

# X-Band Coaxial Pulsed Magnetron - 2,000 kW

## L6170-04

The L6170-04 is a high output power coaxial pulse magnetron that delivers 2,000 kW minimum peak output power at a duty cycle of up to 0.0002 and a pulse width of up to 4.0  $\mu$  Sec.

Performance Characteristics	
<b>Frequency</b>	9.275 – 9.325 GHz
<b>Peak Pulse Power Output</b>	2,000 kW min
<b>Average Power Output</b>	400 W
<b>Peak Anode Voltage</b>	34 to 38 kV
<b>Peak Anode Current</b>	93 A
<b>Average Anode Current</b>	19 mA
<b>Pulse Width</b>	4.0 $\mu$ Sec
<b>Duty Cycle</b>	00.0002
<b>Filament Voltage (Standby)</b>	10 V
<b>Filament Current (Standby)</b>	15 A
<b>Filament Voltage (Oscillating)</b>	2 V (back-down required)
<b>Warm-up time</b>	300 Sec.
<b>Load VSWR</b>	1.2:1 max
Environment	
<b>Cooling</b>	Laboratory environment water cooling to anode & tuner
<b>Flow Rate (Operating)</b>	1.0 gallon / min
<b>Max Inlet temp (Operating)</b>	+45 °C
<b>Max Outlet temp (Operating)</b>	+85 °C
<b>Temperature Range (Ambient Air).</b>	5 °C to 40 °C
Mechanical Description	
<b>RF Launch Type</b>	WR-112 mates with UG-51/U flange
<b>Weight (nominal)</b>	35 lb. (16 Kg)
<b>Outline dimensions</b>	See outline drawing (page 2)
<b>Mounting position</b>	Any orientation
<b>Tuning</b>	10 turns, nominal



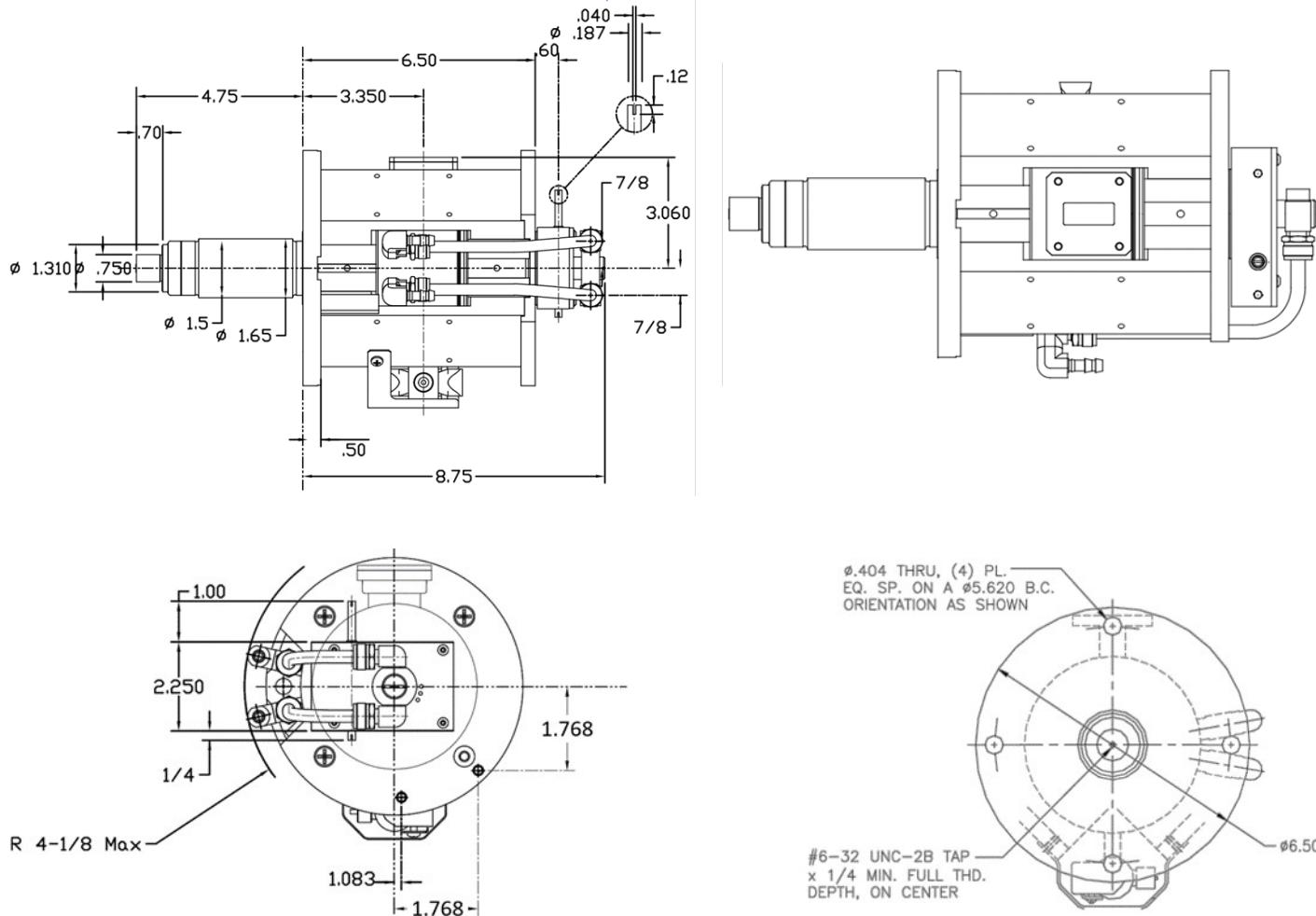
### KEY FEATURES

- \* Linear accelerator applications
- \* 9.3 GHz, high frequency stability
- \* Tunable +/- 25 MHz to match accelerator
- \* 2,000 kW peak output power
- \* 0.0002 duty cycle
- \* Liquid cooled anode
- \* Integral permanent magnets

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**L6170-04 Outline (inches)**



Detailed outline drawings are available on request. Specifications and features are subject to change without notice.

**Stellant Systems** is a partner for civil, military, and commercial organizations whose missions seek to ensure a safe, aware, and connected world. We are a premier manufacturer of critical spectrum and power amplification systems for defense, space, medical & scientific and industrial customers worldwide.

### **Headquarters**

3100 Lomita Blvd.  
Torrance, California 90505  
T: 310-517-6000  
[info@stellantsystems.com](mailto:info@stellantsystems.com)

1035 Westminster Dr.  
Williamsport, Pennsylvania 17701  
T: 570-326-3561

107 Woodmere Rd.  
Folsom, California 95630  
T: 916-351-4500

[www.StellantSystems.com](http://www.StellantSystems.com)

