



- OPTIONAL RS-232 OR RS-485 IS AVAILABLE
- HOT SWITCHABLE POLARITY REVERSIBLE VIA LOGIC SIGNAL
- WELL REGULATED , LOW RIPPLE
- POLARITY REVERSAL WITH IN 10ms
- VOLTAGE AND CURRENT MONITOR OUTPUTS
- REMOTE HV INHIBIT
- ARC AND SHORT CIRCUIT PROTECTED
- OEM CUSTOMIZATION AVAILABLE



## INTRODUCTION

Wisman's PRA is a well-regulated high performance DC-DC converter featuring a "hot switchable" polarity reversal capability. The PRA's low ripple specification makes it ideal for Mass Spectrometry applications; especially security detection systems, Dynodes, sample ionization as well as capillary electrophoresis and electrostatic printing Applications.

The PRA is rated at ±8kV and is packaged in a shielded metal enclosure. This unit features a logic signal input to control output polarity reversal. A HV inhibit feature, along with voltage and current monitors are provided. Easily customized to meet OEM requirements, the PRA can be provided with improved ripple performance and higher voltage and current capabilities.

An optional RS-232 or RS-485 is available, optional reversal time:10ms,25ms,50ms,100ms,250ms,500ms,1s.

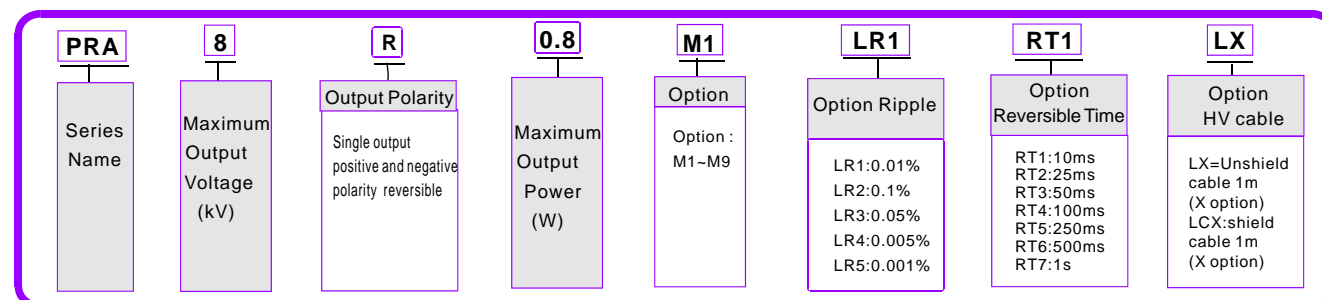
## TYPICAL APPLICATIONS

Mass Spectrometry, Capillary Electrophoresis, Electron Microscope, Electrostatic Printing, Electron Multiplier Tubes, Ion Multiplier Tubes, Electrostatic discharge Testing, Electrostatic chuck.

## PRA SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
1	0.1	0.1	PRA1R0.1	5	0.1	0.5	PRA5R0.5	8	0.1	0.8	PRA8R0.8
3	1	1	PRA1*1	6	0.1	0.6	PRA6R0.6				

