ISO9001:2015

- *USB2.0, RS-232,RS-485 CONTROL AVAILABLE*
- *HOT SWITCHABLE POLARITY REVERSIBLE*
- *WELL REGULATED, LOW RIPPLE,*
- *±1kV~±30kV REMOTE PROGRAMMING*
- *POLARITY REVERSIBLE UPON COMMAND IN<1s,AT NO LOAD*
- *LOW STORAGE ENERGY, CURRENT LIMITED OUTPUT*
- *COST EFFECTIVE MODULAR DESIGN*
- *LOCAL AND REMOTE CONTROL*
- *OEM CUSTOMIZED AVAILABLE*

INTRODUCTION

Wisman's PRC modular high voltage power supply is ideal for OEM usage. It is specifically designed to meet the needs of applications requiring a hots witched reversible output voltage. The output polarity of the unit can be quickly and safely reversed via the Polarity Control Signal provided on the interface connector.Both the output voltage and current are fully adjustable via ground referenced remote programming signals such that 0 to10Vdc corresponds to 0to100%rated output voltage and current. Remote motioning functionality is provided by voltage and current monitor such that 0to10Vdc corresponds to 0to100% rated voltage and current. Additionally remote polarity and mode indicator sprovi
dea comprehensive over view of power supply operation.
AnoptionalUSB2.0RS-232orRS-422isavailable.

TYPICAL APPLICATION

Mass spectrometer, CapillaryElectrophoresis,ElectrostaticPrinting,Electrostaticdischarge,DNA Analysis, Electrospinning,LifeSciences,ElectronMicroscope,ElectronMultiplierTubes,Ion Multiplier Tubes Testing Electrostatic research, Microchip Electrophoresis, Microchip Electrophoresis, Electrostatic chuck, Medical chemical Applications, Science, Laboratory Applications, Industrial Applications.

SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
5	1	5	PRC5R5	15	0.33	5	PRC15R5	25	0.2	5	PRC25R5
	1.2	6	PRC5R6		0.4	6	PRC15R6		0.24	6	PRC25R6
	1.6	8	PRC5R8		0.53	8	PRC15R8		0.32	8	PRC25R8
	2	10	PRC5R10		0.67	10	PRC15R10		0.4	10	PRC25R10
10	0.5	5	PRC10R5	20	0.25	5	PRC20R5	30	0.17	5	PRC30R5
	0.6	6	PRC10R6		0.3	6	PRC20R6		0.2	6	PRC30R6
	0.8	8	PRC10R8		0.4	8	PRC20R8		0.27	8	PRC30R8
	1	10	PRC10R10		0.5	10	PRC20R10		0.33	10	PRC30R10

SELECTION EXAMPLE

PRC	30	R	10	TR	/	FG
Series Number	Maximum Output Voltage (kV)	Output Polarity: Single Output Positive and negative polarity reversible	Maximum output Power(W)	Option: TR:RS-232 AB:RS-485 USB:USB2.0		Floating Ground

APPLICATION SPECIFIC

FEATURES

PARAMETER	DESCRIBE
Input	+25Vdc±10%,2A maximum
Output	±5kV,±10kV,±15kV,±20kV,±25kV,±30kV optional
Stability	0.01% per hour after 1 hour's warm up
Temperature coefficient	≤25ppm/℃。
Ripple	≤0.001%Vp-p。
Polarity	Reversible via remote logical signal
Current/Voltage monitor	0~+10Vdc=0~100% rated output, Zout=10kΩ, Accuracy:±1%
Voltage remote control	0~10Vdc=0~100% rated output,Zin=10MΩ.
Voltage load regulation	0. 01%(no load to full load)
Voltage line regulation	±0. 01%(input voltage changes±10%)
Current load regulation	0. 01%(no load to full load)
Current line regulation	±0. 01%(input voltage changes±10%)
Operation temperature	0℃~+40℃。
Storage temperature	-40℃~+85℃。
Cooling	Convection cooling
Humidity	20%~85%RH,non condensing
Dimensions	3.5" H x 5.0" W x10.0" D (89.00mm x 127.00mm x254.00mm)。
Weight	4.45kg。

