

- 60W, 125W, or 250W OUTPUT POWER
- LOW STORAGE, LOW OVERSHOOT
- DOUBLE OUTPUT, CONTROL INDEPENDENTLY
- MAXIMUM CURRENT OUTPUT
- OUTPUT CIRCUIT PROTECTION
- FAST RISING, HIGH EFFICIENCY
- HIGH POWER DENSITY
- ULTRAL-THIN, PROGRAMMABLE
- MONITORING PANEL
- OEM CUSTOMIZATION AVAILABLE

INTRODUCTION

Wisman's MUD series of high-voltage modules is an extension of the MUB series, which can be directly installed on devices with power requirements greater than 30W. The MUD series provides power up to 60W, 125W, 250W, 0-6KV can output independently. MUD series of modules are especially suitable for systems with high energy, large capacity, high response rate or continuous high power demand.

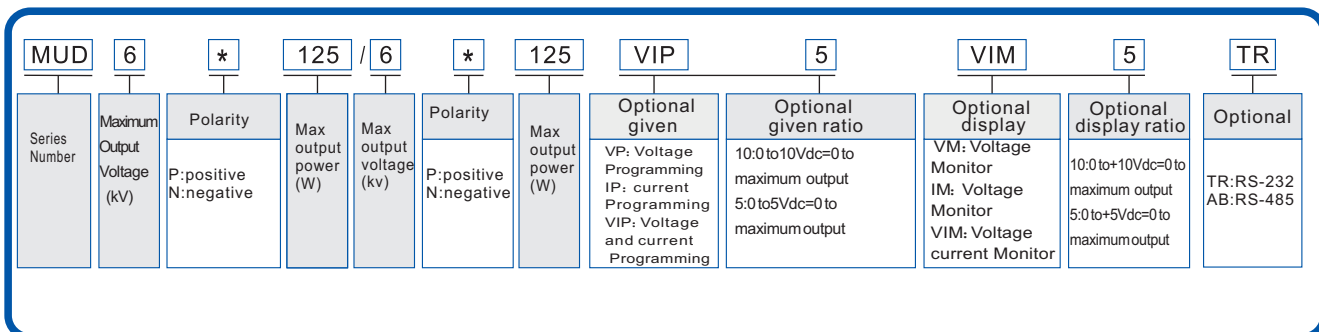
TYPICAL APPLICATIONS

Laser pulse, capacitor charging, pulse power supply, pulse generator, test equipment, ion pump, plasma generator, electrostatic precipitation, high voltage amplification bias industrial testing, TDR, wire testing, cable testing, traveling wave tube. Virtual Cable Test, Medical chemicals, Scientific experiments and industrial application.

MUD SELECTION TABLE

kV	mA	P(W)	Model	Internal capacity(μF)	kV	mA	P(W)	Model	Internal capacity(μF)
0.25	240	60	MUD0.25*30/0.25*30	0.90	2	30	60	MUD2*30/2*30	0.019
	500	125	MUD0.25*62.5/0.25*62.5	0.90		62.5	125	MUD2*62.5/2*62.5	0.019
	1000	250	MUD0.25*125/0.25*125	1.80		125	250	MUD2*125/2*125	0.038
0.5	120	60	MUD0.5*30/0.5*30	0.43	4	15	60	MUD4*30/4*30	0.013
	250	125	MUD0.5*62.5/0.5*62.5	0.43		31.25	125	MUD4*62.5/4*62.5	0.013
	500	250	MUD0.5*125/0.5*125	0.85		62.5	250	MUD4*125/4*125	0.026
1	60	60	MUD1*30/1*30	0.019	6	10	60	MUD6*30/6*30	0.013
	125	125	MUD1*62.5/1*62.5	0.019		20.83	125	MUD6*62.5/6*62.5	0.013
	250	250	MUD1*125/1*125	0.038		41.67	250	MUD6*125/6*125	0.026

MUD SELECTION EXAMPLE



MUD SPECIFICATIONS

PARAMETER	DESCRIBE
Input Voltage Range	+23Vdc~+30Vdc derating: 60W/125W= 11Vdc~+30Vdc, 250W= +15Vdc~+30Vdc
Input current	Disable current:<40mA;No load current:<1250mA;Full load current:<13A
Output Voltage Range	±0.25kV, ±0.5kV, ±1kV, ±2kV, ±4kV, ±6kV
Ripple	<1%, full load
Stability	After a 30 minute warm-up period, <0.01%/8hr. <0.02/day
VoltageLine Regulation	<0.01%
VoltageLoad Regulation	<0.01%
Current Load Regulation	<0.01%
Current lineRegulation	<0.01%
Voltage programming	By external 20kΩ potentiometer control, : 0~5Vdc Zin=10M Ω
Current programming	By external 20kΩ potentiometer control, 0~5Vdc Zin = 10M Ω
Voltage monitor	0~+5Vdc for 0~100% output, Z out = 464Ω ±1%
Current monitor	0~+5Vdc for 0~100% output, Z out = 464Ω ±1%
Over-shoot	C Load, 0 output to Full output < 1% V pk
Rise time	In sync with output voltage
Temperature	Operating:-10~+65℃, (-40~+65 ℃ optional) Storage :-55℃~+105℃
Temperature Coeicient	50PPm(25PPm option)
Thermal Shock	-40~+65℃
Humidity	0 to 95% non-condensing humidity
Altitude	Sea level ~ 20,000 feet
	Weight 0.75kg

MUD RISE TIME

C = uF, V=Volts, I=mA, T=ms	C = uF, V=kV, I=mA, F=Hz	C = uF, V=kV, I=mA, F=Hz	C = uF, E ² =kV, J=Ws
$T = \frac{C \times V}{I}$	$I = C \times V \times F$	$F = \frac{I}{C \times V}$	$J = \frac{C \times E^2}{2}$

NOTES: Capacitance MUDst include HVPS internal Capacitance.

MUD PIN INFORMATION

PIN	SINGAL	PARAMETER
1,8	GND	Power Ground
2,9	Vin	+24Vdc input, standard voltage ranges from+23Vdc to 30Vdc
3	Imon	0~5Vdc for 0to 100% rated output, Zout=464Ω
4	Enable/Disable	GND=ON, Open=OFF
5	Signal GND	Signal GND
6	Vpin	Output:0to5Vdc=0 toMAX
7	VREF	+5Vdc reference voltage
10	N/C	N/C(RS232,RS485 D digital Ground
11	I MODE	I mode
12	V MODE	V mode
13	Ipin	0~5Vdc for 0to 100% rated output, Zin=10MΩ
14	Vmon	0~5Vdc for 0to 100% rated output, Zout=464Ω
15,16	Ground	HV ground
17,18	HV ouput	HV ouput

MUD RS232/RS485 INFORMATION

PIN	SINGAL	PARAMETER
2A	TX/A	TXD/transmit Data/RS-485A
9A	RX/B	RXD/receive Data/RS-485B
5	D	DGND

Unit: inch[mm]

