



- 50kV,50W,THE SMALLEST OF ALL,LESS 45% THAN MRN
- OPTIONAL USB2.0, RS-232/RS-485 CONTROL.
- 50KV,2mA, 50W MAX.
- OVERVOLTAGE,ARC AND SHORT CIRCUIT PROTECTION
- VOLTAGE PROGRAMMING, CURRENT PROGRAMMING OPTIONAL
- LOCAL AND REMOTE CONTROL
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE.

## INTRODUCTIONS

Wisman's MN series high voltage power supply has excellent performance, output voltage up to 50kV, providing overvoltage, short-circuit and safety interlock protection. USB2.0, RS-232, RS-485 interface optional.

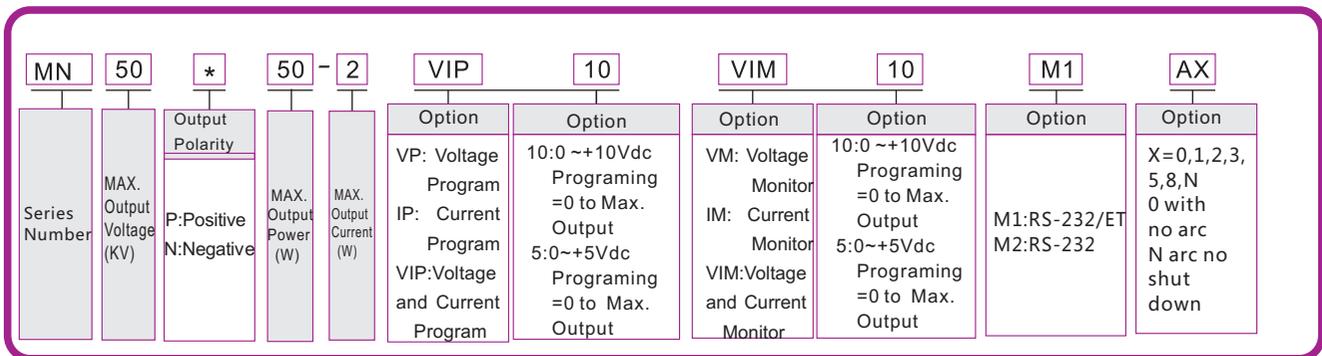
## APPLICAITONS

Photomultiplier tubes Solid state detectors, Piezoelectric crystal devices, Voltage bias, Ultrasonic transducers, Microchannel plates, Spectra, Scintillation counters, Electron multiplier detectors, Electrophoresis, DNA sequencing, Counter, Electron beam, Ion beam, Electrostatic chuck, Withstand voltage test, Pulse power supply, Precision lens, Image intensifiers, Semiconductor testing, Capacitor charging, Electrostatic spinning, Electrostatic discharge testing ESD, Life sciences, Experiments, Industrial applications.

## MN SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
1	10.0	10	MN1*10	6	5.00	30	MN6*30	20	2.50	50	MN20*50	50	0.20	10	MN50*10
	30.0	30	MN1*30		8.33	50	MN6*50		0.33	10	MN30*10		0.60	30	MN50*30
	50.0	50	MN1*50		1.00	10	MN10*10		1.00	30	MN30*30		1.00	50	MN50*50
3	3.33	10	MN3*10	10	3.00	30	MN10*30	1.67	50	MN30*50	2.00		50	MN50*50-2	
	10.0	30	MN3*30		5.00	50	MN10*50	0.25	10	MN40*10					
	16.67	50	MN3*50		0.50	10	MN20*10	0.75	30	MN40*30					
6	1.67	10	MN6*10	20	1.50	30	MN20*30	1.25	50	MN40*50					

## MN SELECTION EXAMPLE





## FEATURES

PARAMETERS	DESCRIBE
Input	+24Vdc±10%,5.0A maximum
Output	1kV,3kV,6kV,10kV,20kV,30kV,40kV,50kV optional, others can be customized
Stability	0.02% per 8 hours after half an hour' s warm up.
Temperature coefficient	≤25ppm/°C。
Ripple	0.1%p-p of maximum rated output voltage.
Voltage Current monitor	0~10Vdc =0~100% rated output,Zout=10kΩ,Accuracy=±1%
Voltage local programming	Internal potentiometer set output voltage from 0~100% rated output.
Voltage remote programming	External 0~+10Vdc control signal set output voltage from 0~100% rated output,Zin=10MΩ.
Voltage load regulation	0.01%(no load to full load)
Voltage line regulation	±0.01%(Input Voltage line changes ±10%)
Current load regulation	0.01%(no load to full load)
Current line regulation	±0.01%(Input Voltage line changes ±10%)
Operation temperature	0°C ~ +50°C。
Storage temperature	-40°C ~ +85°C。
Cooling	Convection cooling
Humidity	20%~85%RH,no condensing.
Dimensions	2.95" H x 2.95" W x 8.06" D (75.0mm x 75.0mm x 205mm)。
Weight	1.5kg。

