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- Output Voltage 1kV~150kV
- Air Insulation
- Low Ripple and Noise
- Ultra-low output voltage stability
- Compact Structure
- Voltage&Current Programming
- Arc and short curcuit protection
- OEM Customization

INTRODUCTION

The DU series 5kW high-voltage power supply can output either positive or negative high voltage, with an output range from 1kV to 150kV. The DU high-voltage power supply features a comprehensive front panel for convenient local control, while the rear panel analog interface allows for remote control. It is characterized by fast response, rapid rise time, and high low-voltage stability.

The DU utilizes silicon carbide inverters, making it suitable for a variety of demanding applications, such as semiconductor manufacturing and vacuum deposition. Many operational functions of the DU high-voltage power supply can be user-configured to meet specific customer requirements.

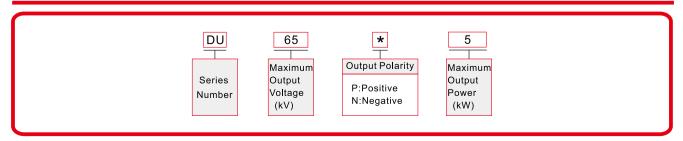
TYPICAL APPLICATIONS

Accelerator, Capacitor Charging, Electron Beam, Ion Beam, Ion Implantation, Semiconductor Manufacturing, Photolithography, Electronic Component Aging, High-Voltage Insulation Testing, Electrostatic Applications, Laser, High-Power RF Transmitter, X-Ray System, Scientific Experiments, Industrial Applications.

DU SELECTIN TABLE

kV	mA	P(kW)	Model	kV	mΑ	P(kW)	Model	kV	mΑ	P(kW)	Model
1	5000	5	DU1*5	20	250	5	DU20*5	65	75	4.875	DU65*4.875
2	2500	5	DU2*5	25	200	5	DU25*5	70	72	5	DU70*5
5	1000	5	DU5*5	30	170	5	DU30*5	80	63	5	DU80*5
8	625	5	DU8*5	40	125	5	DU40*5	100	50	5	DU100*5
10	500	5	DU10*5	50	100	5	DU50*150	125	40	5	DU125*5
15	330	5	DU15*5	60	85	5	DU60*5	150	33	5	DU150*5

DU SELECTION EXAMPLE





1kV~150kV 5kW **Rack Mount**



DU SPECIFICATIONS	SO9001:2015 Page 2 of 3				
PARAMETER	DESCRIBE				
Input	208Vac±10%, three-phase, 48~63Hz, Max current 20A.(optional 380Vac)				
Output	Voltage 1kV~150kV, Power 5kW				
Stability	0.01% per hour, 0.05% every 8 hours after 30 minutes warm up				
Temperature Coefficient	≤100ppm/°C				
Ripple	<0.05% p-prms				
Voltage/Current Monitor	0~+10Vdc=0-100% rated output, Zout=10k Ω , accuracy: \pm 1%				
Voltage Local Programming	Front panel potentiometer to set voltage from 0~100% rated output				
Voltage Remote Programming	External 0~+10Vdc control sign can set voltage from 0~100% rated output. Zin=332M Ω				
Current Local Programming	Front panel potentiometer to set voltage from 0~100% rated output				
Current Remote Programming	External 0~+10Vdc control sign can set voltage from 0~100% rated output. Zin=332M Ω				
Voltage Load Regulation	0.01% (no load to rated load)				
Voltage Line Regulation	$\pm 0.005\%$ (input voltage change $\pm 10\%$)				
Current Load Regulation	0.1%(change in rated current at any voltage change)				
Current Line Regulation	\pm 0.1% (input voltage change \pm 10%)				
Operation Temperature	-20°C~+40°C				
Storage Temperature	-40℃~+85℃				
Humidity	20% ~ 85% RH, non-condensing				
Dimensions	6.93"H x 19.00"W x 24.00"D (176mm x 483mm x610mm)				
Weight	25.6kg				

DU ANALOG INTERFACE

J1		SIGNAL				
1	High Voltage Off Indicator	Open Collector, 35V Max, Active Low				
2	Signal Ground	Voltage Programming Return Signal Ground				
3	Voltage Monitor	0~+10Vdc=0~100% rated voltage output, Zout=10kΩ				
4	Signal Ground	Voltage Programming Return Signal Ground				
5	High Voltage On Indicator	Open Collector, 35V Max, Active Low				
6	N/C	Not Connected				
7	Voltage Programming Monitor	0~10V = to 0~100% rated program				
8	Remote High Voltage On	Short with Pin 9 for Remote High Voltage On				
9	Remote High Voltage On	Remote High Voltage On Return Signal				
10	Remote Voltage Control Input	0~+10Vdc = to 0~100% rated voltage program				
11	Signal Ground	Voltage Program Return Signal Ground				
12	Signal Ground	Voltage Program Return Signal Ground				
13	Signal Ground	Voltage Program Return Signal Ground				
14	Current Monitor	0~+10Vdc=to 0~100% rated current output, Zout=10kΩ				
15	Signal Ground	Voltage Program Return Signal Ground				
16	Arc Error Indicator	Open Collector, 35V Max, Active Low				
17	N/C	Not Connected				
18	+10Vdc	+10Vdc Reference Output, Max Current 1mA				
19	N/C	Not Connected				
20	N/C	Not Connected				
21	External Interlock High	Short with Pin 22 for Interlock Close				
22	External Interlock Low	Short with Pin 21 for Interlock Close				
23	Signal Ground	Current Program Return Signal Ground				
24	Remote Current Control Input	0~10Vdc corresponds to 0~100% rated current program				
25	N/C	Not Connected				

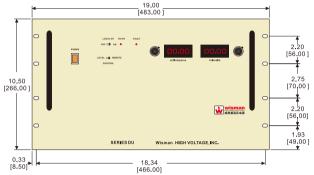
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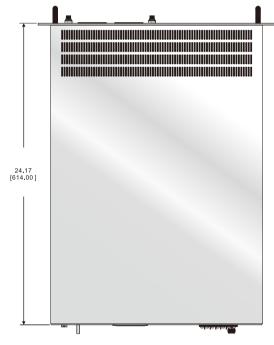
DU MACHINE DIMENSION

Unit: inch[millimeter]

FRONT VIEW



TOP VIEW



BACK VIEW

