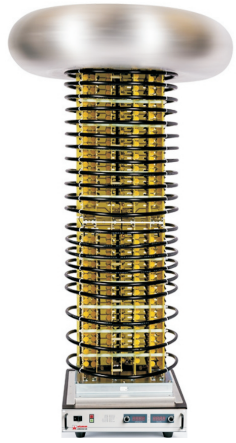
ISO9001:2015

- *POWER FACTOR CORRECTED*
- *PULSE-WIDTH MODULATION*
- *AIR INSULATED*
- *CONSTANT VOLTAGE/CURRENT OPERATION*
- *CURRENT TRIP*
- *LOW RIPPLE, LOW NOISE*
- *TIGHT REGULATION*
- *ARC AND SHORT CIRCUIT PROTECTED*
- *OEM CUSTOMIZATION AVAILABLE*



INTRODUCTION

Wisman's TA series of power supplies are sophisticated 2kW,output voltage ranges from200kV~600kV, with extremely low ripple and noise. They are air insulated fast response units with tight regulation, designed to meet the growing demands from both users and electric utilities for switching supplies with excellent input power factors that draw harmonic currents. Standard ET interface, RS-232 and RS-485 digital interface optional.

TYPICAL APPLICATIONS

Accelerator, Capacitance characteristics, Electron beam, Ion beam, X-ray systems, Ion and chemical vapor deposition, Electrostatic precipitation. Science experiment, Industrial application.

TA SELECTION TABLE

kV	mA	P(kW)	MODEL	MAX STORED ENERGY(J)	HIGH FREQ. RIPPLE(P-P)	LINE FREQ. RIPPLE(P-P)
200	10.00	2	TA200*2	70	100V	10V
250	8.00	2	TA250*2	81	125V	12.5V
300	6.00	1.8	TA300*1.8	100	150V	15V
350	4.50	1.575	TA350*1.575	112	175V	17.5V
400	3.50	1.4	TA400*1.4	131	200V	20V
450	3.00	1.35	TA450*1.35	150	225V	22.5V
500	pls contact Wisman's sales for the specific parameters					
550	pls contact Wisman's sales for the specific parameters					
600	pls contact Wisman's sales for the specific parameters					

TA SELECTION EXAMPLE

TA	600	*	2	VIP	10	VIM	10	TR	/	SSX	ZS
Series Name	Max. Output Voltage (kV)	Output Polarity P:Positive Polarity N:Negative Polarity R:Polarity Reversible	Max. Output Power (kW)	OPTION VP:Voltage Programming IP: current programming VIP:Voltage and current programming	OPTION 10:0~+10Vdc =0to max. output 5 :0~+5Vdc =0 to max. output	OPTION Vm: Voltage Monitor IM:current monitor VIM:Voltage and current monitor	OPTION 10:0~+10Vdc =0to max. output 5 :0~+5Vdc =0 to max. output	OPTION TR:RS-232 AB:RS-485 ET:Ethernet		OPTION Customized slow start X=5s,15s, 20s or 30 s, ±20%。	OPTION Zero start interlock

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TA SPECIFICATIONS

PARAMETER	DESCRIBE
Input Voltage	198~264V RMS,48Hz~63Hz.
Output Voltage	200kV~600kV Maximum output Voltage option,Maximum output power 2kW.
Efficiency	Typically 80% at full load.Power factor：0.995.
Stability	0.01% per hour after 1/2 hour warm-up, 0.05% per 8 hours.
Temperature Coefficient	25ppm/℃.
Ripple	See TA Selection Table.
Voltage Monitor	0~+10Vdc equivalentto 0 to rated voltage. Zout=10kΩ,Accuracy: output change <0.2%, display change <0.5%.
Current Monitor	0~+10Vdc equivalent to 0 to rated current.Zout=10kΩ,Accuracy: Output change <0.1%, display change <1%.
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.
Current Local Programming	Internal potentiometer to set current from 0 to maximum output current.
Current Remote Programming	0~+10Vdc proportional from 0 to maximum output current
Voltage Load Regulation	0.005% (no load to full load change).
Voltage Line Regulation	±0.005% (input Voltage line change±2%).
Current Load Regulation	0.1% (no load to full load change).
Current Line Regulation	±0.005% (input Voltage line change±2%).
Operating Temperature	-20℃~+40℃.
Storage Temperature	-40℃~+85℃.
Dimensions	Driver chassis:8.43"H X 20.31" W X 22.56"D (214.1mm X 515.9mm X573.0mm).
	Remote control unit:5.218"H X 19.00" W X 5.16"D (132.54mm X 482.6mm X130mm).

