



- ONE CAN BE USED AS THREE, OPTICAL FIBER COMMUNICATION OPTIONAL
- STANDARD ET INTERFACE, RS-232 AND RS-485
- VOLTAGE & CURRENT PROGRAMMING
- LOCAL AND REMOTE PROGRAMMING
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE



**RACK MOUNT**

## INTRODUCTION

Wisman's SDL Series are high performance chassis type high voltage power supply with size of 19 inches, It is designed with perfect protection system and can be controlled locally and remotely. The current and voltage can be displayed on the front panel. HV output has the function of the overvoltage, overcurrent, short circuit, arc fault and safety interlock. It is adjustable and optional. One SDL can be used as three, such as SDL260PN2400 can be used as SDL130P1200 SDL130N1200 and SDL260PN2400.

SDL has the control unit, adopting Wisman's unique synchronous technique, realizing positive and negative high voltage output synchronization.

## TYPICAL APPLICATIONS

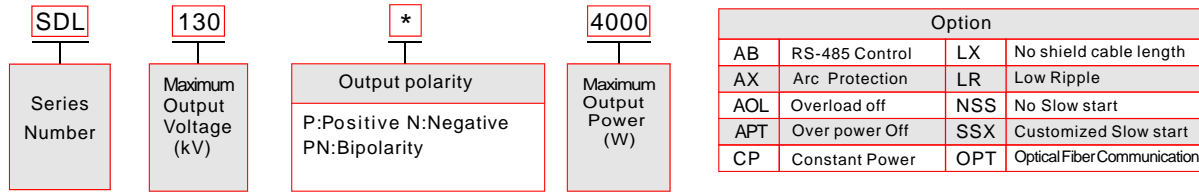
Capacitor Charging, Electronic Component Aging, High Voltage Insulation Test, Electron Beam /Ion Beam, Focuslon Beam, Ion Impouring, Lithography Technology, Electrostatic Applications, Electrostatic Deflexion, Electrospinning, Electrophoresis Capillary Electrophoresis, Microchip Electrophoresis, DNA sequencing, Piezoelectricity material Testing, Science, Laboratory Applications, Industrial Applications.