ANALOG INTERFACE

J2	SIGNAL	PARAMETER
1	+24Vdc GND	Power GND
2	+24Vdc GND	Power GND
3	+24Vdc GND	Power GND
4	HV Enable/inhibit	Open or<1Vdc=HV OFF,>3. 4Vdc (Maximum 15Vdc)=HV ON
5	Voltage monitor	0~+10Vdc=0~full scale, Zout=10kΩ
6	Current monitor	0~+10Vdc=0~full scale, Zout=10kΩ
7	Chassis ground	GND
8	Remote voltage control	0~+10Vdc=full scale,Zin=10MΩ
9	Remote current control	0~+10Vdc=full scale, Zin=10MΩ
10	+10Vdc	+10Vdc reference Voltage
11	SGND	SGND
12	Polarity control	Open or>3. 4Vdc=positive,Ground or <1Vdc=negative
13	Positive polarity indicator	+24Vdc sourced through a 100Ω series, limiting resistor, +24Vdc=positive
14	+24Vdc input	+24Vdc±10%
15	+24Vdc input	+24Vdc±10%
16	Chassis GND	GND
17	Negative polarity indicator	+24Vdc sourced through a 100Ω series, limiting resistor, +24Vdc=negative
18	Current mode indicator	Open collector pulled up internally to+15Vdc,through 2.7kΩ resistor with a 470Ω limiting resistor in series. Transistor OFF=signal active
19	Voltage mode indicator	Open collector pulled up internally to+15Vdc,through 2.7kΩ resistor with a 470Ω limiting resistor in series. Transistor OFF=signal active
20	Return current monitor	0~+10Vdc=0~100% rated output current, as measures returned from load. Zout=10kΩ, 1%
21	Load return	High voltage return point, required for GFI circuit functionality.
22	Ground arc indicator	Open collector pulled up internally to+15Vdc,through 2.7kΩ resistor with a 470Ω limiting resistor in series. Transistor OFF=signal active
23	Spare	N/C
24	Spare	N/C
25	Spare	N/C

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RS-232/RS-485 DIGITAL INTERFACE Ⓓ

	SIGNAL		SIGNAL
1	N/C	6	N/C
2	TXD/Transmit Data	7	RS-485B
3	RXD/Receive Data	8	N/C
4	N/C	9	RS-485A
5	SGND		

