This series of power supplies can generate output that ranges from 20kV to 40kV, 2kW and are housed in compact 19” racks to give a highly regulated output. These rugged units are designed for continuous operation

**REGULATED HIGH VOLTAGE DC POWER SUPPLY FOR ELECTROSTATIC SEPARATION**

**30kV/40kV upto 2kW**

mainly for electrostatic separation.

**Features:**

* Precision regulated
* Protected against frequent short circuits & arcs
* 19” rack mountable

[

* OEM customization available

|  |
| --- |
| **Technical Specifications** |
| **PARAMETER** | SPECIFICATION |
| Input Voltage | 230V ±10% A C, 50Hz, single phase |
| Output Voltage Range\* | 30kV / 40kV DC |
| Output Power Range\* | Upto 2kW |
| Polarity\* | Positive / Negative |
| Line Regulation | ≤ 0.05% for 10% variation in input voltage |
| Load Regulation | ≤0.1% for 0 to 100% load variation |
| Stability | Better than 0.01%/hour after 1 hour warm up |
| Regulation Mode\* | Constant voltage – Constant current |
| Voltage & Current Control\* | Local: By 10-turn potentiometers on the front panelRemote: 0 to 10V DC signals for voltage & current control; ORControl through computer interface |
| Protections\* | Against over load, over current, over voltage, short-circuit and arc |
| Remote Controls & Signalsthrough Pluggable Connector /D-Connector (External RS232 Microcontroller Module) \* | 10V DC reference10V DC HV enable signal0 to 10V DC signal for voltage & current control0 to 10V DC signal for voltage & current monitoring |
| Front Panel | AC power ON/OFF switch with indicationHV ON/OFF switch with indication3½ digit voltage and current meters10-turn potentiometers for voltage and current controlConstant voltage – constant current mode indication |
| Back Panel | Socket for mains input with 250V, 10A 3 conductor power cord of 1.5 metersFuse holder with fuseTerminal for HV output with 10ft of detachable high voltage cable Stud for grounding the unitRemote interface connector\* |
| Topology | High frequency resonant / PWM-controlled switch mode |
| Switching Device | IGBT |
| Cabinet | 2U/3U, 19” rack, powder coated |

\*Optional. To be specified by the user.

#RS232 interface available at an extra cost.

|  |
| --- |
| Remote Interface Connector Configuration |
|  | **Analog Interface** | **Digital Interface** |
| Pins | **28 Pin Pluggable Connector** | **25 Pin D Connector** |
| 1 | Earth | Earth |
| 2 | Common | Common |
| 3 | Interlock | HV Enable |
| 4 | HV Enable | Voltage Control Remote |
| 5 | Reference | Current Control Remote |
| 6 | Common | Over Voltage Control Remote\* |
| 7 | Voltage Control Remote | Over Current Control Remote\* |
| 8 | Voltage Control Local | Common |
| 9 | Common | Voltage Monitor |
| 10 | Current Control Remote | Current Monitor |
| 11 | Current Control Local | Reserved Monitor\* |
| 12 | Common | Reserved Monitor\* |
| 13 | Voltage Monitor | Common |
| 14 | Current Monitor | Mode Status |
| 15 | Common\* | Interlock Status |
| 16 | Voltage Mode Status\* | HV ON Status |
| 17 | Current Mode Status\* | Common |
| 18 | HV ON Status\* | PS Fault Status\* |
| 19 | Common\* | Over Voltage Status\* |
| 20 | PS Fault Status\* | Over Current Status\* |
| 21 | Over Voltage Status\* | Over Temperature Status\* |
| 22 | Over Current Status\* | Open Circuit Status\* |
| 23 | Over Temperature Status\* | Phase Failure Status\* |
| 24 | Open Circuit Status\* | Reserved Status\* |
| 25 | Phase Failure Status\* | Common |
| 26 | Common\* |  |
| 27 | Over Voltage Control\* |  |
| 28 | Over Current Control\* |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ordering Code | HV | 040 | K | 600 | W | N | C | I | D | 5 | T |
|  | **1** |  | **2** |  | **3** |  |  |  | **5** | **6** |
| Section | **Description** | **Options** | **Options Description** |
| 1 | Output Voltage | XXX | Value of output voltage |
| 2 | Output Power | Y | Value of output power |
| 3 | Polarity | P | Positive |
| N | Negative |
| 4 | Short Circuit | A | Shut down  |
| B | Shut down & manual reset  |
| C | Shut down & automatic restart  |
| D | Constant current  |
| 5 | Regulation Mode | 4 | Constant voltage |
| 5 | Constant voltage & constant current |
| 6 | Control Mode | L | Local control |
| R | Remote control through D-connector |
| T | Remote control through pluggable connector |

\*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

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