## PRA SELECTION EXAMPLE



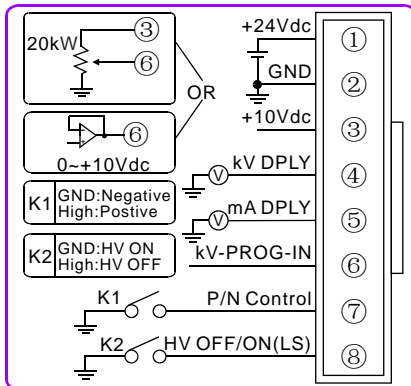
## SPECIFICATIONS

PARAMETER	DESCRIBE
Input Voltage	+24Vdc±2%, 1A maximum.
Output Voltage	±1kV, ±3kV, ±5kV, ±6kV, ±8kV Maximum output Voltage option.
Stability	0.1% per hour after 1 hour warm up.
Temperature Coefficient	≤25ppm/°C.
Ripple	≤0.01%Vp-p.Option 0.1%,0.05%,0.005%,0.001%.
Polarity	Remotely reversible via logic signal.Option 25ms,50ms,100ms,250ms,500ms,1s .
Voltage/Current Monitor	0~+10Vdc corresponds to 0 to maximum output, Zout=20kW, accuracy:±1%.
Voltage Programming	0~+10Vdc proportional from 0 to maximum output voltage,Zout=100kW.
Voltage Load Regulation	0.1% ( no load to full load change).
Voltage Line Regulation	±0.1% (input Voltage line change±2%).
Current Load Regulation	0.1% ( no load to full load change).
Current Line Regulation	±0.1% (input Voltage line change±2%).
Operating Temperature	0°C~+40°C.
Storage Temperature	-40°C~+85°C.
Cooling	Convection cooled.
Humidity	20%~85% RH, non-condensing.
Dimensions	0.98" H X 3.94" W X 4.96" D (25mm X 100mm X126mm).
Weight	600g.

