- STANDARD ET, RS-232,RS-485 CONTROL OPTIONAL
- GENERAL INPUT AND POWER FACTOR CORRECTION
- OUTPUT VOLTAGE 1kV~160kV, POWER 300W~1200W
- OVERVOLTAGE, ARC ,SHORT-CIRCUIT PROTECTION
- VOLTAGE CURRENT PROGRAMMING,
- LOCAL AND REMOTE CONTROL
- SAFETY INTERLOCK FUNCTION
- OEM CUSTOMIZATION AVAILABLE

INTRODUCTION

Wisman’ s MRD series is compact high voltage power supply with features of high stability and accuracy and perfect adjustment performance, providing both positive and negative high voltage output. MRDcan be test and control via internal, external and computer. Standard ET,RS-232 and RS-485 optional. It provides overvoltage, overcurrent, arcing, short-circuit and safety interlock protection

APPLICATION

ESD, Electrophresis, DNA squencing,IBM,EBM, eletrostatic chuck,High voltage bias, Withstand voltage testing,Pulsed power supply Electrostatic spinning, Capacitor charging, Semiconductor testing, Electronic component aging, Power cable testing, Gas chromatography,Blood analysis, Cathode X-ray tube, SPECT scanner, PET scanner, Life science, Medical industrial, Science experiment and Industrial applications.

SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
1	300	300	MRD1*300	15	20	300	MRD15*300	50	6	300	MRD50*300	100	3.00	300	MRD100*300
	600	600	MRD1*600		40	600	MRD15*600		12	600	MRD50*600		6.00	600	MRD100*600
	1200	1200	MRD1*1200		80	1200	MRD15*1200		24	1200	MRD50*1200		12.00	1200	MRD100*1200
3	100	300	MRD3*300	20	15	300	MRD20*300	60	5	300	MRD60*300	120	2.50	300	MRD120*300
	200	600	MRD3*600		30	600	MRD20*600		10	600	MRD60*600		5.00	600	MRD120*600
	400	1200	MRD3*1200		60	1200	MRD20*1200		20	1200	MRD60*1200		10.00	1200	MRD120*1200
5	60	300	MRD5*300	30	10	300	MRD30*300	70	4.28	300	MRD70*300	140	2.14	300	MRD140*300
	120	600	MRD5*600		20	600	MRD30*600		8.57	600	MRD70*600		4.28	600	MRD140*600
	240	1200	MRD5*1200		40	1200	MRD30*1200		17.14	1200	MRD70*1200		8.57	1200	MRD140*1200
10	30	300	MRD10*300	40	7.5	300	MRD40*300	75	4.00	300	MRD75*300	160	1.88	300	MRD160*300
	60	600	MRD10*600		15	600	MRD40*600		8.00	600	MRD75*600		3.75	600	MRD160*600
	120	1200	MRD10*1200		30	1200	MRD40*1200		16.00	1200	MRD75*1200		7.50	1200	MRD160*1200

SELECTION EXAMPLE

MRD	160	*	1200	VIP	10	VIM	10	TR	AX
Series Number	MAX. Output Voltage (KV)	Output Polarity P:Positive N:Negative	MAX. Output Power (W)	Option VP: Voltage Program IP: Current Program VIP:Voltage and Current Program	Option 10:0 ~+10Vdc Programing =0 to Max. Output 5:0~+5Vdc Programing =0 to Max. Output	Option VM: Voltage Monitor IM: Current Monitor VIM:Voltage and Current Monitor	Option 10:0 ~+10Vdc Programing =0 to Max. Output 5:0~+5Vdc Programing =0 to Max. Output	Option TR:RS-232 AB:RS-485 ET:ET INTERFACE	Option X=0,1,2,3,5,8,N 0 with no arc N arc no shut down

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C HIGH VOLTAGE MODULES

FEATURES

PARAMETERS	DESCRIBE
Input	300W:Input voltage 90Vac~264Vac,47Hz~63Hz 600W~1200W:Input voltage 180Vac~264Vac,47Hz~63Hz
Output	1kV~160kV optional,300W,600W,1200W optional
Stability	<25ppm per 1 hour after 2 hours' warm up.
Temperature coefficient	≤25ppm/℃。
Ripple	≤1%rms(>20Hz),0.1%rms(≤20kHz)
Voltage current monitor	0~+10Vdc=0~100% rated output,Zout=4.99kΩ, accuracy:±1%
Voltage local control	Internal potentiometer set output voltage from 0~100% rated output.
Voltage remote control	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℃~+40℃
Storage temperature	-40℃ ~ +85℃。
Humidity	20%~85%RH,no condensing

