

# 2.1 TECHNICAL SPECIFICATIONS

The SSPA specified herein is capable of meeting or exceeding the performance specifications listed in the following table over the frequency range, operating temperature and line voltage variation, unless otherwise specified. The SSPA will meet all RF performance specifications within thirty minutes after the application of prime power.

TABLE 1: TECHNICAL SPECIFICATIONS		
Operating Frequency	5.40 - 5.90 GHz	
Input Signal	Pulsed CW	
Input Level	20 dBm	
Input Impedance	50 Ohms	
Input Return Loss	18 dB	
Input Connector	SMA	
Peak Output Level	(P1dB) 51.5 dBm	
Output Impedance	50 Ohms	
Output Return Loss	18 dB	
Output Connector	Type N	
Gain versus Frequency	31.5 ± 1 dB over operating band	
Gating Signal	1 Volt square wave to precede RF pulse by 15 μs	
Decay Interval	Amplifier output will cease 2 µs after loss of gating signal	
Maximum Pulse Width	2 μs	
Duty Cycle	1 per cent	
Monitor Output	Calibrated output sample loop with 40-dB attenuation. Type N connector	
Dimensions	19" wide x 3.5" high x 24" deep	
Weight	45 lbs. nominal	
Power Requirement	300 Watts @ 110-220 VAC, single phase	



TABLE 3: ENVI	RONMENTAL CONDITIONS
Temperature:	
Non operating (continuous exposure) Operating (ambient)	-40°C to +85°C 0°C to +50°C
Relative humidity	50 % Non Condensing
Altitude	10,000 feet AMSL, de-rated 2°C/1,000 feet from AMSL

TABLE 4: POWER SPECIFICATIONS		
Power Requirements	110-220 VAC, 47-63 Hz, single phase	
Power Consumption	300 Watts, max	



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ENGINEERING TEST DATA SHEET

PRODUCT: 100-300960-000, 150 WATT, C - BAND, RACK-MOUNT, SSPA

PRODUCT CODE: ARSA-CP150-CSN

SERIAL NUMBER: A5649

## 1.0 PEAK OUTPUT POWER VS FREQUENCY AND TEMPERATURE

AMBIENT	OUTPUT POWER AT 1 dB GAIN COMPRESSION SPEC: 51 dBm		
TEMPERATURE	5.400 GHz	5.650 GHz	5,900 GHz
+23°C	52,5	52.3	52.1
+50°C	52,4	52,2	52.1
୯୯	52.8	52, Y	52,2

### 2.0 INPUT/OUTPUT RETURN LOSS

FREQUENCY (GHz)	INPUT RETURN LOSS SPEC: 18 dB min	OUTPUT RETURN LOSS SPEC: 18 dB min
5,45	19.0	
5.8		18, 1

## 3.0 RISE TIME

RISE TIME 120 n.S. SPEC: 2 usec @ centre frequency and 40°C		
	SPEC: 2 µsec @ centre frequency and 40°C	

#### 4.0 FALL TIME

FALL TIME	(\U u \)	
SPEC: 15 µsec @ centre frequency and 40°C		

APPROVED BY:

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DOC. No. TP-100-300960-000 (ARSA-CP150-CSN)

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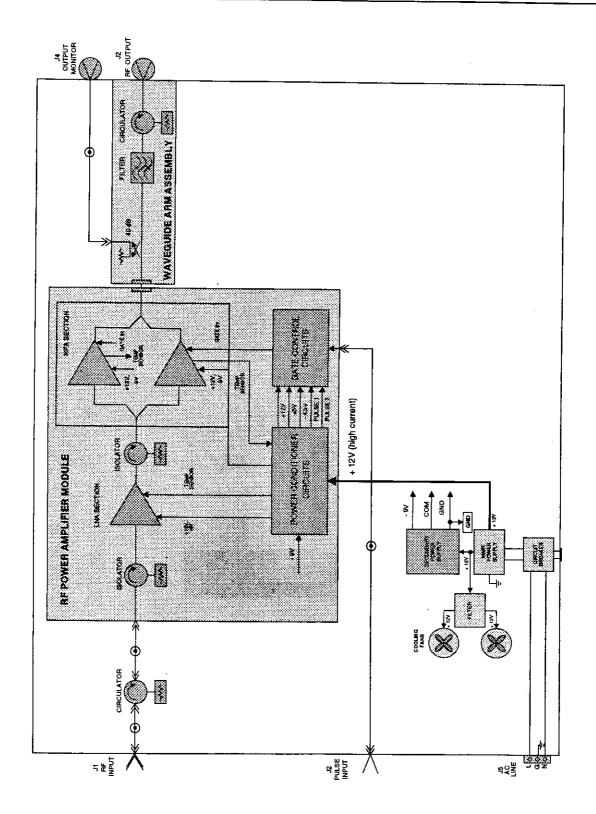


Figure 2: Block Diagram