RS-232/RS-485 DIGITAL INTERFACE Ⓓ

JB3	SIGNAL	JB3	SIGNAL
1	N/C	6	N/C
2	TXD/Transmit Data	7	RS485B(OPTION)
3	RXD/Receive Data	8	N/C
4	N/C	9	RS485A(OPTION)
5	SGND		

ETHERNET DIGITAL INTERFACE Ⓓ

JB2		SIGNAL	JB2		SIGNAL
1	RX+	Receive Date+	5	N/C	No Connection
2	RX-	Receive Date-	6	TX-	Transmit Data-
3	TX+	Transmit Data+	7	N/C	No Connection
4	N/C	No Connection	8	N/C	No Connection

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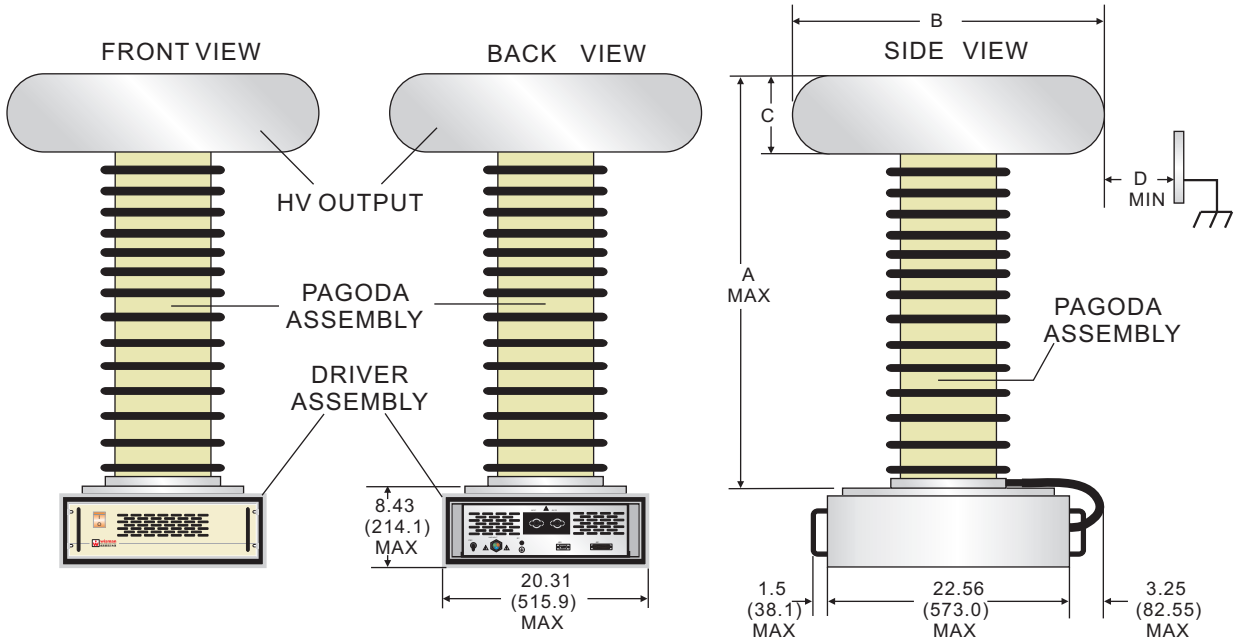
TA ANALOG INFORMATION