Dimensions		Weight	
300/600W(1~70kV)	4.72''H x5.98'W'x11.97''D(120mmx152mmx304mm)		7kg
300/600W(80~100kV)	6,21''H x7.47'W'x15.48''D(158mmx190mmx394mm)		20kg
300/600W(110~160kV)	10.45''H x8.41'W'x21.46''D(266mmx214mmx546mm)		30kg
1200W(1~70kV)	4.72''H x11.97'W'x11.97''D(120mmx304mmx394mm)		13kg
1200W(80~100kV)	6.21''H x11.97'W'x15.48''D(158mmx304mmx394mm)		40kg
1200W(110~160kV)	10.45''H x19'W'x21.46''D(266mmx482mmx546mm)		65kg

MRD ANALOG INTERFACE CONNECTOR

I/O	SIGNAL	
1	Fault signal	Open 50V@10mA maximum
2	Current remote control input	0~+10Vdc=0 to full scale,Zout=10MΩ
3	Voltage remote control input	0~+10Vdc=0 to full scale,Zout=10MΩ
4	Voltage local control output	0~+10Vdc=0~100% rated output
5	Current local control output	0~+10Vdc=0~100% rated output
6	N/C	N/C
7	N/C	N/C
8	Voltage Monitor	0~+10Vdc=0 to full scale,Zout=4.99MΩ
9	Gnd	Signal Gnd
10	Current Monitor	0~+10Vdc=0 to full scale,Zout=4.99MΩ
11	Power on (control signal input)	connect toJ2-12,or connect to +12Vdc external,HV output
12	Internal control signal output	No load:+12Vdc full load:≤15mA
13	N/C	N/C
14	Power on (signal monitor)	Open 50V@10mA maximum
15	Reset signal	Connect to GND,protection circuit reset.

RS-232/RS-485 DIGITAL INTERFACE D

PIN	SIGNAL	PIN	SIGNAL
1	N/C	6	N/C
2	TXD/Transmit data	7	RS-485B optional
3	RXD/ Receive data	8	N/C
4	N/C	9	RS-485A optional
5	Gnd		

ETHERNET INTERFACE D

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

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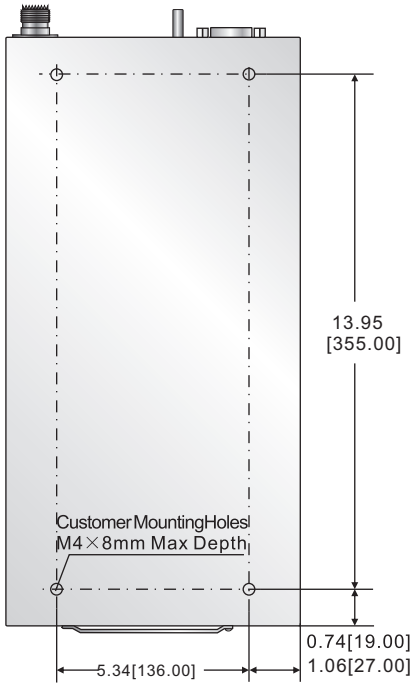
ISO9001:2015

DIMENSIONS

DIMENSIONS:in.[mm]

300/600W(1kV~70kV)

BOTTOM VIEW



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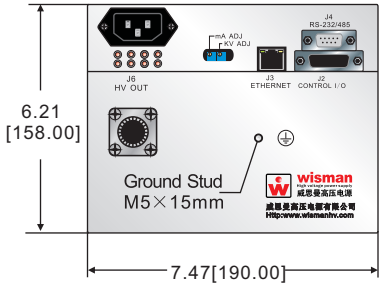

