



- **OPTIONAL USB2.0, RS-232 OR RS-422 IS AVAILABLE.**
- **50KV AT 2 mA. 100 WATT MAX.**
- **65KV AT 2 mA. 100 WATT MAX.**
- **OVERVOLTAGE, ARC & SHORT CIRCUIT PROTECTION**
- **VOLTAGE & CURRENT PROGRAMMING.**
- **LOCAL AND REMOTE CONTROL.**
- **SAFETY INTERLOCK.**
- **OEM CUSTOMIZATION AVAILABLE.**

B
MODULES

INTRODUCTION

Wisman's MRW Series modular high voltage power supplies offer positive or negative output voltages from 25KV to 65kV. High voltage can be linearly ramped up. An optional USB 2.0, RS-232 or RS-422 is available. The MRW incorporates local and remote programming, safety interlock, short-circuit and overload protection.

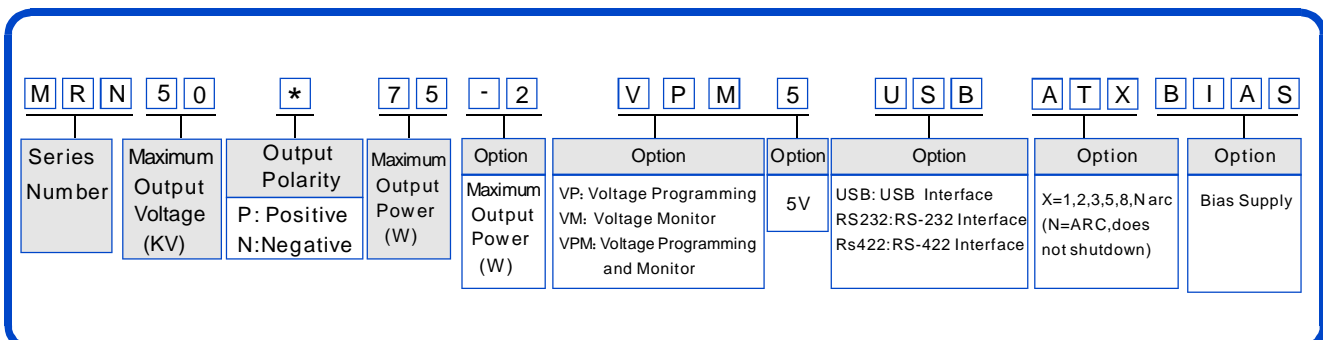
TYPICAL APPLICATIONS

High Voltage Testing, Electron Beam / Ion Beam, MASS Spectrometry, Electrostatics Chuck (ESC), PMT, Semiconductor Testing, Radiation counter, Provides Power To The Pulse Power, Capacitor Charging, Electronic Component Aging, Medical, Chemical Applications, Science, Laboratory Applications, Industrial Applications.

MRW SELECTION TABLE

KV	mA	P(W)	MODEL	KV	mA	P(W)	MODEL	KV	mA	P(W)	MODEL	KV	mA	P(W)	MODEL
25	2.00	50	MRW25*50	50	1.00	50	MRW50*50	50	2.00	50	MRW 50P50-2	65	1.00	65	MRW 65P65
	3.00	75	MRW25*75		1.50	75	MRW50*75		2.00	75	MRW 50P75-2		2.00	65	MRW 65P65-2
	4.00	100	MRW25*100		2.00	100	MRW50*75		1.00	60	MRW 60P60		2.00	75	MRW65P75-2
30	1.67	50	MRW30*50	65	0.77	50	MRW65*50	60	2.00	60	MRW 60P60-2		2.00	100	MRW65P100-2
	2.50	75	MRW30*75		1.15	75	MRW65*75		2.00	75	MRW 60P75-2				
	3.33	100	MRW30*100		1.54	100	MRW65*100		2.00	100	MRW 60P100-2				

