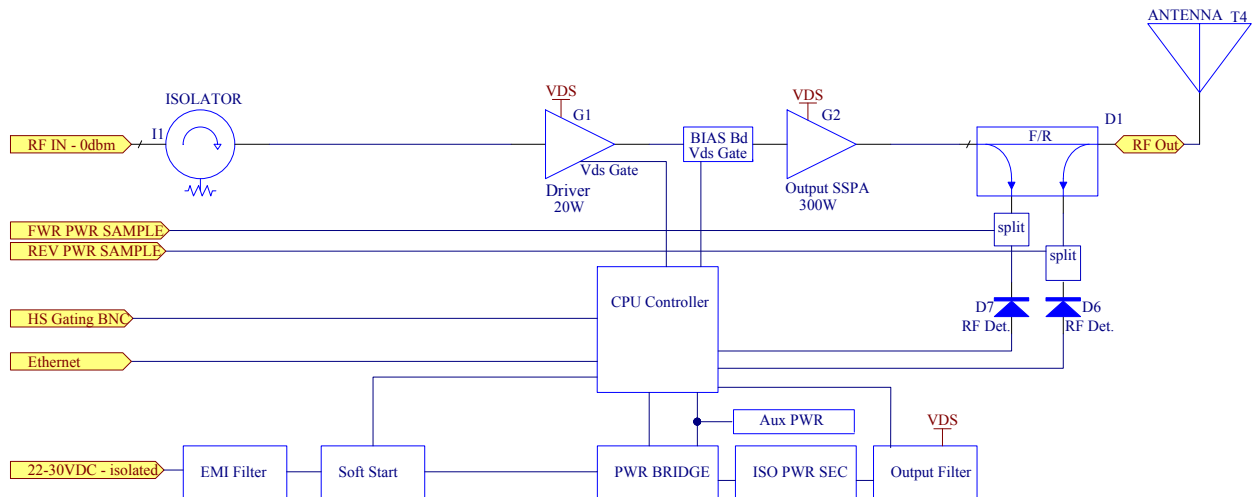
Part No.	ECCN	Description
P300/200W2-18CP	3A611.X	2-18GHz 300W SSPA



SSPA Frequency vs. Power @ 35C

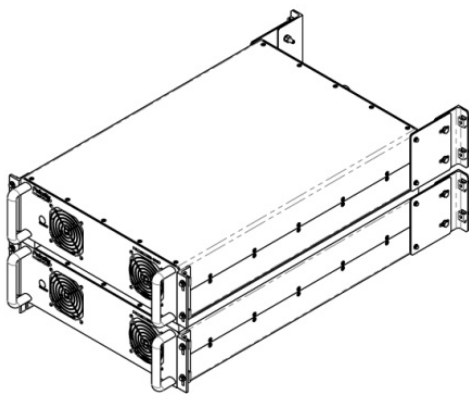
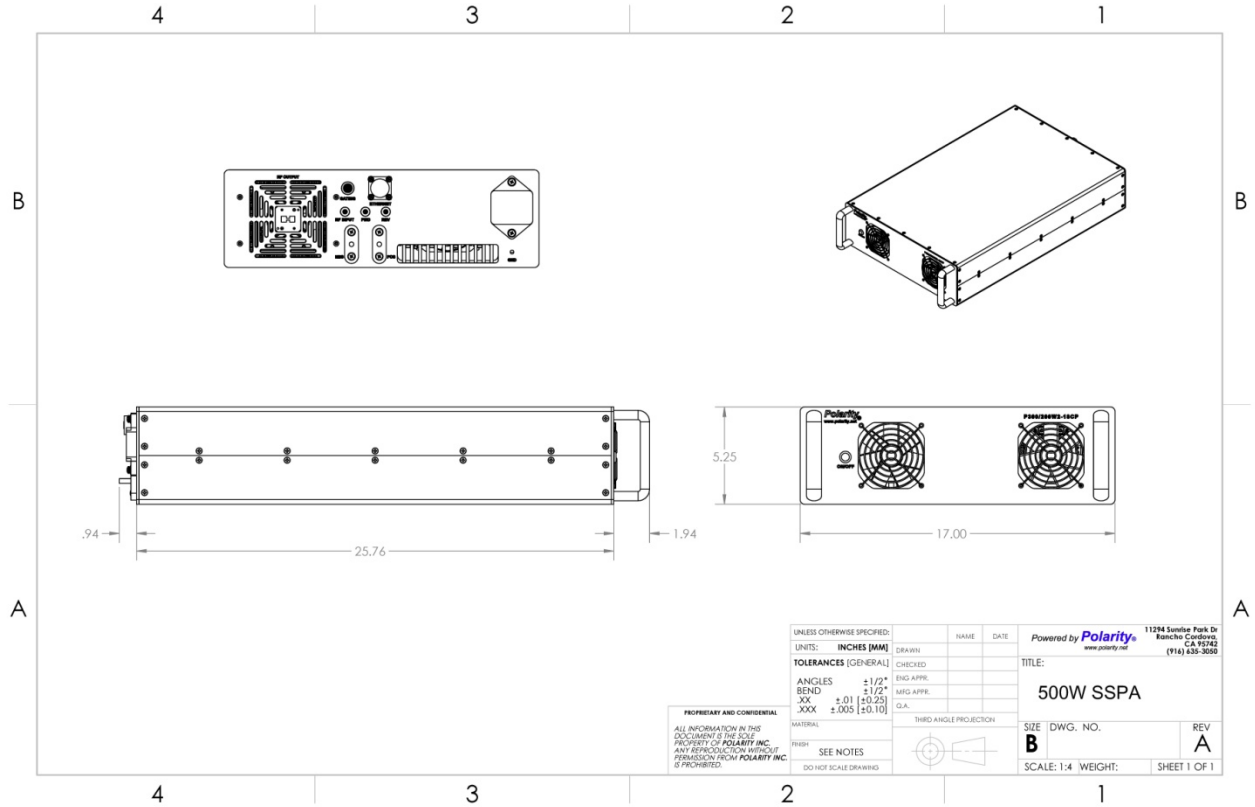


Functional Block Diagram





Package Marking and Dimensions



VIEW FOR REFERENCE ONLY



Caution ESD - Sensitive Device



Absolute Maximum Ratings

Parameter	Rating
RF Input Power, CW, 50 Ω , T _{CASE} =25 °C	+10 dBm
Load VSWR	3.0:1
DC Current (22, 28, 30VDC)	80, 65, 60 A
Storage Air Temperature	-30 to +75 °C
Operating Air Temperature	-5 to +40 °C

Recommended

Parameter	Min	Typ	Max	Units
Voltage (V _{dc})	22	28	30	Volts
Current (dc)	80	65	60	Amps
Operating Air Temperature	-20	25	40	°C
RF Input Power, CW		0	+5	dBm