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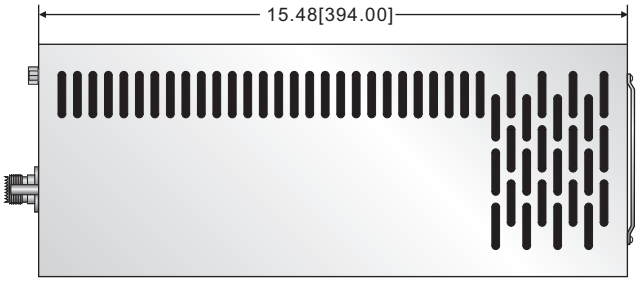
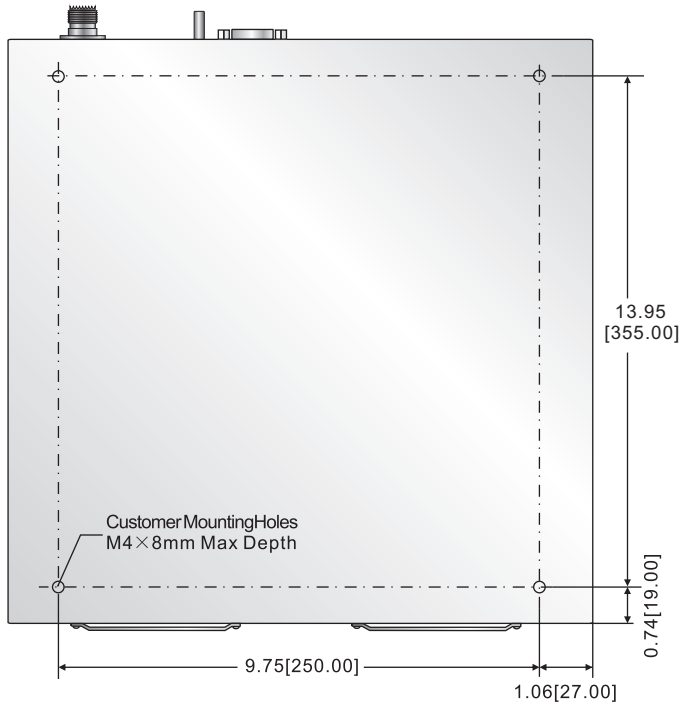


1200W(1kV~70kV)

BOTTOM VIEW



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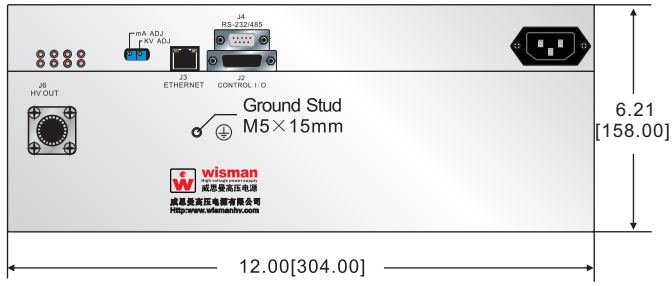

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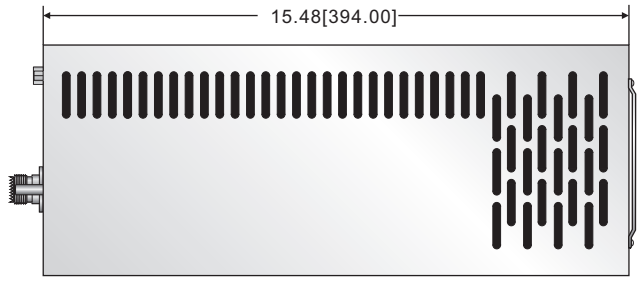

HIGH VOLTAGE MODULES

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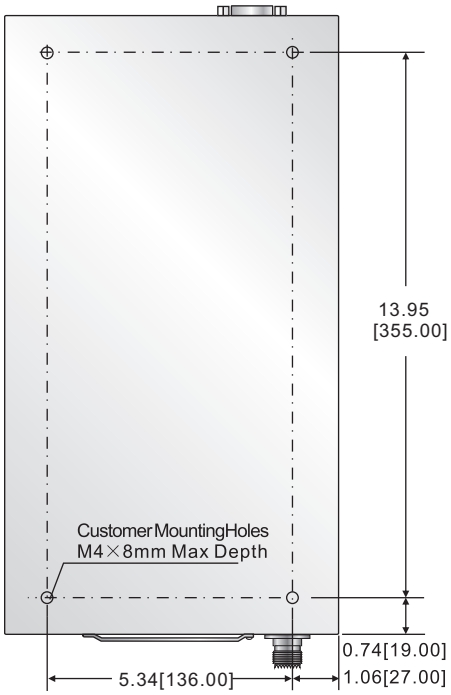
C HIGH VOLTAGE MODULES

