



- 1kV TO 30kV @ 2W TO 20W MAX
- HIGH STABILITY 10ppm/1H, 20ppm/8H, 100ppm/1000H
- RIPPLE ≤ 2ppm, NO MICRO-DISCHARGE
- TEMPERATURE COEFFICIENT: 10ppm
- ETHERNET, RS-232 STANDARD, RS-485 OPTION
- OVER VOLTAGE, ARC AND SHORT CIRCUIT PROTECTED
- SIX-SIDED SHIELDED
- OEM CUSTOMIZATION AVAILABLE

INTRODUCTION

Wisman series high-voltage power modules are high-stability precision high-voltage power modules. The maximum output voltage is 1kV~30kV, and the power is 5W~20W. Stability 10ppm/1H, 10ppm/8H, 10ppm/1000H, ripple ≤ 2ppm, no micro-discharge. Temperature coefficient 10ppm. Mainly used in mass spectrometers and electron microscopes and other fields. The high voltage output of PMD series power supply has functions such as overvoltage, arcing, short circuit protection and safety interlock. Standard network port, RS-232, optional RS-485 digital interface, even resolution DA 16 bit, display resolution AD 16 bit. This series of high stability precision modular high voltage power supplies is ideal for OEMs.

TYPICAL APPLICATIONS

Global brands of X-ray Tubes, Thickness Gauges, Static Elimination, X-ray Fluorescence, X-ray Diffractometers, X-ray Imaging, Sulfur Measuring Instruments, Non-destructive Testing, Portable X-ray Machines, Online Elemental Analysis, X-ray Fluoroscopy, Particle Size Testing, Density Measurement, Paper Composition Detection, ROHS Detector, Precious Metal Detector, Life Science, Medical Chemical Industry, Scientific Experiment, Industrial Application.

PMD SELECTION TABLE

kV	mA	P(W)	Model	Ripple	kV	mA	P(W)	Model	Ripple	kV	mA	P(W)	Model	Ripple
1	5	5	PMD1*5	2mV	5	1	5	PMD5*5	10mV	20	0.25	5	PMD20*5	35mV
1	10	10	PMD1*10	2mV	5	2	10	PMD5*10	10mV	20	0.5	10	PMD20*10	35mV
3	2	6	PMD3*6	5mV	10	0.5	5	PMD10*5	15mV	30	0.2	6	PMD30*6	50mV
3	3	9	PMD3*9	5mV	10	1	10	PMD10*10	15mV	30	0.3	9	PMD30*9	50mV

PMD SELECTION EXAMPLE

PMD	30	*	20	VIP	10	VIM	10	TR	/	AX	LX
Series Name	MAX. Output Voltage (KV)	Output Polarity P: Positive N: Negative	MAX. Output Power (W)	Option VIP: Voltage and Current Program	Option 10:0 ~ +10Vdc Programming =0 to Max. Output 5:0 ~ +5Vdc Programming =0 to Max. Output	Option VIM: Voltage and Current Monitor	Option 10:0 ~ +10Vdc Monitor=0 to Max. Output 5:0 ~ +5Vdc Monitor=0 to Max. Output	Option TR: RS-232 AB: RS-485 ET: Ethernet		Option X=0, 1, 2, 3, 5, 8, N. 0: without arc N: Arc not shutdown	Option LX: optional unshielded wire length Xm, X=1, X: optional LCX: optional shield wire length.



SPECIFICATIONS

PARAMETER	DESCRIBE
Input Voltage	+24Vdc ± 10%, 1.5A maximum
Output Voltage	1kV~30kV max output voltage. 5W~20W output power.
Stability	0.001%/1H, 0.002%/8H, 0.01%/1000H after 1/2 hour warm-up.
Temperature Coefficient	≤10ppm/°C.
Ripple	Less than 0.0002% p-p of maximum rated output voltage.
Voltage/Current Monitor	0~+10Vdc corresponds to 0 to maximum output , Zout=1kΩ ,Accuracy:± 1%
Local Voltage Programming	Internal multi-turn potentiometer to set voltage from 0 to full output voltage
Remote Voltage Programming	0~+10Vdc proportional from 0 to full output voltage. Zin=10MΩ .
Local Current Programming	Internal potentiometer to set beam current between 0 to full output current.
Remote Current Programming	0~+10Vdc proportional from 0 to full output current. Zin=10MΩ .
Voltage Load Regulation	0.001% (no load to full load change).
Voltage Line Regulation	±0.001% (input voltage line change 10%).
Current Load Regulation	0.001% (no load to full load change).
Current Line Regulation	±0.01%(input voltage line change 10%).
Operating Temperature	0°C~+50°C.
Storage Temperature	-35°C~+85°C.
Cooling	Free cooling.
Humidity	20%~85% RH, non-condensing.
Dimensions	2.56" H x 4.53" W x 5.91" D (65.00mm x 115.00mm x150.00mm).
Weight	1.55kg.