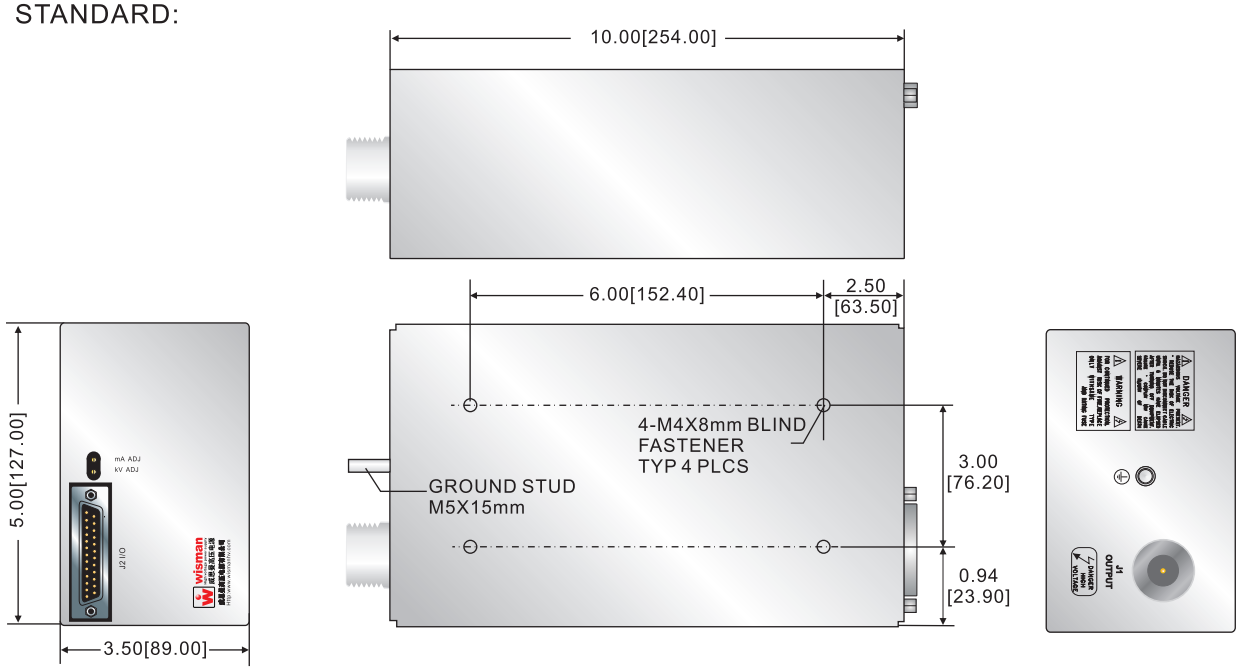
USB2.0 DIGITAL INTERFACE Ⓓ

	USB	Signal
1	VBUS	+5Vdc
2	D-	Data-
3	D+	Data+
4	GND	USB GND

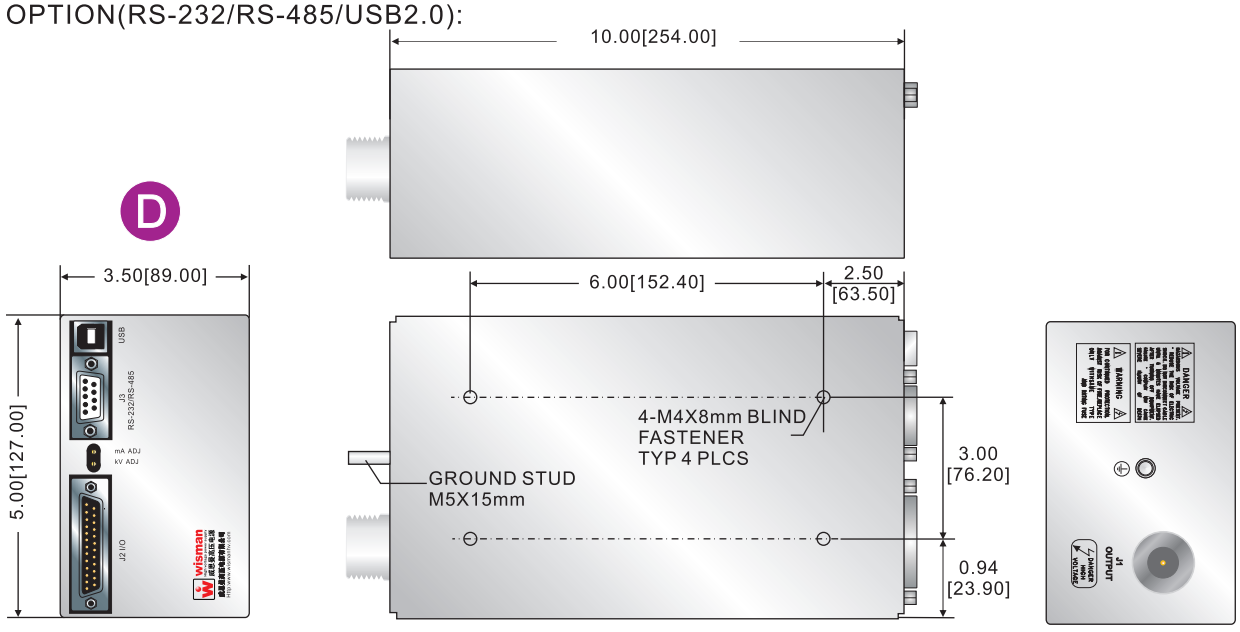
DIMENSION

Unit: inch(mm)

STANDARD:



OPTION(RS-232/RS-485/USB2.0):



APPLICATION SPECIFIC