Controller Specification

Input Power: 115/230VAC 50/60Hz auto-select operation. Fused at 3.3/1.8A. Beam Energy: 0 - 5000V, 1mA switch mode supply continuously variable.

Output capacitance: $0.0047 \square F$.

Dual Condenser Focus: 150 - 5000V, 1mA switch mode supplies independently and continuously variable

through front panel three position rotary switches and trim-pots. Output voltages

scale with energy. Output capacitance: 0.0047 F

Objective Focus: 0 - 5000V, 1mA switch mode supply continuously variable. Output voltage scales

with energy. Output capacitance: 0.0047 [F

Filament Power: Emission regulated supply with front panel selectable filaments providing 5V@

5A max.

Electron Bombardment Electron accelerating voltage internally adjustable to 150V.

Seven settings of electron emission current selectable from front panel rotary switch.

Internally adjustable to 1500V.

Faraday Collector: Front panel momentary switch permits beam current monitoring through panel

mounted display.

Deflection: Variable bi-polar 350VDC supply for +X, -X, +Y and -Y deflection. Remaining

octupole elements are supplied from a resistive divider network.

Interlocks: HV cable disconnection turns off HV supplies.

Adjustable high pressure interlock switches off HV supplies in the event of system

overpressure.

System and Auxiliary interlocks provide total shutdown in the event of system or

auxiliary equipment failure.

Front Panel Monitoring: Digital panel meters provide precision monitoring of all critical parameters including:

lens voltages ($4^{1}/_{2}$ digits), ion source pressure and beam current ($3^{1}/_{2}$ digits), filament

current and voltage $(3^{1}/_{2})$ digits), emission current $(3^{1}/_{2})$ digits).

Chassis Dimensions: 483(W)x132.5(H)x435.4(D) mm. 19 inch rack-mountable desktop case 3U high.