D
MODULES

**PMD POWER INPUT/
FILAMENT OUTPUT CONNECTOR**

J4	SIGNAL	
1	+24Vdc Input	+24Vdc ± 10% ,max.current 5A
2	+24Vdc Ground	Power Ground

RS-232/RS-485 DIGITAL INTERFACE^D

J3	SIGNAL	J3	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		

PMD ANALOG INTERFACE

J1	PARAMETER	
1	+10Vdc Reference	+10Vdc Reference
2	Voltage Monitor	0~+10Vdc=0 to max. voltage output Zout=10kW
3	Voltage Program Input	0~+10Vdc=0 to max. Voltage output Zin=10MW
4	Local Voltage Program	0~+10Vdc, screwdriver adjust
5	Current Monitor	0~+10Vdc=0 to max. current output ,Zin=10MW
6	Current Program Input	0~+10Vdc, screwdriver adjust
7	Local Current Program	0~+10Vdc=0 to max. current output,Zout=10kW
8	External Interlock	Ground=HV ON
9	Interlock Return	Ground

PMD ET DIGITAL INTERFACE^D

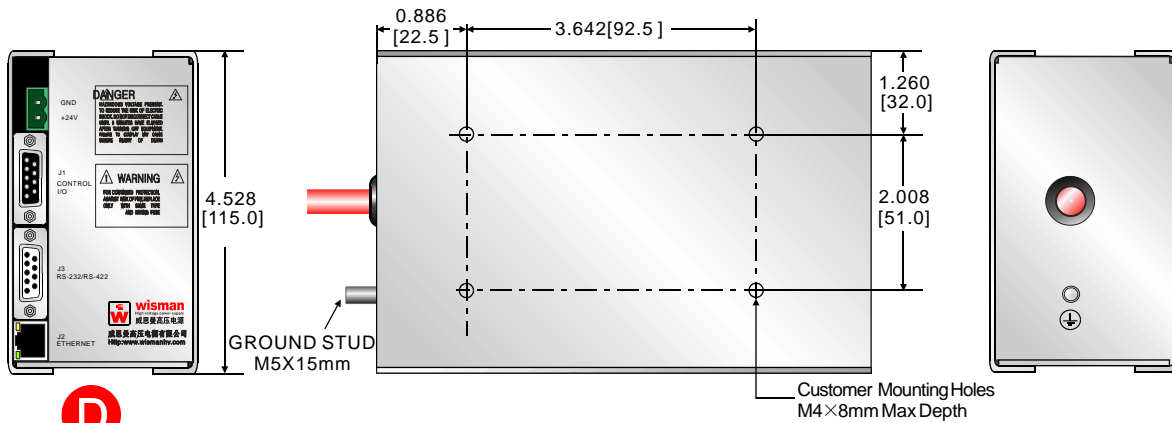
SIGNAL			SIGNAL		
1	RX+	Receive data+	5	N/C	N/C
2	RX-	Receive data-	6	TX-	Transmit data-
3	TX+	Transmit data+	7	N/C	N/C
4	N/C	N/C	8	N/C	N/C

PMD DIMENSIONS

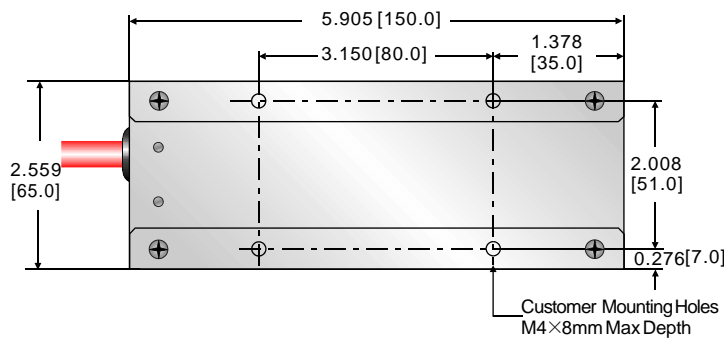
D
MODULES

DIMENSIONS:in.[mm]

ETHERNET,RS-232 STANDARD/RS-485 OPTION:



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ANALOG CONTROL