## SDL SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
2	10	20	SDL2*20	20	1	20	SDL20*20	60	0.33	20	SDL60*20	130	0.15	20	SDL130*20	160	0.13	20	SDL160PN20
	30	60	SDL2*60		3	60	SDL20*60		1	60	SDL60*60		0.46	60	SDL130*60		0.38	60	SDL160PN60
	60	120	SDL2*120		6	120	SDL20*120		2	120	SDL60*120		0.92	120	SDL130*120		0.75	120	SDL160PN120
	100	200	SDL2*200		10	200	SDL20*200		3.33	200	SDL60*200		1.54	200	SDL130*200		1.25	200	SDL160PN200
	150	300	SDL2*300		15	300	SDL20*300		5	300	SDL60*300		2.31	300	SDL130*300		1.88	300	SDL160PN300
	300	600	SDL2*600		30	600	SDL20*600		10	600	SDL60*600		4.62	600	SDL130*600		3.75	600	SDL160PN600
	600	1200	SDL2*1200		60	1200	SDL20*1200		20	1200	SDL60*1200		9.24	1200	SDL130*1200		7.5	1200	SDL160PN1200
	1200	2400	SDL2*2400		120	2400	SDL20*2400		40	2400	SDL60*2400		18.5	2400	SDL130*2400		15	2400	SDL160PN2400
2000	4000	SDL2*4000	200	4000	SDL20*4000	66.7	4000	SDL60*4000				25	4000	SDL160PN4000					
6	3.33	20	SDL6*20	30	0.67	20	SDL30*20	80	0.25	20	SDL80*20	140	0.14	20	SDL140PN20	200	0.1	20	SDL200PN20
	10	60	SDL6*60		2	60	SDL30*60		0.75	60	SDL80*60		0.43	60	SDL140PN60		0.3	60	SDL200PN60
	20	120	SDL6*120		4	120	SDL30*120		3	120	SDL80*120		0.86	120	SDL140PN120		0.6	120	SDL200PN120
	33.3	200	SDL6*200		6.67	200	SDL30*200		2.5	200	SDL80*200		1.43	200	SDL140PN200		1	200	SDL200PN200
	50	300	SDL6*300		10	300	SDL30*300		3.75	300	SDL80*300		2.14	300	SDL140PN300		1.5	300	SDL200PN300
	100	600	SDL6*600		20	600	SDL30*600		7.5	600	SDL80*600		4.28	600	SDL140PN600		3	600	SDL200PN600
	200	1200	SDL6*1200		40	1200	SDL30*1200		15	1200	SDL80*1200		8.57	1200	SDL140PN1200		6	1200	SDL200PN1200
	400	2400	SDL6*2400		80	2400	SDL30*2400		30	2400	SDL80*2400		17.1	2400	SDL140PN2400		12	2400	SDL200PN2400
66.7	4000	SDL6*4000	133	4000	SDL30*4000	50	4000	SDL80*4000	28.6	4000	SDL140PN4000	20	4000	SDL200PN4000					
10	2	20	SDL10*20	40	0.5	20	SDL40*20	100	0.2	20	SDL100*20	150	0.13	20	SDL150PN20	260	0.08	20	SDL260PN20
	6	60	SDL10*60		1.5	60	SDL40*60		0.6	60	SDL100*60		0.4	60	SDL150PN60		0.23	60	SDL260PN60
	12	120	SDL10*120		3	120	SDL40*120		1.2	120	SDL100*120		0.8	120	SDL150PN120		0.46	120	SDL260PN120
	20	200	SDL10*200		5	200	SDL40*200		2	200	SDL100*200		1.33	200	SDL150PN200		0.77	200	SDL260PN200
	30	300	SDL10*300		7.5	300	SDL40*300		3	300	SDL100*300		2	300	SDL150PN300		1.15	300	SDL260PN300
	60	600	SDL10*600		15	600	SDL40*600		6	600	SDL100*600		4	600	SDL150PN600		2.31	600	SDL260PN600
	120	1200	SDL10*1200		30	1200	SDL40*1200		12	1200	SDL100*1200		8	1200	SDL150PN1200		4.62	1200	SDL260PN1200
	240	2400	SDL10*2400		60	2400	SDL40*2400		24	2400	SDL100*2400		15	2400	SDL150PN2400		9.23	2400	SDL260PN2400
400	4000	SDL10*4000	100	4000	SDL40*4000	40	4000	SDL100*4000	25	4000	SDL150PN4000								



## SDL SELECTION EXAMPLE



## SDL SPECIFICATIONS

PARAMETER	DESCRIBE
Input	220Vac±10%,(Option AC110V )20A maximum Current .
Output	2kV~260kV Maximum output Voltage option.20W~4000W Maximum output power option.
Stability	100ppm per hours after 1/2 hour warm-up.
Temperature Coefficient	≤25ppm/°C.
Ripple	0.1% p-p+1Vrms
Voltage/Current Monitor	0 ~ +10Vdc corresponds to 0 to maximum output, Zout=4.99kΩ, accuracy:±1%.
Voltage Local Programming	Internal potentiometer to set voltage from 0 to maximum output voltage.
Voltage Remote Programming	0 ~ +10Vdc proportional from 0 to maximum output voltage.
Current Local Programming	Internal potentiometer to set current from 0 to maximum output current.
Current Remote Programming	0 ~ +10Vdc proportional from 0 to maximum output current.
Voltage Load Regulation	0.005%+5000mV ( no load to full load change).
Voltage Line Regulation	±0.005%+500mV (input voltage line change±10%).
Current Load Regulation	0.01%±100uA ( no load to full load change).
Current Line Regulation	±0.005% (input voltage line change±10%).
Operating Temperature	0°C~+50°C.
Storage Temperature	-40°C~+85°C.
Humidity	20%~85% RH, non-condensing.
Dimensions 20W~600W	3.46" H x 19.00" W x 19.00" D(88mm x 482.5mm x482.5mm).
Dimensions 1200W~4000W	6.92" H x 19.00" W x 19.00" D(176.00mm x 482.5.00mm x482.5.00mm).
Control unit	1.73" H x 19.00" W x 19.00" D(44mm x 482.5mm x482.5mm).
Weight	14~30kg.

