



- OUTPUT VOLTAGE FROM 1KV~70KV, MAX OUTPUT POWER 350W
- WIDE VOLTAGE INPUT 86Vac~265Vac
- POWER FACTOR CORRECTED FRONT END
- LOCAL, REMOTE ANALOG AND DIGITAL PROGRAMMING
- OV&OT&OU&ARC&SHORT CIRCUIT PROTECTION
- ET,RS-232,RS-485 DIGITAL INTERFACE OPTIONAL
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE



HANDY TYPE

INTRODUCTION

Wisman's DEF Series of modular high voltage power supplies delivers up to 350W of continuous output power. Voltage range 1kV~70kV. These modules feature both voltage and current regulation with auto-matic cross over, provide positive or negative high voltage. DEF series incorporates local and remote programming: RS-232,RS-485 or USB2.0 and has the function of overvoltage、overcurrent、arc fault and safety interlock.

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.

DEF 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	DEF1*200	10	20.0	200	DEF10*200	25	8.0	200	DEF25*200	50	4.0	200	DEF50*200
	350.0	350	DEF1*350		35.0	350	DEF10*350		14.0	350	DEF25*350		7.0	350	DEF50*350
3	66.7	200	DEF3*200	15	13.3	200	DEF15*200	30	6.7	200	DEF30*200	60	3.3	200	DEF60*200
	116.7	350	DEF3*350		23.3	350	DEF15*350		11.7	350	DEF30*350		5.8	350	DEF60*350
5	40.0	200	DEF5*200	20	10.0	200	DEF20*200	40	5.0	200	DEF40*200	70	2.9	200	DEF70*200
	70.0	350	DEF5*350		17.5	350	DEF20*350		8.8	350	DEF40*350		5.0	350	DEF70*350

DEF SELECTION EXAMPLE

DEF	70	*	350	VIP	10	VIM	10	TR / A / 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 10: 0~+10Vdc =0 to full scale 5:0~+5Vdc =0 to full	Option VM: Voltage Monitor IM: Current Monitor VIM: Voltage/Current Monitor	Option 10: 0~+10Vdc =0 to full scale 5: 0~+5Vdc=0 to full	Option AB:RS-232 TR:RS-485 ET:ETHER NET	Option DB15 pin Analog X=0,1,2,3,5,8, N:Arc(0=no ARC=ARC, does not shutdown)



DEF SPECIFICATIONS

HANDY TYPE

PARAMETER	DESCRIBE
Input	86Vac~256Vac,47Hz~63Hz.
Output	1kV~70kV, 200W~350W OPTIONAL
Stability	25ppm per hour after a 2 hour warm-up period.
Temperature Coefficient	≤25ppm/°C.
Ripple	≤1%rms(>20kHz),0.1%rms(≤20kHz)
Voltage/Current Monitor	0~+10 Vdc corresponds to 0 to 100% rated output, Zout=10kΩ . Accuracy= ±1%
Voltage Remote Programming	External potentiometer to control output reference voltage remotely via internal +10Vdc
Current Remote Programming	External potentiometer to control output reference current remotely via internal +10Vdc
Voltage Load Regulation	0.01% (no load to full load change).
Voltage Line Regulation	±0.01% (input voltage line change86~256Vac) .
Curren Load Regulation	0.01% (no load to full load change).
Curren Line Regulation	±0.01% (input voltage line change86~256Vac).
Operating Temperature	0°C ~ +50°C
Storage Temperature	-40°C ~ +85°C .
Connector	HV output connector: Optional, high cable is 1Meter Output Input connector: DB 15 pin, including control and display
Dimensions	3.15" H x 11.02" W x 10.00" D (80mm x 254mm x280mm)
Weight	5.5kg.

DEF ANALOG INTERFACE(OPTIONAL)

J2	SIGNAL	PARAMETER
1	+10Vdc Reference	+10Vdc Reference
2	N/C	No Connection.
3	N/C	No Connection.
4	HV Enable Input	Connect to JB1-15 to HV Enable Supply
5	Power Supply Fault	Open Collector,50Vdc@10mA Maximum
6	Power Supply Fault	Open Collector,50Vdc@10mA Maximum
7	Voltage Monitor	0 ~ +10Vdc=0 to rated output. Zout=4.99kΩ
8	Current Monitor	0 ~ +10Vdc=0 to rated output. Zout=4.99kΩ
9	N/C	No Connection.
10	Current Program In	0 ~ +10Vdc=0 to rated output. Zin=10MΩ
11	Voltage Program In	0 ~ +10Vdc=0 to rated output. Zin=10MΩ
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-485 INTERFACE(OPTIONAL)

