

ISO9001:2015

Page 1 of 2







- OUTPUT VOLTAGE RANGE 8kV~100kV
- AIR INSULATION. LIGHT WEIGHT
- LOW RIPPLE, LOW NOISE
- VOLTAGE & CURRENT PROGRAMMBLE
- LOCAL & ROMOTE REGULATION
- SAFETY INTERLOCK
- ARC & OSCP
- STANDARD ET, RS-485 RS-232
- OEM CUSTOMIZATION AVALIABLE

INTRODUCTION

Wisman DP Series high voltage power supply, can output positive or negative high voltage with 3kW, the output range from 8kV to 100kV. The DP high voltage power supply front panel is fully functional for local control, the rear panel analog interface can be remote control, standard network port and RS232 digital interface. It has the characteristics of fast response, fast rising speed and high voltage stability. Flexible digital control and analog control with low ripple and low noise, stable adjustment and arc protection.

DP uses inverters such as silicon carbide and is suitable for a variety of demanding applications such as semiconductor manufacturing, vacuum deposition. Many of the operating functions of the DP high voltage power supply can be configured by the user to suit the specific requirements of the customer.

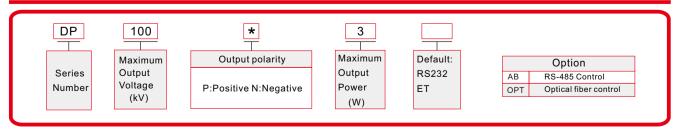
TYPICAL APPLICATIONS

Capacitor charging, electronic component, aging insulation test, high voltage testing, electron beams, ion beams, lithography technology, electro-statics applications, electro-spinning, electrophoresis capillary electrophoresis, microchip electrophoresis, DNA sequencing, piezo electricity material testing, science, laboratory applications, accelerator, industrial applications.

DP SELECTION TABLE

kV	mA	P(kW)	MODEL	kV	mA	P(kW)	MODEL	kV	mA	P(kW)	MODEL
8	375	3	DP8*3	25	120	3	DP25*3	60	50	3	DP60*3
10	300	3	DP10*3	30	100	3	DP30*3	70	43	3	DP70*3
12	250	3	DP12*3	40	75	3	DP40*3	80	37.5	3	DP80*3
15	200	3	DP15*3	50	60	3	DP50*3	100	30	3	DP100*3
20	150	3	DP20*3								

DP SELECTION EXAMPLE



DP SPECIFICATIONS

ISO9001:2015

Page 2 of 2

PARAMETER	DESCRIBE
Input	187-264Vac, Uniphase, 48-64Hz, 20A Maximum current
Output	8kV~100kV Maximum output Voltage option.3kW Maximum output power
Stability	0.01% per hour, 0.05% every 8 hours after 30 minutes'warm up *
Temperature Coefficient	≤100ppm/°C
RIPPLE	<0.05%
Voltage/Current Monitor	0 ~ +10Vdc=0 ~100% rated output,Zout=10kΩ, accuracy: ±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=332MΩ
Current Local Programming	Front panel potentiometer to set voltage from 0 ~100% rated output
Current Remote Programming	External 0 ~ +10Vdc control sign can set current from 0 ~100% rated output. Zin=332MΩ
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

DP ANALOG INTERFACE

J2	SIGNAL		
1	GND	GND	
2	SIGNAL	SIGANL	
3	External Interlock	Interlocking with PIN-4, +12Vdc when floating	
4	External Interlock Return	Interlocking with J2-3, GND	
5	N/C	N/C	
6	Remote Voltage Program In	$0 \sim +10 \text{Vdc} = 0 \sim 100\% \text{ rated output,Zout} = 332 \text{M}\Omega$	
7	Remote Current Program In	$0 \sim +10 \text{Vdc} = 0 \sim 100\%$ rated output, Zout=332M Ω	
8	SIGNAL	SIGNAL	
9	Voltage Monitor	0 ~ +10Vdc=0 ~100% rated output,Zout=10kΩ	
10	Current Monitor	0 ~ +10Vdc=0 ~100% rated output,Zout=10MΩ	
11	SIGNAL	SIGNAL	
12	+10Vdc	10Vdc reference, 4mA Max	
13	N/S	N/S	
14	N/S	N/S	
15	Remote HV ON	HV ON short circuit with pin-16	
16	Remote HV ON	HV ON short circuit with pin-15	
17	N/S	N/S	
18	N/S	N/S	
19	N/S	N/S	
20	HV enable signal	>2. 5V=enable, <1. 5V=disable	
21	HV ON Indicator	5V=ON, Low=OFF, 5mA Max	
22	Remote PS Fault	5V=power fault,low=normal,5mA Max	
23	Voltage Mode	5V=current mode,low=voltage mode,5mA Max	
24	Arc PS Fault	low=normal, 5V= arc fault, 5mA Max	
25	GND	GND	

RS232/RS485DIGITALINTERFACE O

J3	SIGNAL				
1	N/C	6	N/C		
2	TXD/TRANSMIT	7	RS485B(option)		
3	RXD/RECEIVE DATA	8	N/C		
4	N/C	9	RS485A(option)		
5	DIGITAL GROUND				

ETHERNET DIGITAL INTERFACE®

J4	SIGNAL		
1	RX+	Receive Data+	
2	RX-	Receive Data-	
3	TX+	Transmit Data+	
4	N/C	NO CONNECTION	
5	N/C	NO CONNECTION	
6	TX-	Transmit Data-	
7	N/C	NO CONNECTION	
8	N/C	NO CONNECTION	