

# DC

1kV~130kV  
10W~2000W  
RACK MOUNT



**wisman**<sup>®</sup>  
High voltage power supply  
威思曼高压电源

ISO9001:2015

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RACK MOUNT



- OUTPUT VOLTAGE RANGE 1KV ~ 130KV
- STANDARD ET, RS-232, OPTIONAL RS-485
- VOLTAGE & CURRENT PROGRAMMABLE
- LOCAL AND REMOTE REGULATION
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE

## INTRODUCTION

Wisman's DC series of high-voltage power supplies are designed to meet high-performance 19" chassis-type HV power supplies. DC series are equipped with a complete protection system such as over-voltage, over-current protection, and arc protection etc. Remote & local control, voltage and current display. These full featured supplies are available in a wide range of outputs with many options.

## 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.

## DC 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	
1	10	10	DC1*10	6	16.7	100	DC6*100	15	80	1200	DC15*1200	50	0.6	30	DC50*30	80	3.75	300	DC80*300	
	30	30	DC1*30		50	300	DC6*300		133	2000	DC15*2000		1.2	60	DC50*60		7.5	600	DC80*600	
	60	60	DC1*60		100	600	DC6*600		0.5	10	DC20*10		2	100	DC50*100		15	1200	DC80*1200	
	100	100	DC1*100		200	1200	DC6*1200		1.5	30	DC20*30		6	300	DC50*300		25	2000	DC80*2000	
	300	300	DC1*300		333	2000	DC6*2000		3	60	DC20*60		12	600	DC50*600		0.1	10	DC100*10	
	600	600	DC1*600		1.25	10	DC8*10		5	100	DC20*100		24	1200	DC50*1200		0.3	30	DC100*30	
	1200	1200	DC1*1200		3.75	30	DC8*30		15	300	DC20*300		40	2000	DC50*2000		0.6	60	DC100*60	
	2000	2000	DC1*2000		7.5	60	DC8*60		30	600	DC20*600		0.17	10	DC60*10		1	100	DC100*100	
2	5	10	DC2*10	8	12.5	100	DC8*100	100	60	1200	DC20*1200	60	0.5	30	DC60*30	100	3	300	DC100*300	
	15	30	DC2*30		37.5	300	DC8*300		100	2000	DC20*2000		1	60	DC60*60		6	600	DC100*600	
	30	60	DC2*60		75	600	DC8*600		0.33	10	DC30*10		1.6	100	DC60*100		12	1200	DC100*1200	
	50	100	DC2*100		150	1200	DC8*1200		1	30	DC30*30		5	300	DC60*300		20	2000	DC100*2000	
	150	300	DC2*300		250	2000	DC8*2000		2	60	DC30*60		10	600	DC60*600		0.08	10	DC120*10	
	300	600	DC2*600		1	10	DC10*10		3.33	100	DC30*100		20	1200	DC60*1200		0.25	30	DC120*30	
	600	1200	DC2*1200		3	30	DC10*30		10	300	DC30*300		33.3	2000	DC60*2000		0.5	60	DC120*60	
	1000	2000	DC2*2000		6	60	DC10*60		20	600	DC30*600		0.14	10	DC70*10		0.83	100	DC120*100	
3	3.33	10	DC3*10	10	10	100	DC10*100	30	40	1200	DC30*1200	70	0.43	30	DC70*30	120	2.5	300	DC120*300	
	10	30	DC3*30		30	300	DC10*300		66	2000	DC30*2000		0.85	60	DC70*60		5	600	DC120*600	
	20	60	DC3*60		60	600	DC10*600		0.25	10	DC40*10		1.42	100	DC70*100		10	1200	DC120*1200	
	33.3	100	DC3*100		120	1200	DC10*1200		0.75	30	DC40*30		4.28	300	DC70*300		16.6	2000	DC120*2000	
	100	300	DC3*300		200	2000	DC10*2000		1.5	60	DC40*60		8.57	600	DC70*600		0.23	30	DC130*30	
	200	600	DC3*600		0.67	10	DC15*10		2.5	100	DC40*100		17.1	1200	DC70*1200		0.46	60	DC130*60	
	400	1200	DC3*1200		2	30	DC15*30		7.5	300	DC40*300		28.5	2000	DC70*2000		0.77	100	DC130*100	
	666	2000	DC3*2000		4	60	DC15*60		15	600	DC40*600		0.13	10	DC80*10		2.31	300	DC130*300	
6	1.67	10	DC6*10	15	6.67	100	DC15*100	40	30	1200	DC40*1200	80	0.38	30	DC80*30	130	4.61	600	DC130*600	
	5	30	DC6*30		20	300	DC15*300		50	2000	DC40*2000		0.75	60	DC80*60		9.23	1200	DC130*1200	
	10	60	DC6*60		40	600	DC15*600		50	0.2	10		DC50*10	1.25	100		DC80*100	15.3	2000	DC130*2000

