



Model 3900-1S7

ISO 9001 CERTIFIED

**6 - 640 MHz, pulsed,
solid-state, RF power
amplifier system**

Electrical specifications:

(-1) Ch B:

(-7) Ch A:

Frequency range MHz	6 - 220, 221 - 245	550 - 620, 621 - 640
Pulse power (min.) into 50 ohms	300 W, 150W	100 W, 60W (not simultaneous)
CW power (max.) into 50 ohms	30 W	30 W (not simultaneous)
Gain (typ.)60 dB	60 dB	55 dB
Gain flatness	±3 dB	±3 dB
Input/Output impedance	50 ohms	
Input VSWR	< 2:1	
Pulse width (Max/ch)	CH A 20 ms, 1 ms simultaneous	
Duty cycle	10%, 1% simultaneous	
Amplitude rise/fall time	200 ns typ.	200 ns typ.
Amplitude droop	CH B: <5% to 10 ms typ.; 7% max. CH A: <5% to 10 ms typ.; 7% max	
Noise figure	8 dB typ.	8 dB typ.
Output noise (blanked)	< 20 dB over thermal	
Blanking delay	< 2 µs on/off, TTL signal	

Protection

1. VSWR: infinite VSWR at rated power
2. Input overdrive: up to 10 dB
3. Over duty cycle/pulse width
4. Over temperature

Supplemental characteristics:

Connectors, rear panel (2ea)

1. RF input: BNC (F)
2. RF outputs: Type N (F)
3. Noise blanking: BNC (F)
4. Interface: 25 pin D(F), EMI filtered

Controls, front panel

1. AC power
2. Duty cycle
3. Duty cycle

Indicators, front panel

1. AC power on
2. Over pulse width
3. Over duty cycle
4. Over temperature
5. Overdrive
6. CW mode
7. FWD/RFL power

System monitors

1. Thermal fault
2. DC power supply fault
3. Over duty cycle/pulse width
4. Forward/reflected RF power

Cooling

Internal forced air

Operating temperature

+10 to 40°C

AC line voltage

120/240 VAC, ±10%, 50 - 60 Hz

AC power requirements

1300 watts

Package

Rack mount

Size (HWD, inches)

5.25x19x24

Net weight

75 lbs