

This series of power supplies can generate output that ranges from 160kV to 220kV, 100W to 1kW and the high voltage sections are housed in oil-filled HT tanks and the control sections in compact 19" racks to give a highly regulated output.

Features:

- ❖ Precision Regulated
- ❖ Low Ripple
- ❖ High Stability
- ❖ 19" Rack mountable
- ❖ OEM Customization Available



TECHNICAL SPECIFICATIONS

PARAMETER		SPECIFICATION
Input Voltage		230V $\pm$ 10% AC, 50Hz, single phase
Output Voltage Range*		160kV to 220kV DC
Output Power Range*		100W to 1kW
Polarity*		Positive / Negative
Voltage Regulation	Line	$\leq$ 0.05% for $\pm$ 10% variation in input voltage
	Load	$\leq$ 0.1% for 0 to 100% load variation
Current Regulation	Line	$\leq$ 0.1% for $\pm$ 10% variation in input voltage
	Load	$\leq$ 0.1% for 0 to 100% load variation
Stability		< 0.05/hour after 1 hour warm up
Temperature Coefficient		< 0.05% / $^{\circ}$ C
Regulating Mode		Constant current - Constant voltage
Cooling		Oil cooling
Voltage & Current Control #		Local: By 10-turn potentiometers on the front panel Remote: 0 to 10V DC signals for voltage & current control; OR Control through computer interface
Protections		Against over voltage, over load, short circuit and arc
Remote Controls & Signals through Pluggable Connector / D-Connector (External RS232 Microcontroller Module) #		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
Front Panel		Power ON/OFF switch with indication HV ON/OFF switch with indication 3½ digit current and voltage meters 10-turn potentiometers for current and voltage control Constant current – constant voltage mode indication
Back Panel		Socket for mains input with 250V, 10A 3 conductor power cord of 1.5 meters Fuse holder with fuse Stud for grounding the unit Remote interface connector #

Topology	High frequency resonant / PWM-controlled switch mode
Switching Device	IGBT
Cabinet	19" rack, powder coated for control section HT tank for high voltage section

*To be specified by the customer

For remote operation digital interface available at an extra cost

Remote Interface Connector Configuration

Pins	14 Pin Pluggable Connector (Analog Interface)	25 Pin D Connector (Digital Interface)
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		Interlock Status
16		HV ON Status
17		Common
18		PS Fault Status*
19		Over Voltage Status*
20		Over Current Status*
21		Over Temperature Status*
22		Open Circuit Status*
23		Phase Failure Status*
24		Reserved Status*
25		Common

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

Ordering Code	HV	040	K	600	W	N	C	U	D	5	T
		1		2		3				5	6
Section	Description			Options		Options Description					
1	Output Voltage			XXX		Value of output voltage					
2	Output Power			YYY		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					

For any queries or customization requests contact us at info@ionics.co.in

For product line information visit us at www.ionics.co.in