MRW SELECTION EXAMPLE





SPECIFICATIONS

ISO9001:2008

PARAMETER	DESCRIBE
Input Voltage	+24Vdc±10% ,5.0A maximum for 70W, 8.0A maximum for 100W.
Output Voltage	25KV, 30KV, 50KV, 60KV, 65KV
Stability	0.02% per 8 hours after 1/2 hour warm-up.
Temperature Coefficient	≤25ppm/°C.
Ripple	0.1% p-p of output voltage.
Voltage/Current Monitor	0V to +10Vdc , Zout=1KΩ , Accuracy: ±1%.
Local Voltage control	Internal multi-turn potentiometer to set voltage from 0 to full output voltage.
Local Current control	Internal potentiometer to set beam current between 0 to full output current.
Remote Voltage control	0 to +10Vdc proportional from 0 to full output voltage.
Remote Current control	0 to +10Vdc proportional from 0 to full output current.
Voltage Load Regulation	Load: 0.01% of output voltage no load to full load.
Voltage Line Regulation	Line: ±0.01% for ±10% change in input voltage.
Curren Load Regulation	Load: 0.01% of output current from 0 to rated voltage.
Curren Load Regulation	Line: ±0.01% for ±10% change in input voltage.
Operating Temperature	0°C to +50°C.
Storage Temperature	-40°C to +85°C.
Cooling	Free convection for the 50W unit and 75W unit, Fan (15CFM) assisted for 100W unit.
Humidity	20% to 85% RH, non-condensing.
Dimensions	5.51" H x 3.35" W x 9.45" D (140.0mm x 85.0mm x 240.0mm)
Weight	3.65kg

MRW POWER INPUT/ FILAMENT OUTPUT CONNECTOR

SINGAL		SINGAL	
J2	J2-1	+24V Input	
	J2-2	Ground	
J4	J4-1	Ground	
	J4-2	Voltage Monitor	
	J4-3	Current Monitor	
	J4-4	Interlock Output	

ANALOG INTERFACE CONNCTION

J5	SINGAL	J5	SINGAL
1	+10Vdc Reference	6	Current Program Input
2	Filament Monitor	7	Local Current Program
3	Voltage Program Input	8	Interlock Output
4	Local Voltage Program	8	Signal Ground
5	Spare		

RS-232/RS-422 DIGITAL INTERFACE

SINGAL		SINGAL	
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		

MRW LED INDICATORS

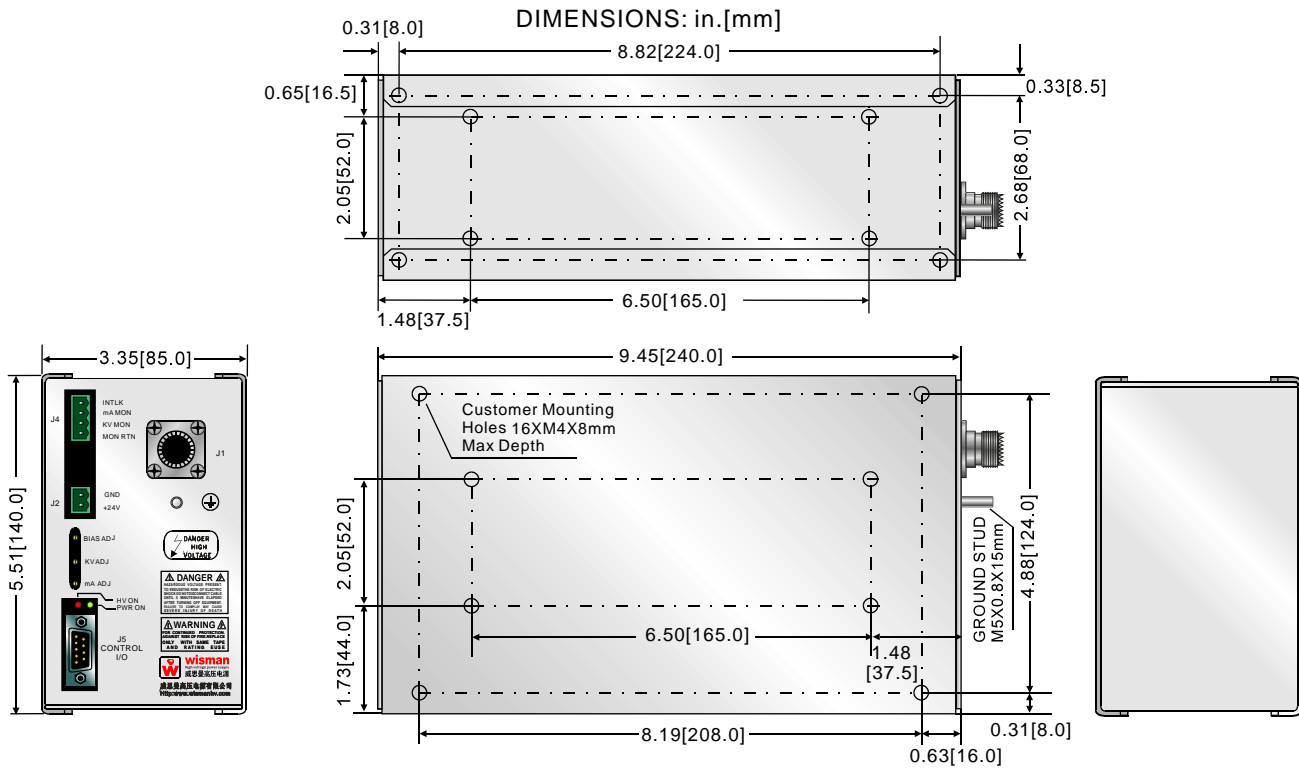
LED	SINGAL	LED	SINGAL
1	POW Power ON	5	UC Low current occurs
2	ARC Arc fault occurs	6	OV Over voltage occurs
3	OT Over temperature occurs	7	UV Low voltage occurs
4	OC Over current occurs	8	HV HV ON

