

High Voltage and High Speed PulsePower Supplies

SK Series



These are perfect for Pulse Impression with High Speed to SEM, MASS, MCP Electrodes, etc.

# High Voltage & High Speed Pulse Power Supplies **SKseries**



www.matsusada.com

## **SK Series** Perfect for Pulse Impression with High Speed To SEM or MASS and MCP Electrodes, etc.!



#### Features

- High speed response
- · High power design applicable in low impedance
- High reliability and long life with all solid-state
- Ultra compact and light weight design
- Wide lineup of 300V to 10kV. Selectable best fitted model according to its usage

#### Outline

SK series are ultra-high speed and high power Pulse Power Supplies developed with our technology and know-how as a professional manufacturer of high voltage power supply. They are best-fitted power supplies for high speed impression of pulse in wide field such as defection of electron beam and ion beam or measurement of radiated light, PMT and MCP.

#### Applications

Impression of pulse to TOF-MASS, MCP, electronic shutter, bio-chip, inspection of insulating material, electronic gun, various gate electrodes.

#### Lineup

\* For models 5kV and larger, the dedicated high voltage power supply is included as external power supply.

Output Voltage	Positive Polar Output Model	Negative Polar Output Model
300V	SK-0.3P	SK-0.3N
400V	SK-0.4P	SK-0.4N
500V	SK-0.5P	SK-0.5N
1kV	SK-1P	SK-1N
2kV	SK-2P	SK-2N
5kV	SK-5P	SK-5N
10kV	SK-10P	SK-10N

### **Specifications**

Input Voltage	115VAC±10% 50 / 60Hz		
Output Pulse			
-Output Current	5A peak(1µ sec maximum), 20mA average		
	300V to 2kV models : 15ns (10% to 90% of set voltage, time of 90% to 10%) *2		
-Rise / Fall Time *1	5kV model : 15ns (10% to 90% of set voltage, time of 90% to 10%) *3		
	10kV model : 25ns (10% to 90% of set voltage, time of 90% to 10%) *3		
-Pulse Width	300V to 2kV models : 200ns minimum to $\infty$ (depend on input pulse)		
	5kV &10kV models $$ : 300ns minimum to $\infty$ (depend on input pulse)		
<sup>L</sup> Delay Time	300V to 2kV models : 200ns maximum		
	5kV &10kV models : 300ns maximum		
Repetition Frequency	10kHz maximum (depend on input pulse)		
Input Pulse	Proportion to pulse width by TTL (output at HIGH)		
Setting Input Voltage	10-turn potentiometer (For 5kV model and larger, setting should be made from the dedicated external power supply.)		
Display of Output Voltage	3.5 digits indicator $\pm 1999$ (For 5kV model and larger, indicated on the external power supply)		
Output Terminals	300V to 2kV models : output shielded cable 1m length		
	5kV &10kV models : [direct cabling] non-shield cable 0.5m length		
Accessories	Instruction manual (1)		
	AC input cable 2.5m length (1)		
	HV cable 2.5m length to be connected to the dedicated external power supply (1)		
	AC cable 2.5m length for the dedicated external power supply (1) — Only for 5kV and 10kV models		
	Instruction manual of the dedicated external power supply (1)		
	*1 : At capacitive load, it may be calculated with t = CV/5		
	*2 · At no load measurement on the output connector (without cable)		

\*2 : At no load, measurement on the output connector (without cable).

\*3 : At no load, measurement on the direct output cable (0.5m length).

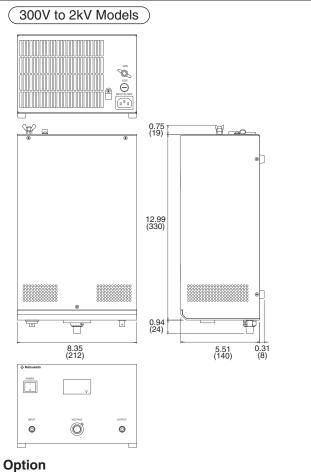
Please inquiry our sale staff for the detail specifications.

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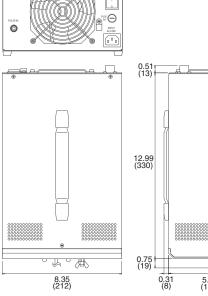
5kV and larger models

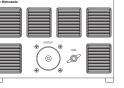
#### Dimensions inch (mm)

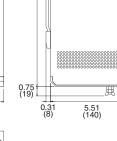


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5kV, 10kV Models







When ordering, suffix the following option mark to the model number. <e.g> SK-0.3P-L(220V)

-L(220V)

200 to 240VAC single phase input



## Customer Inquiry Sheet (SK series)

Please copy this page and above fax number after filling out form below.

#### I would like

A quotation	An explanation of product	A demonstration	To purcha
Other (		)	

Give us your requirement / comment

#### Please fill in below.

Address:	
Company:	
Dept.:	Title:
Name:	
Tel:	Fax:
E-mail:	

We warrant that products contained in this catalog (hereinafter, the "Products") are free from defects in material and workmanship under normal use for a period of one (1) year from the date of shipment thereof. However, the warranty period for X-ray detectors and X-ray source shall be either one (1) year from the date of shipment or 1,000 hours, whichever shorter. The above warranty shall not apply to any Product which, at our sole judgment, has been:i)Repaired or altered by persons unauthorized by us; or ii)Connected, installed, adjusted or used otherwise than in accordance with the instructions furnished by us (including being used in an inappropriate installation environment, such as in corrosive gas, high temperature and humidity). We are not liable for any loss, damage or failure of the Products after the shipment thereof caused by external factors such as disasters. If any Product is showed to be defective as satisfactory to us, we, at our sole discretion, repair or replace such defective Products at no cost to the purchaser. We assume no liability to the purchaser or any third party for special, incidental, consequential, or other damages resulting from a breach of the foregoing warranty. This warranty excludes any and all other warranties not set forth herein, express or implied, including without limitation the implied warranties of merchantability or fitness for a particular purpose. The Products are not designed and produced for such applications as requiring extremely high reliability and safety, or involving human lives (such as nuclear power, aerospace, social infrastructure facility, medical equipment, etc.). The use under such environment is not covered by this warranty and may require additional design and manufacturing processes. Regarding RoHS compliance, Matsusada Precision Inc. does not intentionally use objectionable substances in the products listed within this catalog. Matsusada Precision Inc. manufactures products using components which, according to our suppliers, are "RoHS compliant parts". However, Matsusada Precision does not analyze each and every unit to confirm. Therefore, there may be some customized products which do not comply to RoHS. Please contact your nearby sales office for confirmation.

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