## SDL ANALOG INTERFACE

PIN	SIGNAL				
1	Signal Ground	Signal Ground	14	Local HV Off Out	+15Vdc at Open, <25mA at Closed
2	External Inhibit	Ground=Inhibit, Open=HV On	15	HV Off	Comment to HV OFF for FP Operation
3	External Interlock	+15Vdc at Open, <15mA at Closed	16	Remote HV On	+15Vdc, 10mA Max=HV Off
4	External Interlock Return	External Interlock Return	17	Remote HV Off Indicator	0=HV On, +15Vdc, 10mA Max=HV Off
5	Current Monitor	0 ~ +10Vdc=0 to maximum output	18	Remote HV On Indicator	0=HV Off, +15Vdc, 10mA Max=HV On
6	Voltage Monitor	0 ~ +10Vdc=0 to maximum output	19	Remote Voltage Mode	Open Collector 50Vdc Max, 10mA Max On=Active
7	+10Vdc	+10Vdc, 1mA Max	20	Remote Current Mode	
8	Remote Current Program In	0 ~ +10Vdc=0 to maximum output	21	Remote Power Mode	
9	Local Current Program Out	Front Panel Program Current	22	Remote PS Fault	0=Fault, +15Vdc, 0.1mA Max=No Fault
10	Remote Voltage Program In	0 ~ +10Vdc=0 to maximum output	23	+15Vdc Output	+15Vdc, 100mA Max
11	Local Voltage Program Out	Front Panel Program Voltage	24	Power Monitor	Optional
12	Power Monitor	0 ~ +10Vdc=0 to maximum output,	25	Power Supply Common	Chassis Ground
13	Remote Power Program In	(Optional)			

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## RS-232 DIGITAL INTERFACE (A, B, C) <sup>Ⓛ</sup>

PIN	SIGNAL
1	N/C
2	TXD/Transmit Data
3	RXD/Receive Data
4	N/C
5	Digital Ground
6	N/C
7	N/C
8	N/C
9	N/C

## ETHERNET DIGITAL INTERFACE (A, B, C) <sup>Ⓛ</sup>

PIN	SIGNAL	PARAMETERS
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

## HV OUTPUT (B, C)

J1	HV Output
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## OPTICAL FIBER INTERFACE (B, C) <sup>Ⓛ</sup>

J5	PARAMETERS	
1	TX	Transmit Data
2	RX	Receive Data

## OPTICAL FIBER INTERFACE (A) <sup>Ⓛ</sup>

J3	#17 PACK PARAMETERS	
1	TX	Transmit Data
2	RX	Receive Data

J4	#25 PACK PARAMETERS	
1	TX	Transmit Data
2	RX	Receive Data

The power supply consists of three parts: A, B and C.  
A is the control unit. The customer can realize the high-voltage remote computer control;  
B is the positive high voltage power supply unit;  
C is the negative high voltage power supply unit.

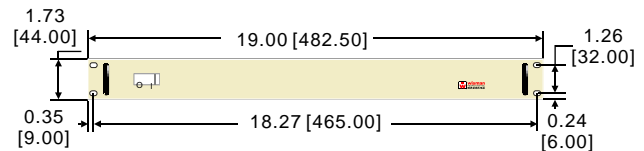
## INHIBIT (A) <sup>Ⓛ</sup>

J2	PARAMETERS	
6	INHIBIT	REMOTE ENABLE OUTPUT
7	GND	GND
OTHERS	N/C	N/C

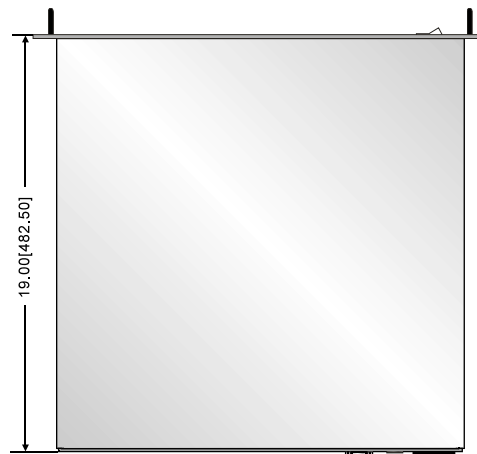
## DIMENSIONS

DIMENSIONS: in.[mm]

