EC

0~±2kV
0~13W
E-chuck semiconductor electronic sucker special power supply

wisman®
High voltage power supply
威思曼高压电源

ISO9001:2015

APPLICATION SPECIFIC

- Lockable front panel control interface
- Certificate of Calibration provided with each unit
- Supports both Coulombic and Johnsen-Rahbek ESC technologies
- Electrostatic chuck profiles can be uploaded to the unit and stored internally via a user-friendly software interface
- Wafer detection includes wafer free, wafer presence, or wafer clamped state

INTRODUCTION

Wisman's EC series of software-driven electrostatic sucker power supplies provide a range of features to meet a wide range of demanding applications. The instrument uses Wisman amplifier technology, which has been shown to increase efficiency and throughput by up to three times that of other power sources. Reduce backside gas errors, improve throughput and eliminate wafer stick/burst problems; control parameters such as overcurrent, presence of wafer and wafer clamp thresholds, clamp voltage, offset voltage, and internal or external amplitude/offset controls; the versatility of amplitude/offset and output control during adjustment; control output using rear panel I/O, serial computer commands, or front panel controls; configures custom clamp and clamp removal sequences and waveforms. The versatile and trusted performance of Wisman's EC allows for use in multiple unique tools and processes without adding new costs to each unique tool or process in the facility.

APPLICATIONS

Electrostatic-driven handling of materials, Semiconductor wafer processing, Non-mechanical transfer of flat panels or other processing materials sensitive to mechanical clipping

SELECTION EXAMPLE

EC	2	*	13
Series Number	Maximum output voltage(kV)	Output polarity P: Positive N: Negative R: Reversible	Maximum output power(W)

Sales@wismanhv.com
www.wismanhv.com

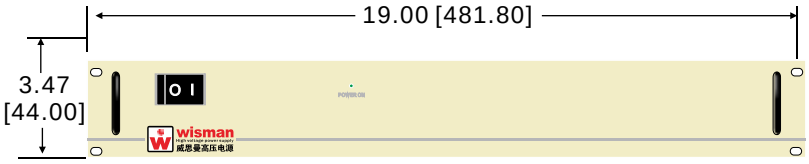
SPECIFICATION

PARAMETER	DESCRIPTION
Input	DC24V,2A
Output voltage	0 to ±2kV DC , Maximum
Output current	0 to ±6.5 mADC，peak to 10 mA
Output phasing	Output voltage A (reference phase) : 0 to ±2 kV Output voltage B (B phase =[-1] x A phase) : 0 to ±2kV
Simultaneous High Voltage Outputs	Two simultaneous high-voltage outputs (Output Phase A and Output Phase B) of equal magnitude and opposite in polarity relative to an offset voltage
Offset Voltage	An offset voltage of up to ±2 kV may be simultaneously added to the output of each phase. When an offset voltage is added, the polarity and magnitude of offset voltageappears simultaneously on both outputs A and B regardless of the magnitude and polarity of the A and B voltages themselves. The sum of the offset voltage and the output voltage of each phase cannot exceed ±2 kV
Output Waveshape	Each DC output voltage (Phase A and Phase B) is ramped up and down with symmetrical rise and fall times, or can be programmed with the user's custom clamping and declamping waveforms
Setting the High Voltage Amplitude	HV magnitude can be controlled either externally or internally to the unit
Setting the Offset Voltage	Offset voltage may be controlled externally or internally to the unit
Output Voltage Monitor	Back Panel Connector
Scale Factor	1 V/200 V
Phase B DC	Accuracy better than 2% of full scale
Offset Voltage	< 10 mV
Output Noise	< 50 mV rms
Current Monitor Scale Factor	1 V/100 uA
DC Accuracy	±5 uA
Output Noise	< 50 mV rms
Temperature	0-35°C（32-104°F）
Relative Humidity	To 85%, no condensation
Altitude	To 2,000 m (6,561.68 ft)
Dimensions (H x W x D)	43.7 x 421.6 x 457.3 mm (1.72 x 16.6 x 18 in) 1U rack enclosure
Weight	3.86 kg (8.5 lb)
DC Input Receptacle	2.0 mm locking DC jack; center contact is positive and shell is negative (receptacle mates with Switchcraft S761K plug)
Connectors	15-pin "D" ITT Canon used by remote device to control/monitor the unit, 9-pin "D" ITT Canon RS232, 3-Pin FCT "D" High-Voltage, standard type-A USB, Ethernet (optional) and Front Panel

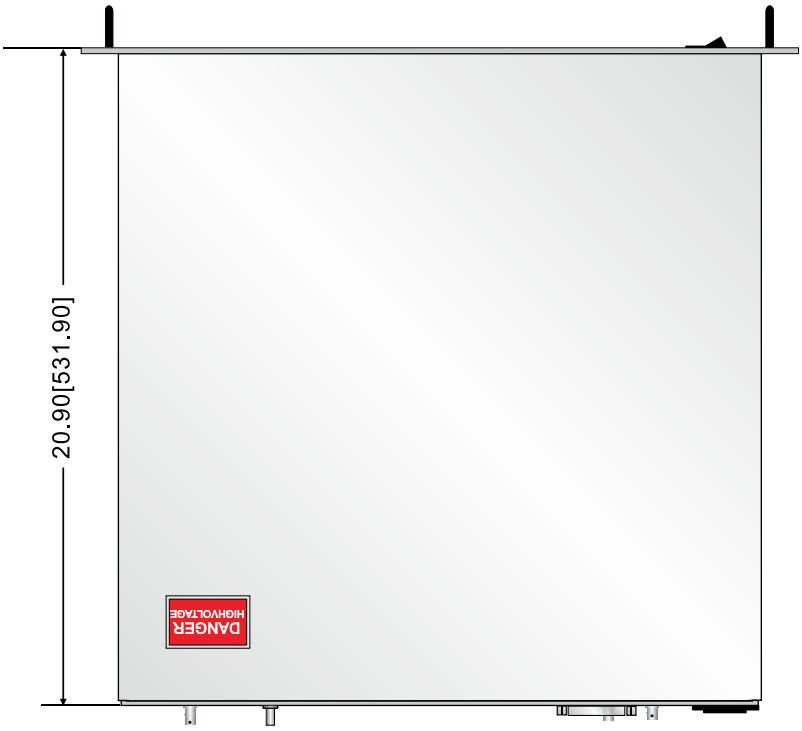
Sales@wismanhv.com
www.wismanhv.com

EC DIMENSIONS

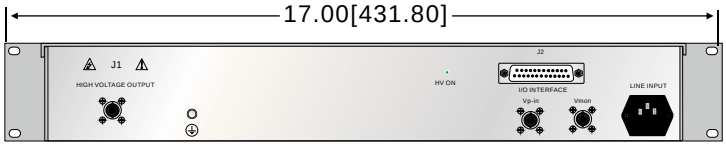
FRONT VIEW



TOP VIEW



BACK VIEW



APPLICATION SPECIFIC

Sales@wismanhv.com
www.wismanhv.com