## DC SELECTION EXAMPLE

DC	130	*	2000	OPTION			
Series Number	Maximum Output Voltage (kV)	Output polarity P:Positive N:Negative R:Reversible Polarity (within 8kV, above 8kV, turn to HV modules)	Maximum Output Power (W)	AB	RS-485 Control	DO	Voltage dual output
				AX	Arc Protection	LX	No shield cable length
				AOL	Overload off	LR	Low Ripple
				APT	Over power off	NSS	No Slow Start
				CP	Constant Power	SSX	Customized Slow Start



**DC SPECIFICATIONS**

PARAMETER	DESCRIBE
Input	220Vac±10%,(Option 110Vac )10A maximum Current. Efficiency: 85%, Power Factor: 0.995
Output	1kV~130kV Maximum output Voltage option.10W~2000W Maximum output power option.
Stability	Less than 0.01% after per 8 hours warm-up.
Temperature Coefficient	≤25ppm/°C.
Ripple	0.05% + 1Vrms, LR = 0.02% + 1Vrms.
Voltage/Current Monitor	0 ~ +10Vdc = 0 ~100% rated output,Zout=4.99kΩ, accuracy:±1%.
Voltage Local Programming	Front panel potentiometer to set voltage from 0 ~100% rated output, Zin=10MΩ
Voltage Remote Programming	External 0 ~ +10Vdc control sign can set voltage from 0 ~100% rated output. Zin=10MΩ
Current Local Programming	Internal potentiometer to set current from 0 ~100% rated output. Zin=10MΩ
Current Remote Programming	External 0 ~ +10Vdc control sign can set current from 0 ~100% rated output. Zin=10MΩ
Voltage Load Regulation	0.005%+500mV ( no load to rated load).
Voltage Line Regulation	±0.005%+500mV (input voltage change±10%).
Current Load Regulation	0.01%±100uA ( no load to rated load ).
Current Line Regulation	±0.005% (input voltage change±10%).
Operating Temperature	0°C~+50°C.
Storage Temperature	-40°C~+85°C.
Humidity	20%~85% RH, non-condensing.
Dimensions10W-300W:0kV-100kV	1.73” H x 19.00” W x 19.00” D(44mm x 482.5mm x482.5mm).
Dimensions10W-1200W:1kV-130kV	3.46” H x 19.00” W x 19.00” D(88mm x 482.5mm x482.5mm).
Weight	7.7~14kg.

**RACK MOUNT**

**DC ANALOG INTERFACE**

J2	SIGNAL	
1	Signal Ground	Signal Ground
2	Polarity Monitor	Optional
3	External Interlock	+15Vdc at closed, <15mA at open
4	External Interlock Return	External Interlock Return
5	Current Monitor	0 ~ +10Vdc=0 ~100% rated output,Zout=4.99kΩ
6	Voltage Monitor	0 ~ +10Vdc=0 ~100% rated output,Zout=4.99kΩ
7	+10Vdc	+10VDC reference output, 1mA Max
8	Remote Current Program In	0 ~ +10Vdc=0 ~100% rated output,Zin=10MΩ
9	Local Current Program Out	Front Panel Program Current output
10	Remote Voltage Program In	0 ~ +10Vdc=0 ~100% rated output,zin=10MΩ
11	Local Voltage Program Out	Front Panel Program Voltage output
12	Remote Power Program Out	(Optional)
13	Remote Power Program In	
14	Remote HV Off	+15Vdc at Open, contact closure
15	HV Off/ON Indicator	Low=Off, , High=On
16	Remote HV On	+15Vdc @open, contact open
17	HV ON Indicator	Low=On, High=Off
18	Reset Signal	Low= Reset
19	Voltage Mode	Low
20	Current Mode	Low
21	Power Mode	Optional
22	Remote PS Fault	0=Fault, +15Vdc, 0.1mA Max=No Fault
23	+15Vdc I/O	+15Vdc, 100mA Max
24	Power Monitor	Optional
25	Ground	Chassis Ground