DIMENSIONS

DIMENSIONS:in.[mm]

300/600W(80kV~100kV)

BOTTOM VIEW



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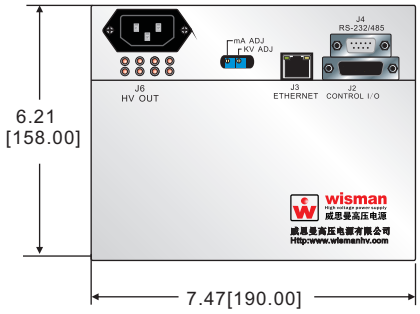

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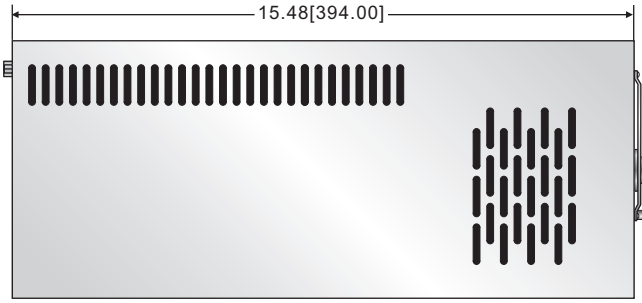
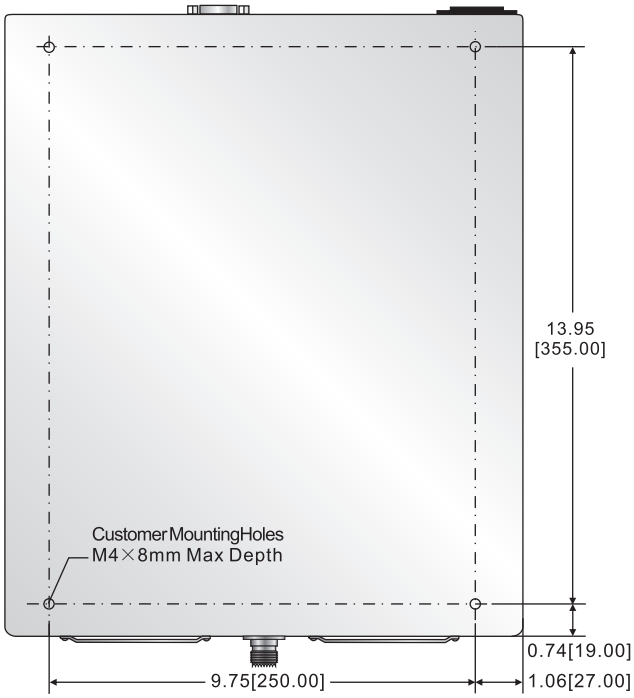


1200W(80kV~100kV)

BOTTOM VIEW



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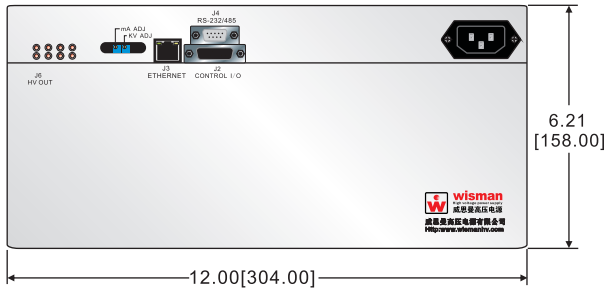

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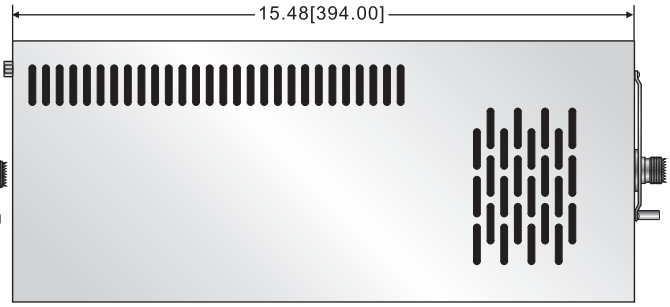