### MN POWER INPUT INTERFACE

PIN	SIGNAL	
1	+24Vdc	+24Vdc input
2	GND	Gnd

### MN ANALOG INTERFACE CONNECTOR

I/O	SIGNAL	
1	Gnd	Gnd
2	Voltage Monitor	0~+10Vdc=0 to full scale,Zout=10kΩ
3	Current Monitor	0~+10Vdc=0 to full scale,Zout=10kΩ
4	External Interlock	Connect to pin 1 to HV enable supply
5	+10Vdc reference	1mA,+10Vdc at maximum
6	N/C	N/C
7	Voltage remote control input	0~+10Vdc=0 to full scale,Zout=10MΩ
8	Voltage local control output	0~+10Vdc, potentiometer adjustment
9	N/C	N/C
10	Current remote control input	0~+10Vdc=0 to full scale,Zout=10MΩ
11	Current local control output	0~+10Vdc, potentiometer adjustment
12	Interlock output	Interlock output+12Vdc
13	Interlock coil	Connect to pin 12 to HV enable supply
14	N/C	N/C
15	Gnd	Gnd

### RS-232/RS-485 DIGITAL INTERFACE<sup>D</sup>

PIN	SIGNAL	PIN	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	Gnd		

### ETHERNET INTERFACE<sup>D</sup>

PIN	SIGNAL		PIN	SIGNAL	
1	RX+	Receive data+	5	N/C	N/C
2	RX-	Receive data+	6	TX-	Transmit data-
3	TX+	Transmit data+	7	N/C	N/C
4	N/C	N/C	8	N/C	N/C

### USB DIGITAL INTERFACE<sup>D</sup>

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

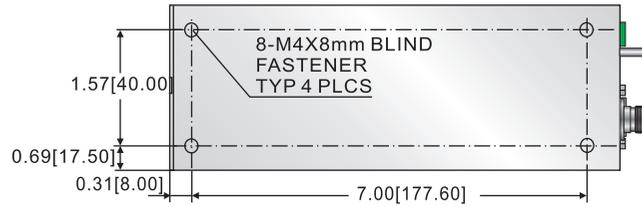
## DIMENSIONS

HIGH VOLTAGE MODULES

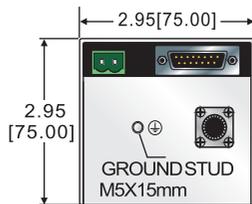
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STANDARD(ANALOG INTERFACE)

BOTTOM VIEW



FRONT VIEW



SIDE VIEW

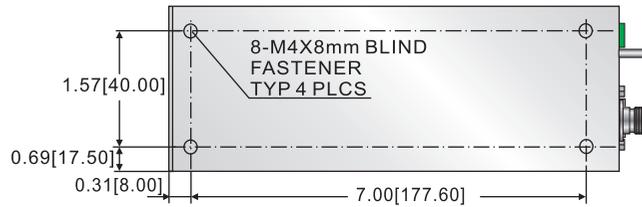


BACK VIEW

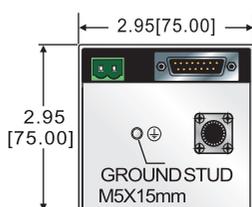


**OPTION M1(RS-232,ET OPTIONAL: ANALOG INTERFACE, USB, RS-485)**

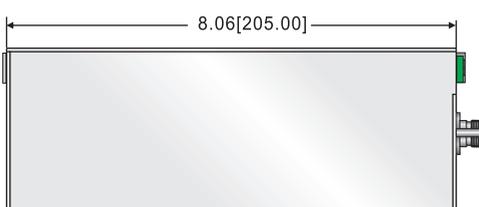
BOTTOM VIEW



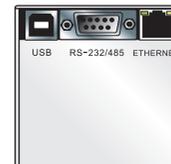
FRONT VIEW



SIDE VIEW

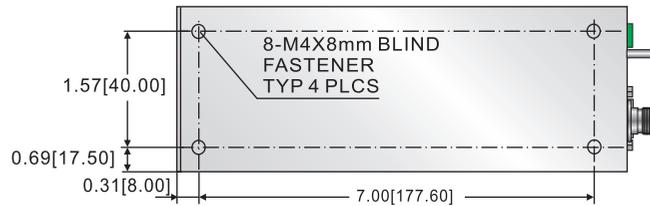


BACK VIEW

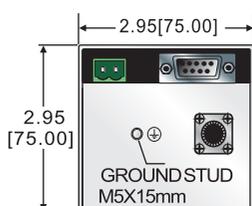


**OPTION M2(RS-232,ET OPTIONAL: ANALOG INTERFACE, RS-485)**

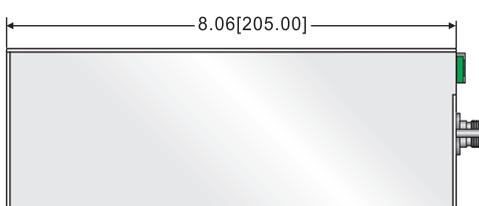
BOTTOM VIEW



FRONT VIEW



SIDE VIEW



BACK VIEW

