

This series of power supplies can generate output that ranges from 1kV to 150kV, 50W to 1kW and are housed in compact 19" racks to give a highly regulated output.

Features:

- ❖ Precision Regulated
- ❖ Low Ripple
- ❖ High Stability
- ❖ Analog/Digital Interface
- ❖ 19" Rack Mountable
- ❖ OEM Customization Available


TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
Input Voltage	230V \pm 10% A C, 50Hz, single phase
Output Voltage Range*	1kV DC to 150kV DC
Output Power Range*	50W to 1kW
Polarity*	Positive/Negative
Line Regulation	\leq 0.01% for 10% variation in input voltage
Load Regulation	\leq 0.05% for 0 to 100% load variation
Ripple	\leq 0.05% rms at full rating
Stability	Better than 0.01%/hour after 1 hour warm up
Temperature Coefficient	< 0.05% / $^{\circ}$ C
Regulation Mode*	Constant voltage – Constant current
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 load, over voltage, short-circuit and arc
Remote Interface (Analog) through Pluggable 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
Optional. Remote Interface (Digital) through D-Connector (External Ethernet/RS232 Microcontroller Module) #	HV ON/OFF Voltage & current setting Voltage & current monitor
Front Panel	AC power ON/OFF switch with indication HV ON/OFF switch with indication 3½ digit voltage and current meters 10-turn potentiometers for voltage and current control Constant voltage – constant current mode indication
Back Panel	Socket for mains input with 250V, 10A 3 conductor power cord of 1.5 meters Fuse holder with fuse Terminal for HV output with 10ft of detachable high voltage cable

	Stud for grounding the unit Remote interface connector*
Topology	High frequency resonant / PWM-controlled switch mode
Switching Device	MOSFET/IGBT
Cabinet	For $\leq 100\text{kV}$ 19" rack, 2U/3U powder coated For $\geq 100\text{kV}$ control & HT section separate

*Optional. To be specified by the user.

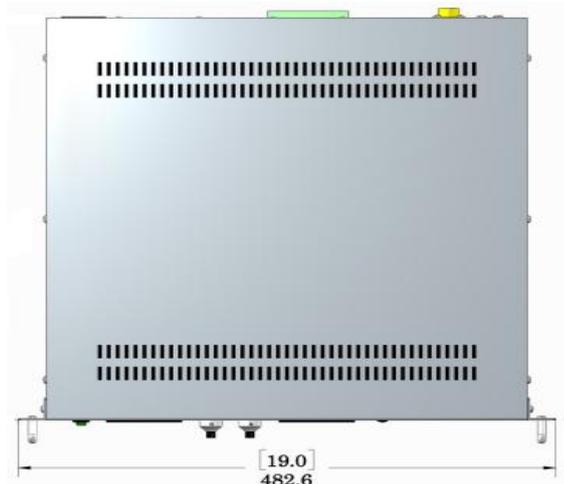
#Digital Interface available at an extra cost.

Remote Interface Connector Configuration		
	Analog Interface (14 Pin Pluggable Connector)	Digital Interface (25 Pin D Connector)
Pins		
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	B	Y	A
	1						2	3	4
Section	Description			Options		Options Description			
1	Output Voltage			XXX		Value of output voltage			
	Output Power			YYY		Value of output power			
	Polarity			P		Positive			
				N		Negative			
	Control Mode			Default		Local control			
	Input Voltage			Default		230V AC, 1 phase, 50Hz			
Additional Features (Optional)									
2	Short Circuit			A		Shut down & manual reset			
				B		Shut down & automatic restart			
				C		Constant current mode			
3	Input Voltage			Y		415V AC, 3 phase, 50Hz			
				Z		24V DC			
4	Remote Interface			A		Analog			
				D		Digital			



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

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