



thermionics
laboratory, inc.

RC Series 3kW Rod-Fed e-Gun™

Research Capacity electron beam evaporation sources

Thermionics introduces a redesigned 3 kW Rod-Fed e-Gun for better coating performance. The new design protects the emitter from damage and shorting during installation and service. The improved water-cooling system enhances heat transfer, which increases rate stability and prevents damage to the e-beam source.

The Rod-Fed e-Gun is designed for easy installation into MBE systems.

Features

- 3kW e-Gun source
- Fits into a 4.5" CF type port
- Rod-fed material for continuous evaporation
- Completely shielded emitter
- Fully UHV compatible



Specifications

Operating pressure	Below 5×10^{-5} Torr is desirable for best operation
Beam voltage	4,000 VDC
Beam current	0-750 mA continuously variable
Maximum power	3kW
Cooling water	1 gpm
Pressure differential	25 psi minimum
Maximum bakeout temperature	230°C
Crucible volume	0.25" diameter -or- 0.38" diameter rod; 3" standard length
e-Gun size	2.25" diameter x 2.95" height

Ordering Information

Description	Model No.
Rod-Fed e-gun only	RF0303-25
Rod-Fed e-gun with all utility, electrical and mechanical feedthroughs mounted on a 4.5" diameter ConFlat® type flange	RF0303-25/SK