This series of precision regulated power supplies consist of a high voltage unit for electron gun and a filament supply, either floating on high voltage or at ground potential, both house in a single rack These are designed specifically for scanning Electron Microscope that require high stability and low ripple noise.

**REGULATED HIGH VOLTAGE POWER SUPPLY FOR**

**SCANNING ELECTRON MICROSCOPE**

**Up to 120kV, 150W**



**Features:**

* Precision Regulated
* Low Ripple
* High Stability
* 19” Rack Mountable
* OEM Customization Available

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| **Technical Specifications** | |
| **PARAMETER** | SPECIFICATION |
| Input Voltage | 230V ±10% A C, 50Hz, single phase |
| Front Panel | AC Power ON/OFF switch with indication HV ON/OFF switch with indication 3½ dig it meters for display of output high voltage & current, filament voltage 10-turn potentiometers for control of high voltage and current, filament voltage |
| Back Panel | Socket for mains input with 250V, 10A/20A 3 conductor power cord of 1.5 meters Fuse holder with fuse  Terminal for HV output with 10ft of detachable high voltage cable Terminal for filament output Stud for grounding the unit Remote interface connector\* |
| Topology | High frequency resonant / PWM-controlled switch mode |
| Switching Device | IGBT |
| Cabinet | 2U to 5U 19” rack mountable, powder coated |
| HIGH VO LTAGE POWER SUPPLY | |
| Output Voltage Range\* | Upto 120kV DC |
| Output Power Range\* | Upto 150W |
| Polarity\* | Negative |
| Line Regulation | Better than 0.005% for 10% variation in input voltage |
| Load Regulation | Better than 0.005% for 0 to 100% load variation |
| Ripple | 0.05% at full rating |
| Stability | Better than 0.005%/hour after 1 hour warm up |
| Regulation Mode\* | Constant voltage |
| Voltage & Current Control\* | Local: By 10-turn potentiometers on the front panel Remote: 0 to 10V DC signals for voltage & current control |
| Protections\* | Against over load, over current, short-circuit and arc |
| Remote Controls & Signals through Pluggable Connector / D-Connector | 10V DC reference 10V DC HV enable signal 0 to 10V DC signal for voltage & current control 0 to 10V DC signal for voltage & current monitoring |
| FILAMENT POWER SUPPLY | |
| Output Voltage Range\* | 10V DC typical |
| Output Power Range\* | 4A typical |
| Polarity\* | Floating on high voltage output / Positive |
| Line Regulation | 1% |
| Voltage Control\* | Local: By 10-turn potentiometers on the front panel Remote: 0 to 10V DC signal for voltage control |
| Remote Controls & Signals through Pluggable Connector / D-Connector | 10V DC reference 0 to 10V DC signal for voltage & current monitoring 0 to 10V DC signals for voltage control |

\*Optional. To be specified by the user only as per application’s requirement.

For any queries or customization requests contact us at [info@ionics.co.in](mailto:info@ionics.co.in)

For product line information visit us at [www.ionics.co.in](http://www.ionics.co.in)