

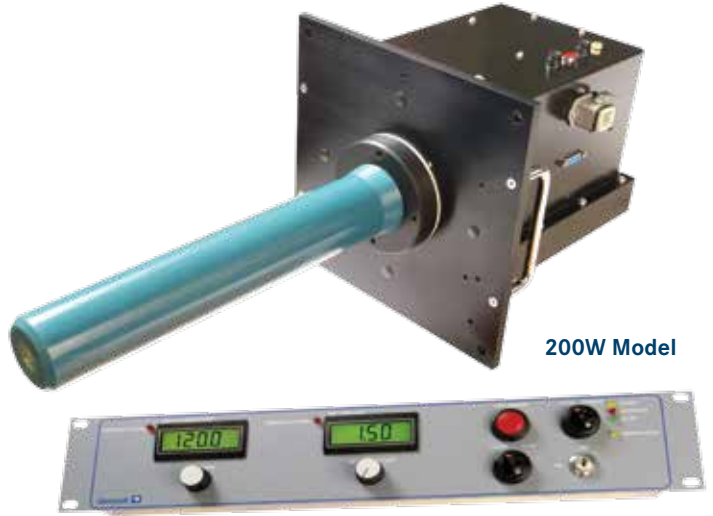


## Mercury Range

150 - 1000W, 80 - 150kV versatile PSU range



960W and 480W Models



200W Model

### Specification Summary

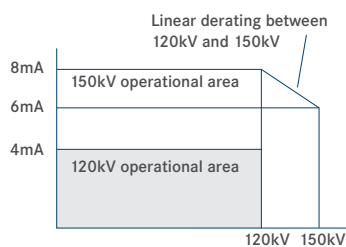
Electrical (150kV specifications in brackets)

<b>Supply Voltage</b>	198 to 264 VAC, 45 to 60Hz. The input is via conventional filtered industrial connector. This allows for different installation wire lengths, convenient installation and servicing and also provides better EMC performance. However, if local legislation insists, a direct wiring system may be adopted. The type of connection should be specified with the order.
<b>Output Voltage</b>	Up to 120kV (150kV) DC positive or negative polarity.
<b>Output Current</b>	Maximum of 4mA (The 150kV can provide up to 8mA at a derated voltage - see graph).
<b>Accuracy</b>	The voltage and current are within 5% FSD of the demand value.
<b>Rise Time</b>	300msec from HV On command into 30pF load.
<b>Control</b>	By operator's control unit or remote interface. A basic facility for remote computer monitoring and control of the output voltage and current is incorporated.

### Remote Control

Remote interface signals as follows:

1. HV monitor
2. mA monitor
3. HV demand reference
4. mA limit reference
5. HV On command
6. HV On report
7. Remote Status Report



### Interlock

An interlock keyswitch is provided on the front panel of the control unit. A facility for an external interlock loop is also included.

The Genvolt 'Mercury' series units were designed specifically for operation with the patented ion Blast air purification system which can achieve up to 99.98% cleaning efficiencies even with micron-sized particles.

However, the system is available for use in other fields of application that require a source of HVDC. The Mercury is available in three basic modules:

- 1) 150kV, 960W provides 8mA up to 120kV with linear de-rating to 6mA at 150kV.
- 2) 120kV, 480W provides 4mA up to 120kV with linear de-rating to 3mA at 150kV.
- 3) 100kV, 200W provides 2.5mA up to 80kV with linear de-rating to 1.8mA at 100kV

Control is by means of an external control unit. This is available in two types. Type 'A', which is illustrated above, has full digital metering facilities and includes a remote interface. Adjustment down to zero is possible with the type 'A' with independent control of both mA and kV settings. Type 'B' has simple bar graph indication of current and voltage and a rotary switch to derate either the current demand or voltage demand from maximum over a limited range.

The control signals are standard 0-10V and it is thus possible for the user to employ any suitable control system as an alternative to the two control panels. Genvolt's flexible approach makes it possible to produce variants on the above designs, usually in short time frames.

Design improvements may lead to specification changes.