**RS-232/RS-485 DIGITAL INTERFACE** <sup>Ⓛ</sup>

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

**ETHERNET DIGITAL INTERFACE** <sup>Ⓛ</sup>

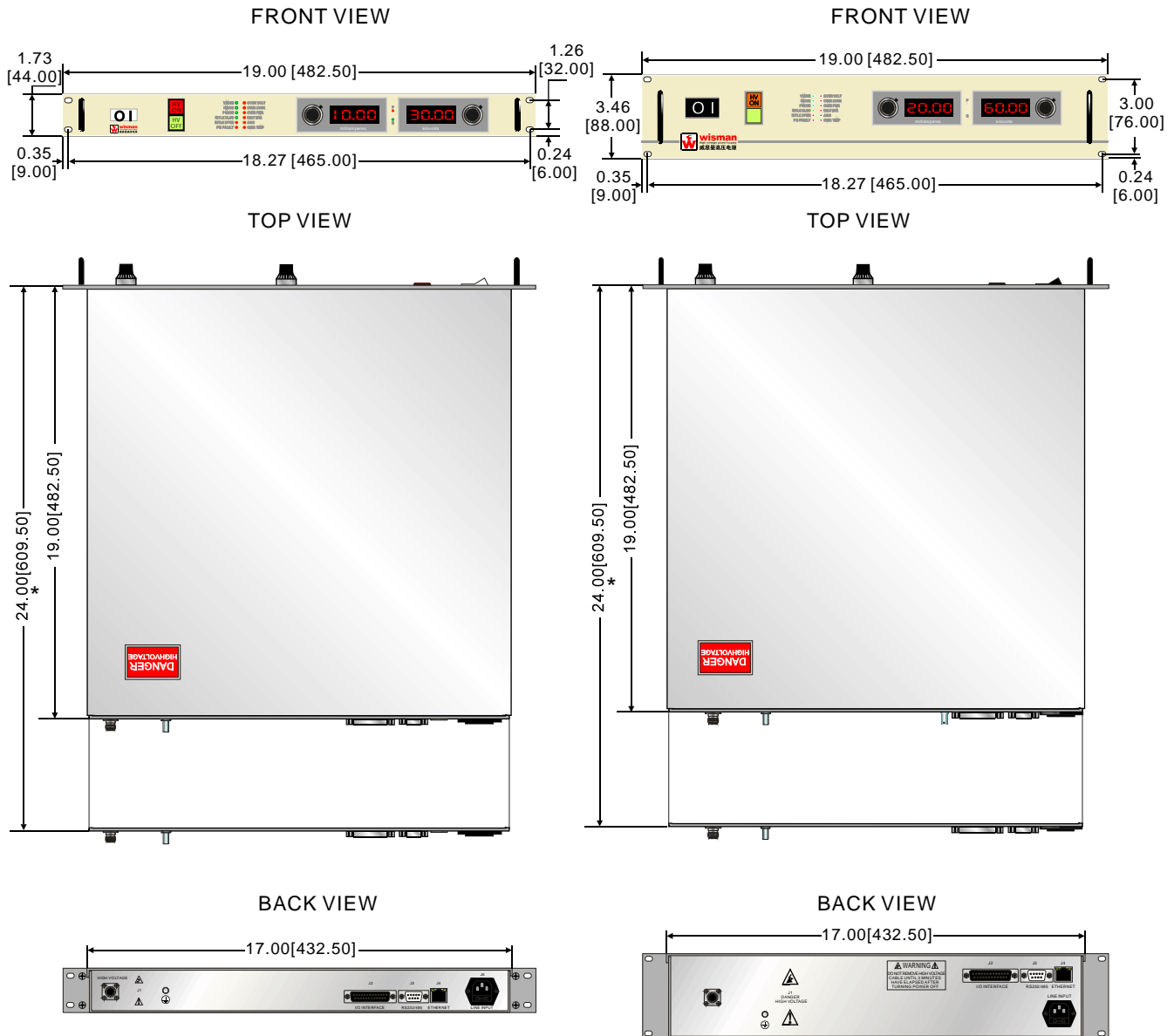
J4	SIGNAL	
1	RX+	Receive Data+
2	RX-	Receive Data-
3	TX+	Transmit Data+
4	N/C	No Connection
5	N/C	No Connection
6	TX-	Transmit Data-
7	N/C	No Connection
8	N/C	No Connection

## DIMENSIONS

DIMENSIONS: in.[mm]

10W~300W:

600W~1200W:



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

**F3 RACK MOUNT**