



# Model 3900C-12

**ISO 9001 CERTIFIED**

**6 - 500 MHz, pulsed,  
solid-state, RF power  
amplifier system**

**Electrical specifications:**

**(-1) Ch B:**

**(-2) Ch A:**

Frequency range	6 - 220 MHz **	200 - 500 MHz
Pulse power (min.) into 50 ohms	300 W	50 W
	** 221-245 MHz	100 W
CW power (max.) into 50 ohms	30 W	15 W
Gain (typ.)	60 dB	50 dB
Gain flatness	±3 dB	±3 dB
Input/Output impedance	50 ohms	
Input VSWR	< 2:1	
Pulse width (Max/ch)	20 ms	
Duty cycle	Up to 1%	
Amplitude rise/fall time	200 ns typ.	175 ns typ.
Amplitude droop	CH B: <5% to 10 ms typ.; 7% max.	CH A: <10% to 10 ms typ.; 15% max
Noise figure	8 dB typ.	9 dB typ.
Output noise (blanked)	< 20 dB over thermal	
Blanking delay	< 1 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