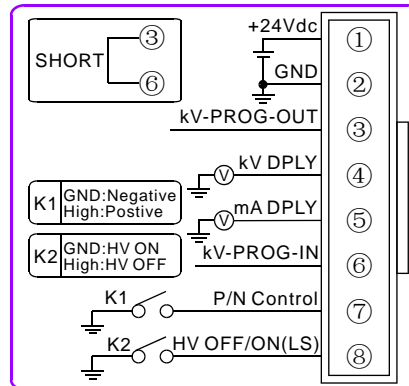
APPLICATION SPECIFIC

## PRA ANALOG INFORMATION

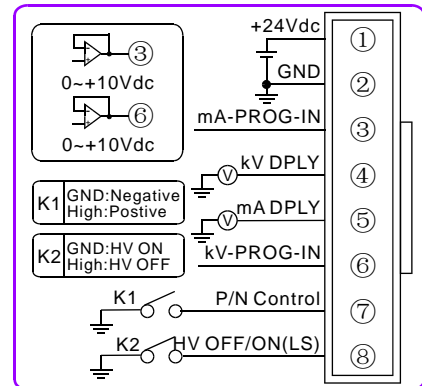
M1:Voltage external program



M2:Voltage internal program

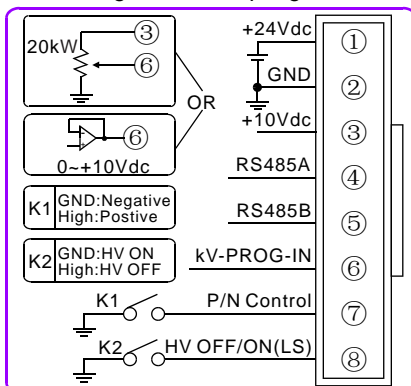


M3:Voltage and Current Control

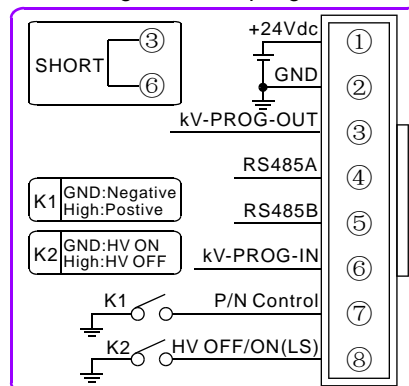


## PRA DIGITAL AND ANALOG COMPATIBLE INFORMATION(RS485) <sup>D</sup>

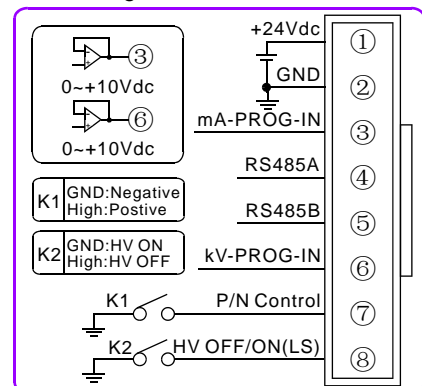
M4:Voltage external program



M5:Voltage internal program



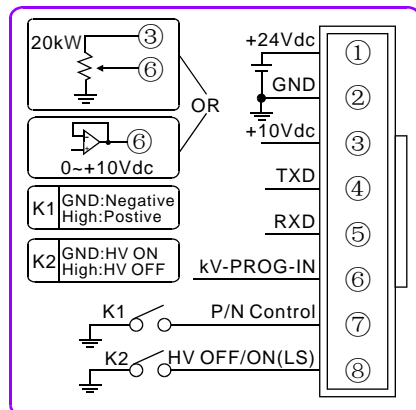
M6:Voltage and Current Control



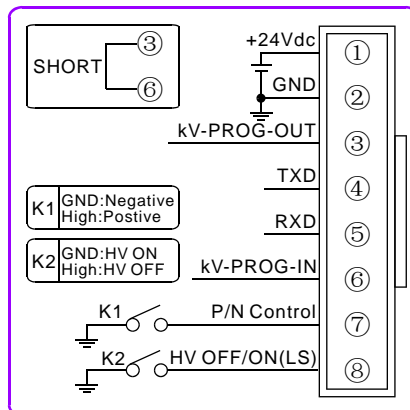


**PRA DIGITAL AND ANALOG COMPATIBLE INFORMATION(RS232) <sup>Ⓧ</sup>**

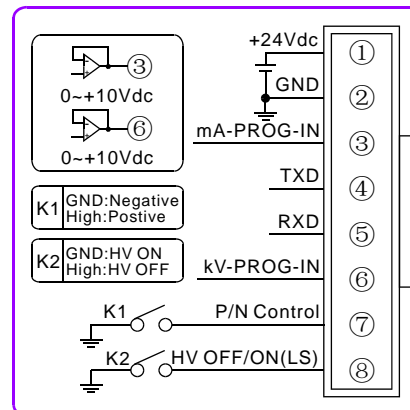
M7: Voltage External Program



M8: Voltage Internal Program

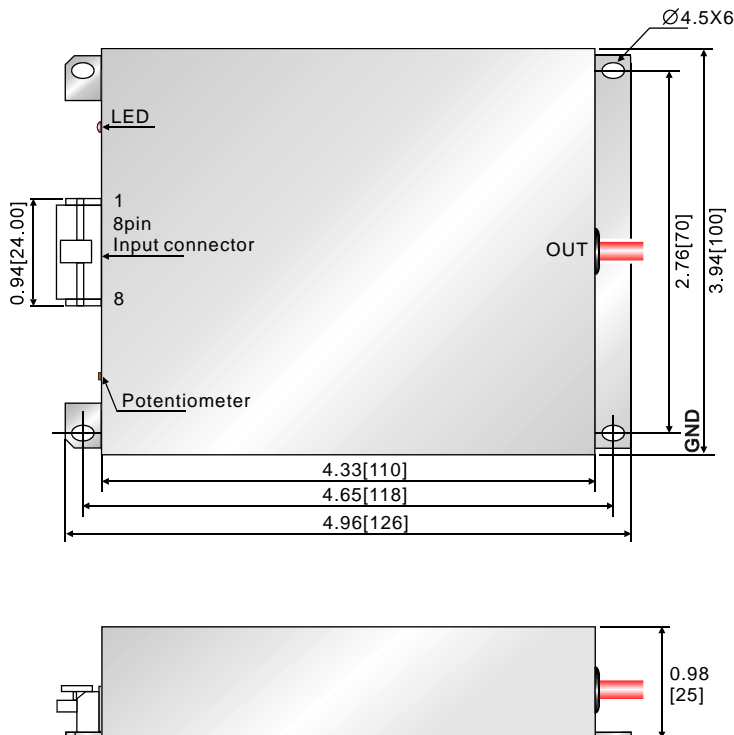


M9: Voltage and Current Control



**PRA DIMENSIONS**

DIMENSIONS:in.[mm]



APPLICATION SPECIFIC