FRONT VIEW



TOP VIEW



BACK VIEW



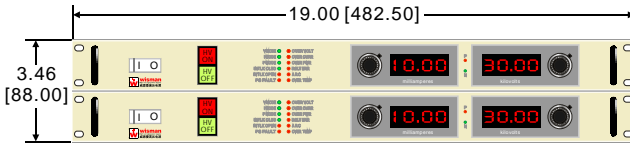
## DIMENSION

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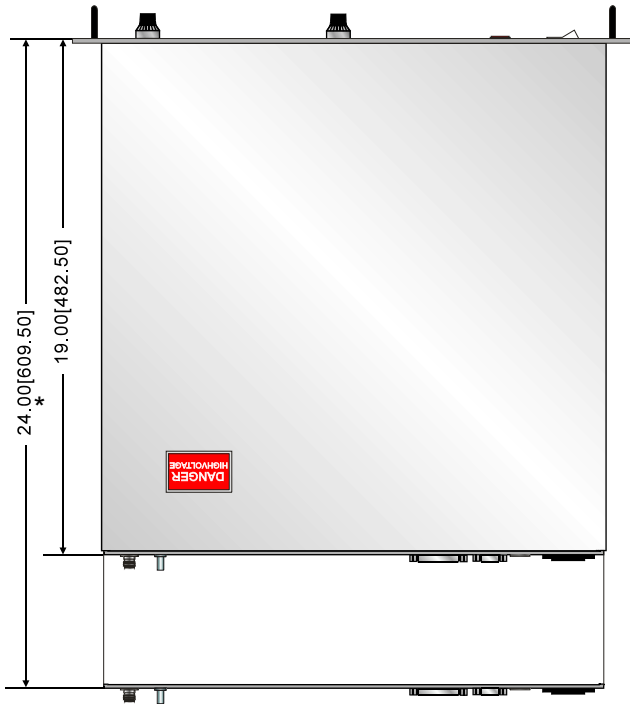
DIMENSIONS:in.[mm]

10W~300W:

FRONT VIEW



TOP VIEW

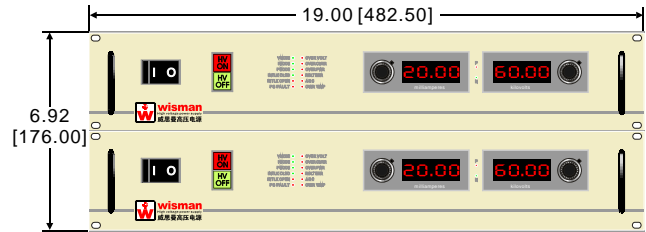


BACK VIEW

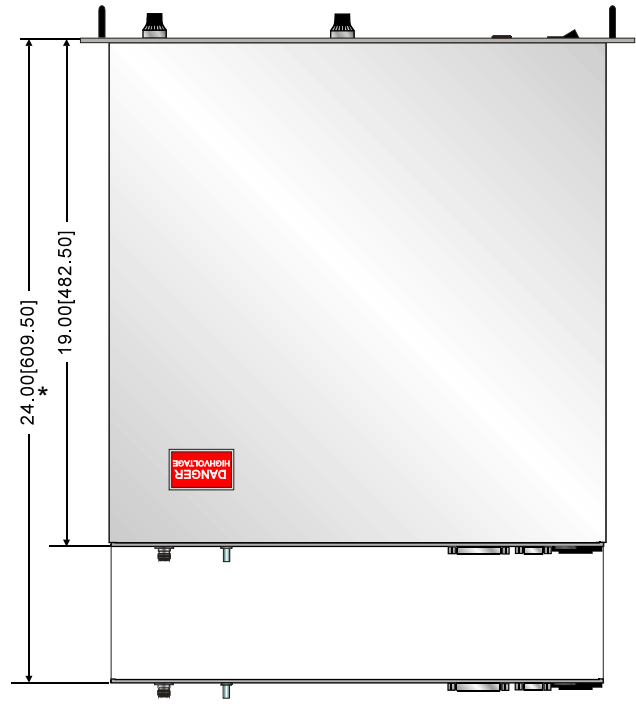


600W~1200W:

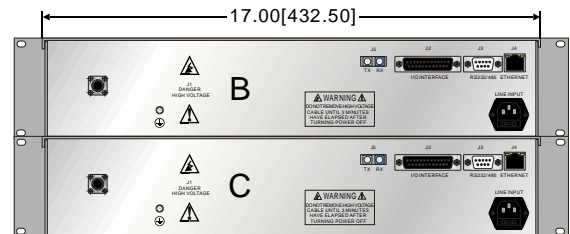
FRONT VIEW



TOP VIEW



BACK VIEW



\* Depth Becomes 24" [609.5] for 80kV to 130kV range.