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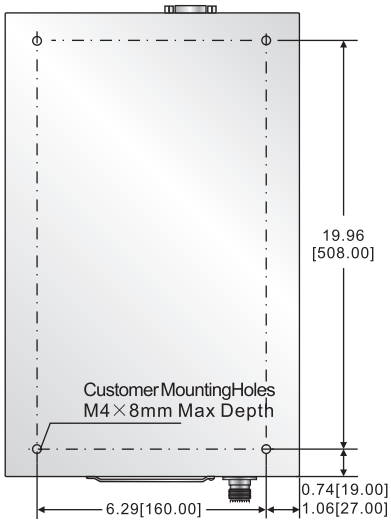
DIMENSIONS

ISO9001:2015

DIMENSIONS:in.[mm]

300/600W(110kV~160kV)

BOTTOM VIEW



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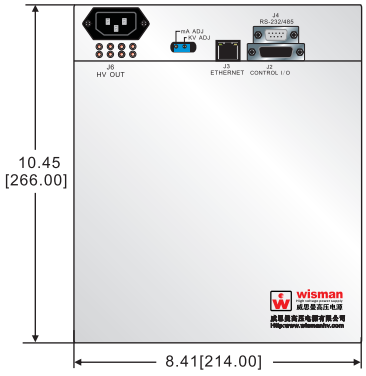

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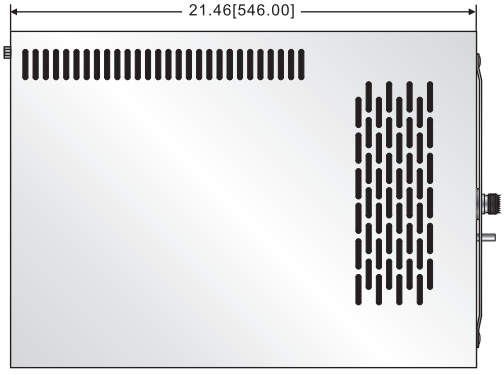
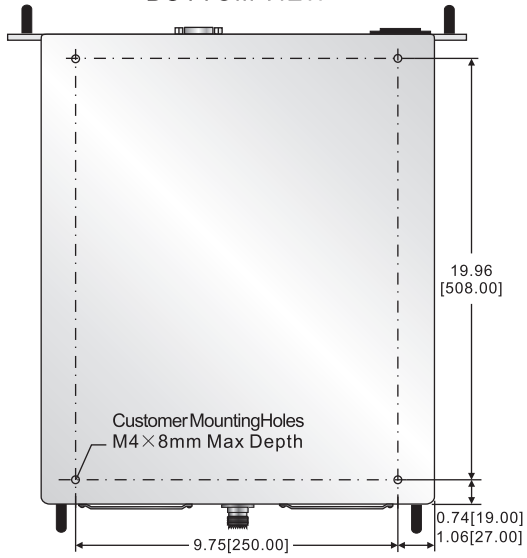


1200W(110kV~160kV)

BOTTOM VIEW



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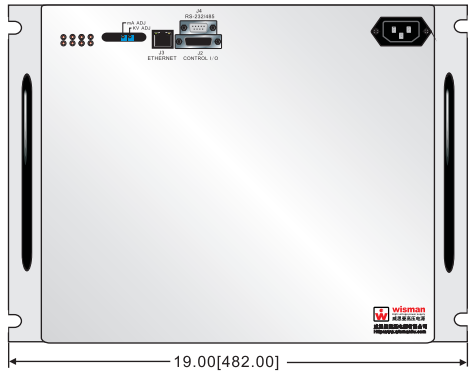

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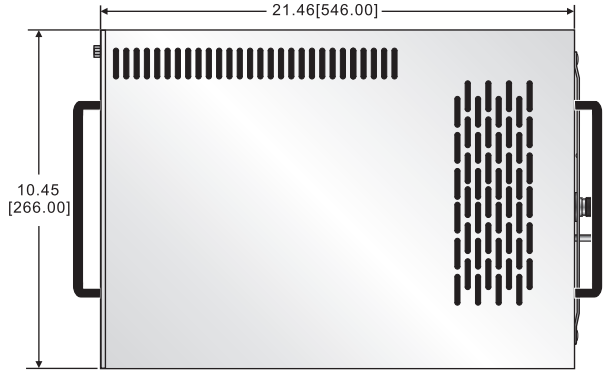

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