USB DIGITAL INTERFACE

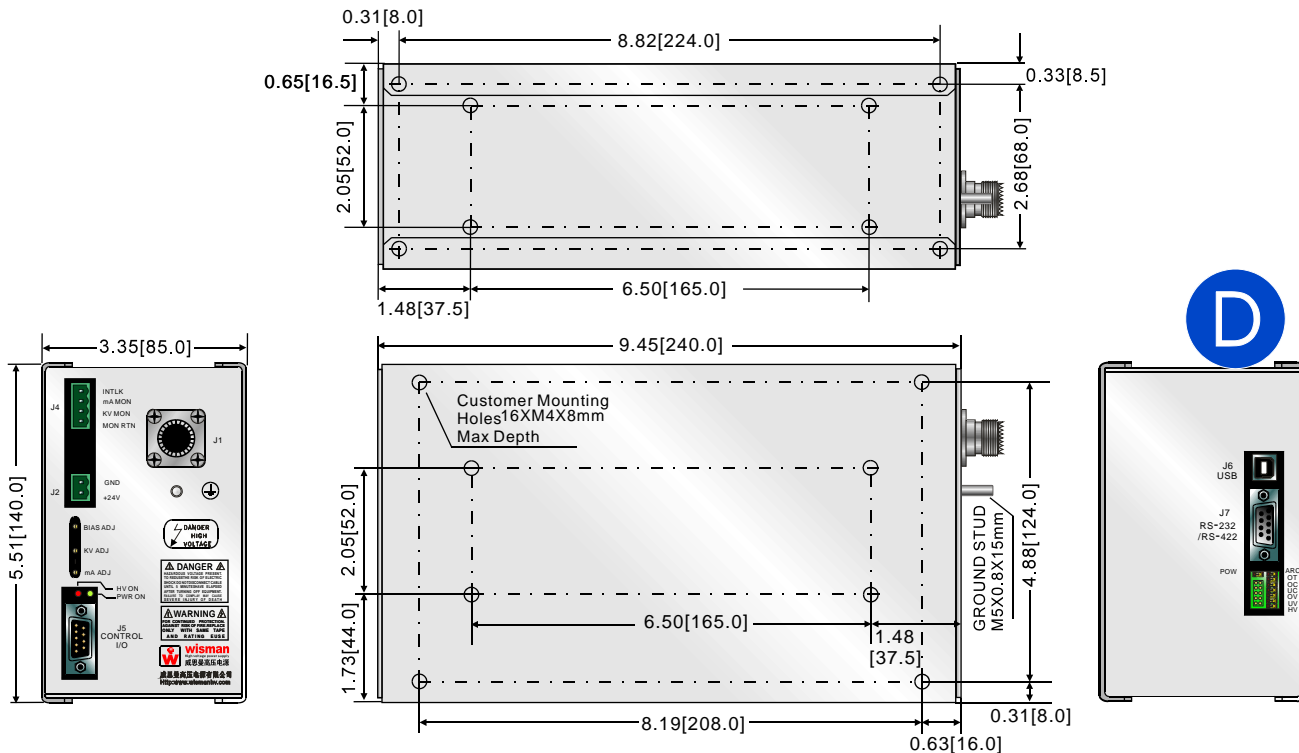
USB	SINGAL	USB	SINGAL
1	VBUS +5Ddc	3	D+ Data+
2	D- +5Ddc	4	GND Ground

DIMENSIONS

B
MODULES



OPTION: USB/RS232/RS422:



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