JB1	SIGNAL	PARAMETER
1	Power Supply Common	Power Supply Ground
2	Reset/HV Inhibit	Normally open, Low = Reset/Inhibit
3	External Interlock	+24Vdc @ open, <25mA @ closed
4	External Interlock Return	Return for External Interlock
5	Current Monitor	0~+10Vdc=0~100% rated output, Zout=10kΩ.
6	Voltage Monitor	0~+10Vdc=0~100% rated output, Zout=10kΩ.
7	+10Vdc Reference Output	+10Vdc @ 1mA
8	mA Program Input	0~+10Vdc = 0~100% rated output, Zin=10MΩ
9	Local mA Program Output	0~+10Vdc = 0~100% rated output, front panel pot
10	kV Program Input	0~+10Vdc = 0~100% rated output, Zin=10MΩ
11	Local kV Program Output	0~+10Vdc = 0~100% rated output, front panel pot
12	Remote Power On Output	+24Vdc @ open, <25mA @ closed
13	Remote Power On Return	Return for Remote Power On
14	Remote HV Off	+15Vdc @ open, connect to pin15 for front panel operation
15	Remote HV Off/On Common	HV On/Off Common
16	Remote HV On	+15Vdc @ open, connect to pin15 for front panel operation
17	HV Off Indicator	Low = HV Off
18	HV On Indicator	Low = HV On
19	Power Supply Common	Supply Ground
20	+24Vdc Output	+24Vdc @ 100mA
21	Voltage Mode Status	Open Collector, Low = Active
22	Current Mode Status	Open Collector, Low = Active
23	Power Mode Status	Open Collector, Low = Active(Option)
24	Interlock Closed Status	Open Collector, Low = Active
25	Spare	Spare
26	Spare	Spare
27	Spare	Spare
28	Spare	Spare
29	Over Power Fault	Open Collector, Low = Active
30	Over Voltage Fault	Open Collector, Low = Active
31	Over Current Fault	Open Collector, Low = Active
32	System Fault	Open Collector, Low = Active
33	RGLT Error Fault	Open Collector, Low = Active
34	Arc	Open Collector, Low = Active
35	Over Temp Fault	Open Collector, Low = Active
36	AC Fault	Open Collector, Low = Active
37	Interlock	connect to pin19 for Interlock closed
38	Spare	Spare
39	Spare	Spare
40	Pull Voltage	Option connect to pin 44 or pin 45
41	Spare	Spare
42	Spare	Spare
43	Spare	Spare
44	+5Vdc Output	+5Vdc @ 100mA, maximum
45	+15Vdc Output	+15Vdc @ 100mA, maximum
46	-15Vdc Output	-15Vdc @ 10mA, maximum
47	Spare	Spare
48	Spare	Spare
49	Spare	Spare
50	Power Supply Common	Power Supply Ground

TA DIMENSIONS

DIMENSIONS:in.[mm]

HIGH VOLTAGE STACK AND DRIVE ASSEMBLY:



SISE KV	"A"	"B"	"C"	"D"
200KV	28.5(724)	24(610)	5.00(127)	24(610)
250KV	35.75(908)	28(711)	7.00(178)	31(787)
300KV	40.00(1016)	28(711)	7.00(178)	38(965)
350KV	57.00(1448)	34(864)	8.50(216)	45(1143)
400KV	62.00(1575)	38(965)	10.00(254)	52(1321)
450KV	66.00(1676)	38(965)	10.00(254)	60(1524)
500KV	pls contact with Wisman's sales for the specific parameters			
550KV	pls contact with Wisman's sales for the specific parameters			
600KV	pls contact with Wisman's sales for the specific parameters			

Driver chassis: