



- OUTPUT VOLTAGE FROM 1KV~70KV
- INPUT 86Vac~265Vac
- POWER FACTOR CORRECTED FRONT END
- LOCAL AND REMOTE PROGRAMMING
- OV&OT&OU&ARC&SHORT CIRCUIT PROTECTION
- RS-232&RS-485&ETHERNET IS AVAILABLE
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE



## INTRODUCTION

Wisman's MEF Series of modular high voltage power supplies deliver up to 350W of continuous power, providing 0.99 power factor along with universal input voltage (86Vac to 265Vac) capabilities. These fixed polarity modules feature both voltage and current regulation with auto-matic crossover, And provide positive or negative high voltage. The MEF incorporates local and remote programming. An optional RS-232, RS-485 and ETHERNET is available. Safety interlock, short-circuit protection. And operating to the most exacting specifications.

## TYPICAL APPLICATIONS

High voltage testing, Electrostatics Discharge Test (ESD), Electrostatic chuck (ESC), Electrophoresis, DNA sequencing, Electron Beam/Ion Beam, High voltage bias, Hipot Testing, Provides power to the pulse power, Electrospinning, Capacitor charging, Semiconductor Testing, Electronic component aging, Electric Power Cable Test, Electron Multiplier Detectors, Gas Chromatography, Hemanalysis, Cathod.

## MEF SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
1	200.0	200	MEF1*200	10	20.0	200	MEF10*200	25	8.0	200	MEF25*200	50	4.0	200	MEF50*200
	350.0	350	MEF1*350		35.0	350	MEF10*350		14.0	350	MEF25*350		7.0	350	MEF50*350
3	66.7	200	MEF3*200	15	13.3	200	MEF15*200	30	6.7	200	MEF30*200	60	3.3	200	MEF60*200
	116.7	350	MEF3*350		23.3	350	MEF15*350		11.7	350	MEF30*350		5.8	350	MEF60*350
5	40.0	200	MEF5*200	20	10.0	200	MEF20*200	40	5.0	200	MEF40*200	70	2.9	200	MEF70*200
	70.0	350	MEF5*350		17.5	350	MEF20*350		8.8	350	MEF40*350		5.0	350	MEF70*350

## MEF SELECTION EXAMPLE

MEF	70	*	350	VIP	10	VIM	10	AB	AX
Series Number	Maximum Output Voltage (kV)	Output polarity N: Negative P: Positive	Maximum Output Power (W)	Option VP: Voltage Program IP: Current Program VIP: Voltage/Current Program	Option 0~+10Vdc =0 to full scale	Option VM: Voltage Monitor IM: Current Monitor VIM: Voltage/Current Monitor	Option 0~+10Vdc =0 to full scale	Option AB: RS-232 TR: RS-485 ET: ETHERNET	Option X=0,1,2,3,5,8,N (0=no ARC; N=ARC does not shutdown)



**MEF SPECIFICATIONS**

ISO9001:2015

C  
MODULES

PARAMETER	DESCRIBE
Input	86~264Vac,47~63Hz.
Output	1kV, 3kV, 6kV, 10kV, 15kV, 20kV, 30kV, 35kV, 40kV, 50kV, 60kV, 70kVMaximum output Voltage option.200W, 350W Maximum output power option.
Stability	25ppm per hours after 2 hour warm-up.
Temperature Coefficient	~ 25ppm/°.
Ripple	~ 1 rms( 20kHz),0.1 rms( ~ 20kHz)
Voltage/Current Monitor	0~+10 Vdc corresponds to 0 to maximum output, $Z_{out}=4.99k\Omega$ .
Voltage Local Programming	Internal potentiometer to set voltage from 0 to maximum output voltage.
Voltage Remote Programming	0~+10Vdc proportional from 0 to maximum output voltage, $Z_{in}=10M\Omega$ .
Voltage Load Regulation	0.01% ( no load to full load change).
Voltage Line Regulation	$\pm 0.01\%$ (input voltage line change $\pm 10\%$ ).
Curren Load Regulation	0.01% ( no load to full load change).
Curren Line Regulation	$\pm 0.01\%$ (input voltage line change $\pm 10\%$ ).
Operating Temperature	0 ~ to +40 ~
Storage Temperature	-40°C to +85°C。
Humidity	20%~85% RH, non-condensing.
Output cable	A detachable 1m long shielded HV cable is provide
Cooling	Fan cooled, side air intack.
Dimensions	3.15" H x 11.02" W x 10.00" D (80mm x 280mm x254mm)。
Weight	5kg.

**MEF ANALOG INTERFACE**

J2	SIGNAL	
1	+10Vdc Reference	+10Vdc Reference
2	N/C	No Connection.
3	N/C	No Connection.
4	HV Enable Input	Connect to Pin 15 to HV Enable Supply
5	HV Enable Monitor	Open Collector,50Vdc@10mA Maximum
6	Power Supply Fault	Open Collector,50Vdc@10mA Maximum
7	Voltage Monitor	0 ~ +10Vdc=0 to maximum output.
8	Current Monitor	0 ~ +10Vdc=0 to maximum output.
9	N/C	No Connection.
10	Current Program In	0 ~ +10Vdc=0 to maximum output.
11	Voltage Program In	0 ~ +10Vdc=0 to maximum output.
12	N/C	No Connection.
13	N/C	No Connection.
14	Ground	Signal Ground
15	HV Enable Output	+12Vdc @ Open, =15mA @ Closed

**RS-232/RS-422 DIGITAL INTERFACE <sup>D</sup>**

J1	SIGNAL	
1	N/C	
2	TXD/Transmit Data	
3	RXD/Receive Data	
4	N/C	
5	SGND	
6	N/C	
7	RS485B OPTION	
8	N/C	
9	RS485A OPTION	

**ETHERNET DIGITAL INTERFACE <sup>D</sup>**

J3		SIGNAL
1	RX+	Receive Data+
2	RX-	Receive Data-
3	TX+	Transmit Data+
4	N/C	No Connection
5	N/C	No Connection
6	TX-	Transmit Data-
7	N/C	No Connection
8	N/C	No Connection

## DIMENSIONS

ISO9001:2015

DIMENSIONS:in.[mm]

C | MODULES

