

**ISO 9001 CERTIFIED**

## Model 3146

**300-600 MHz, 50 W pulsed,  
solid-state, RF power  
amplifier systems**



### Electrical specifications:

Frequency range	300 - 600 MHz
Pulse power into 50 ohms (min.)	50 W
CW power into 50 ohms (max.)	15 W
Linearity ( $\pm 1$ dB from linear)	0 - 80 W
Gain (typ.)	50 dB
Gain flatness	$\pm 3$ dB
Input/output impedance	50 ohms
Input VSWR	Less than 2:1
Pulse width	20 ms, 250 ms with long pulse option
Duty cycle	Up to 10%
Amplitude rise/fall time	175 ns typ.
Amplitude droop	5% to 20 ms typ; 7% max.
Phase change/output power	10° to rated power typ.
Phase error overpulse	4° to 10 ms duration, typ.
Noise figure	9 dB typ.
Output noise (blanked)	< 20 dB over thermal
Blanking delay	< 1 $\mu$ s on/off, TTL signal
Protection	1. VSWR: infinite VSWR at rated power 2. Output overdrive 3. Over duty cycle/pulse width 4. Over temperature

### Supplemental characteristics:

Connectors, rear panel	1. RF input: BNC (F) 2. RF output: Type N (F) 3. Noise blanking: BNC (F) 4. Interface: 25 pin D(F), EMI filtered
Controls, front panel	1. AC power 2. Fwd/Ref RF power 3. Pulse width 4. Duty cycle
Indicators, front panel	1. AC power on 2. Peak power meter 3. Over pulse width 4. Over duty cycle/Standby 5. Over temperature 6. Overdrive, Fwd/Ref 7. CW mode
System monitors	1. Forward/reflected RF power 2. Over pulse width/duty cycle 3. DC power supply fault 4. Thermal fault
Cooling	Internal forced air
Operating temperature	+10 to 40°C
AC line voltage	120/240 VAC $\pm 10\%$ , 50 - 60 Hz
AC power requirements	400 VA
Package	Rack mount
Size (HWD, inches)	5.25x19x24
Net weight	42 lbs