



- OPTIONAL USB2.0、RS-232 OR RS-485 IS AVAILABLE
- HOT SWITCHABLE POLARITY REVERSIBLE VIA A LOGIC SIGNAL
- WELL REGULATED, LOW RIPPLE
- ±1kV~±30kV , REMOTELY PROGRAMMABLE
- POLARITY REVERSIBLE UPON COMMAND IN <1 S.AT NO LOAD
- LOW STORED ENERGY, CURRENT LIMITED OUTPUT
- COST EFFECTIVE MODULAR DESIGN
- LOCAL AND REMOTE CONTROL
- OEM CUSTOMIZATION AVAILABLE

## INTRODUCTION

Wisman's PRF modular high voltage power supply is ideal for OEM usage. It is specifically designed to meet the needs of applications requiring a hot switched 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 to 10Vdc corresponds to 0 to 100% rated output voltage and current.

Remote motioning functionality is provided by voltage and current monitor such that 0 to 10Vdc corresponds to 0 to 100% rated voltage and current. Additionally remote polarity and mode indicators provide a comprehensive overview of power supply operation.

An optional USB 2.0、RS-232 or RS-485 is available.

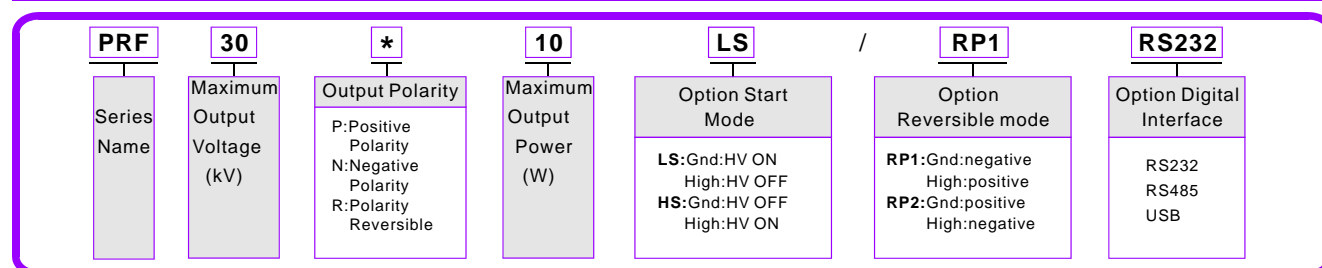
## TYPICAL APPLICATIONS

Mass Spectrometry, Capillary Electrophoresis, Electron Microscope, Electrostatic Printing, Electron Multiplier Tubes, Ion Multiplier Tubes, Electrostatic discharge Testing, Electrostatic research, DNA Analysis, Microchip Electrophoresis, Microchip Electrophoresis, Electrospinning, Electrostatic chuck, Life Sciences, Medical, chemical Applications, Science, Laboratory Applications, Industrial Applications.

## PRF SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
5	1	5	PRF5*5	15	0.33	5	PRF15*5	25	0.2	5	PRF25*5
	1.2	6	PRF5*6		0.4	6	PRF15*6		0.24	6	PRF25*6
	1.6	8	PRF5*8		0.53	8	PRF15*8		0.32	8	PRF25*8
	2	10	PRF5*10		0.67	10	PRF15*10		0.4	10	PRF25*10
10	0.5	5	PRF10*5	20	0.25	5	PRF20*5	30	0.17	5	PRF30*5
	0.6	6	PRF10*6		0.3	6	PRF20*6		0.2	6	PRF30*6
	0.8	8	PRF10*8		0.4	8	PRF20*8		0.27	8	PRF30*8
	1	10	PRF10*10		0.5	10	PRF20*10		0.33	10	PRF30*10

## PRF SELECTION EXAMPLE





**SPECIFICATIONS**

PARAMETER	DESCRIBE
Input	+24Vdc±10%, 2A maximum.
Output	±1kV, ±2kV, ±3kV, ±5kV, ±8kV, ±10kV, ±12kV, ±14kV, ±15kV, ±18kV, ±20kV, ±30kV Maximum output Voltage option.
Stability	0.01% per hour after 1 hour warm up.
Temperature Coefficient	≤25ppm/°C.
Ripple	≤70mVp-p.
Polarity	Remotely reversible via logic signal.
Voltage/Current Monitor	0~+10Vdc corresponds to 0 to maximum output, Zout=10k? accuracy:±1%.
Voltage Programming	0~+10Vdc proportional from 0 to maximum output voltage, Zin=10M? .
Voltage Load Regulation	0.001% ( no load to full load change).
Voltage Line Regulation	±0.001% (input Voltage line change±10%).
Current Load Regulation	0.1% ( no load to full load change).
Current Line Regulation	±0.05% (input Voltage line change±10%).
Operating Temperature	0°C~+40°C.
Storage Temperature	-40°C~+85°C.
Cooling	Convection cooled.
Humidity	20%~85% RH, non-condensing.
Dimensions	2.87" H x 4.92" W x 13.39" D (73.00mm x 125.00mm x340.00mm).
Weight	3.75kg.