J1	SIGNAL
1	N/C
2	TXD/Transmit Data
3	RXD/Receive Data
4	N/C
5	SGND
6	N/C
7	RS-485B
8	N/C
9	RS-485A

ETHERNET INTERFACE

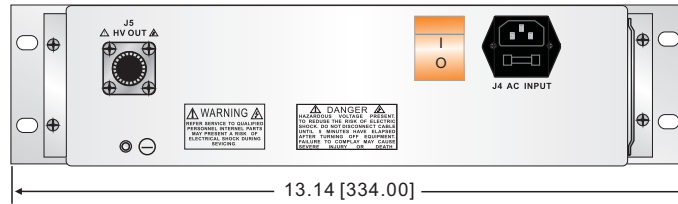
J3	SIGNAL	J3	SIGNAL	
1	RX+	5	N/C	No Connection
2	RX-	6	TX-	Transmit Data-
3	TX+	7	N/C	No Connection
4	N/C	8	N/C	No Connection



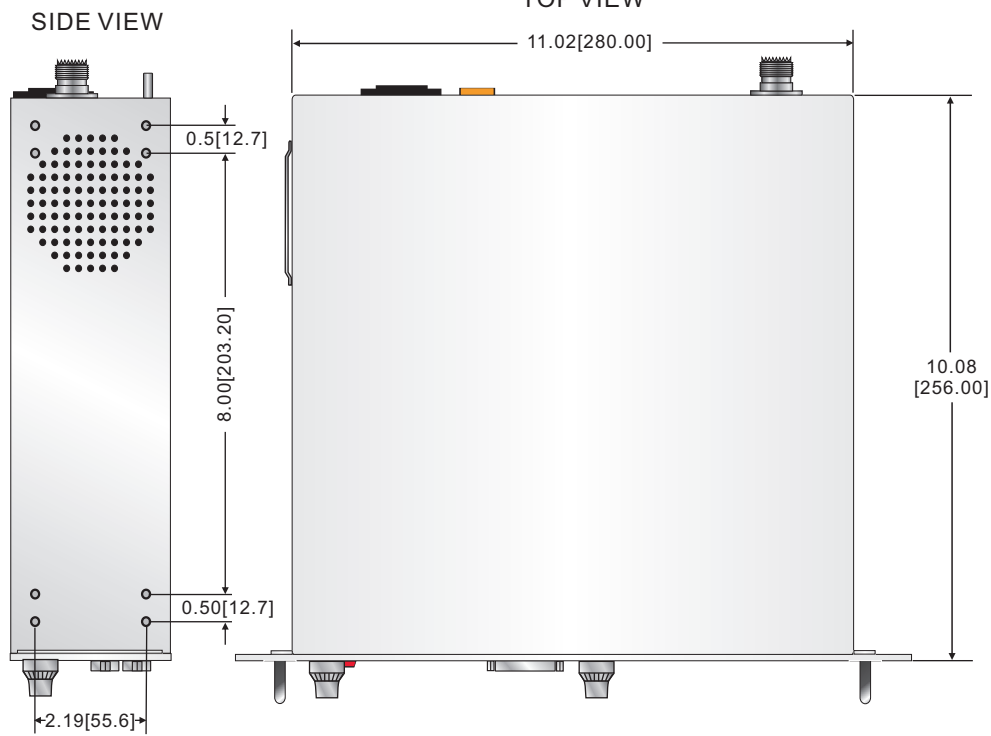
DIMENSIONS

DIMENSIONS:in.[mm]

BACK VIEW



TOP VIEW



SIDE VIEW

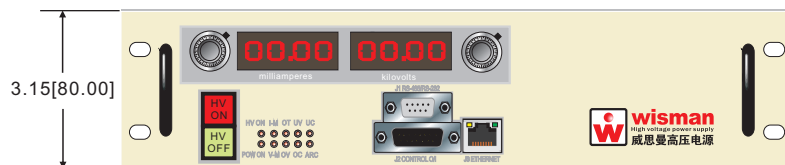
STANDARD: ETHERNET

FRONT VIEW



OPTION: ANALOG/RS-232/RS-485

FRONT VIEW



HANDY TYPE