**PRF ANALOG INFORMATION**

J2	SIGNAL	PARAMETER
1	Local Voltage Control	0~+10Vdc=0 to full scale.
2	Remote Voltage Control	0~+10Vdc=0 to full scale, Zin=1M?
3	Local Current Control	0~+10Vdc=0 to full scale.
4	Remote Current Control	0~+10Vdc=0 to full scale, Zin=1M?
5	Voltage Monitor	0~+10Vdc=0 to full scale, Zout=10k?
6	Polarity Control	Open or>3.4Vdc(up to 15Vdc)=Positive, Polarity Grounded or<1Vdc=Negative Polarity.
7	Chassis Ground	Ground.
8	+24Vdc Return	Power Return .
9	Spare	No Connection.
10	Spare	No Connection.
11	Spare	No Connection.
12	HV Enable/Inhibit	Ground or<1Vdc=HV ON, Open or>3.4Vdc ( up to 15Vdc) =HV OFF.
13	Current Monitor	0~+10Vdc=0 to full scale, Zout=10k?
14	+10Vdc	+10Vdc Reference Output .
15	+24Vdc Input	Power Input.

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

J3	SIGNAL	J3	SIGNAL
1	N/C	6	RA+/RA+ Receive
2	TXD/Transmit Data	7	RB-/RB- Receive
3	RXD/Receive Data	8	TB-/TB- Transmit
4	N/C	9	TA+/TA+ Transmit
5	SGND		

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

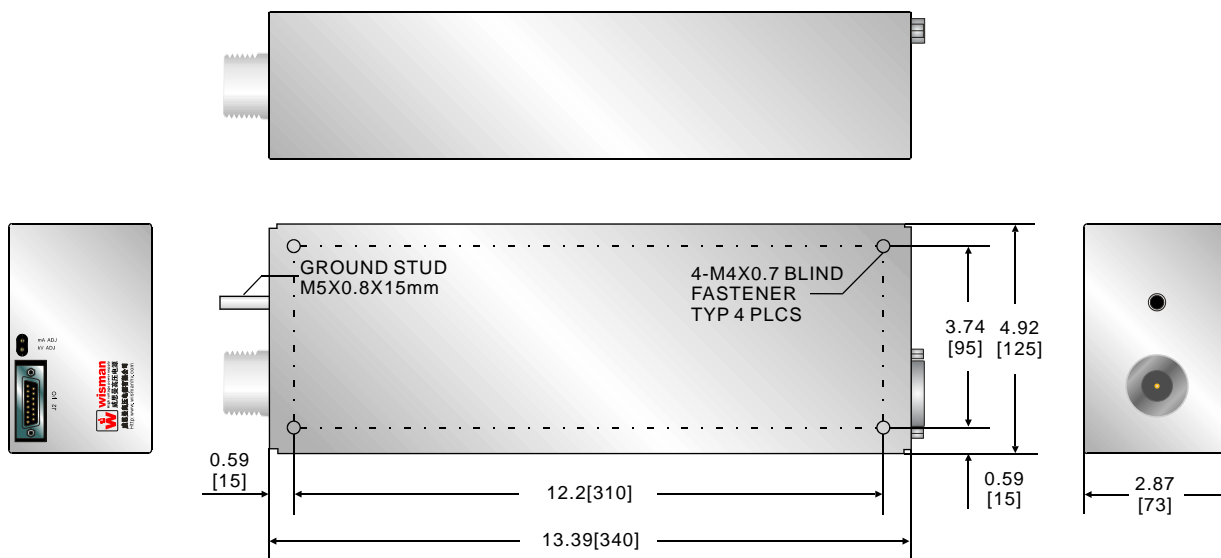
USB	SIGNAL
1	VBUS +5Vdc
2	D- Data-
3	D+ Data+
4	SGND USB GND

— APPLICATION SPECIFIC

## DIMENSIONS

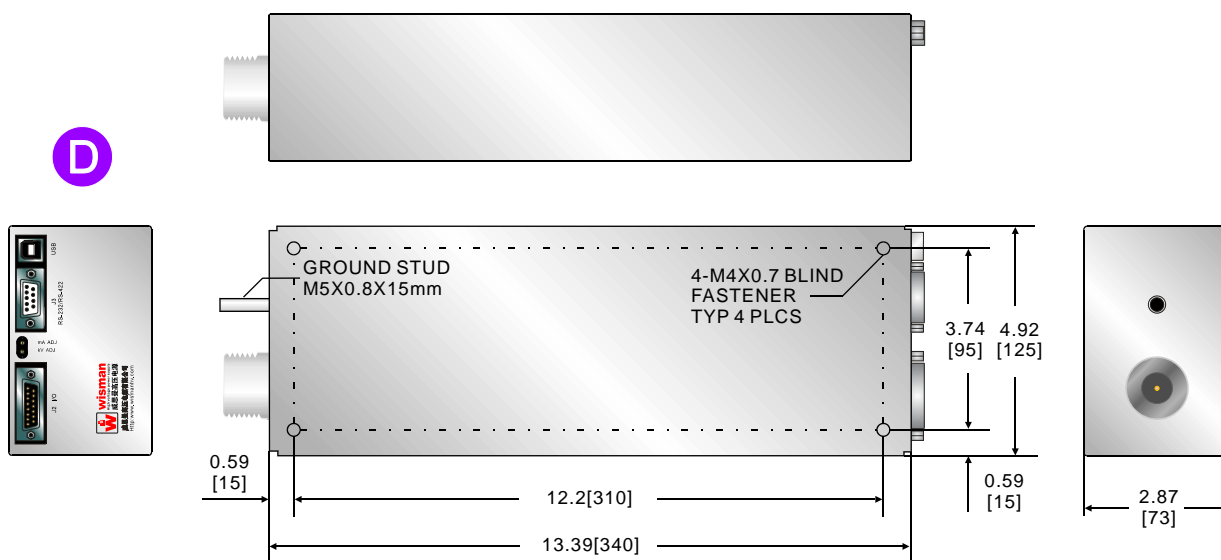
DIMENSIONS:in.[mm]

STANDARD:



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

**D**



— APPLICATION SPECIFIC