### HIGH VOLTAGE POWER SUPPLY

MODEL:1260 AN



## SEJIN Specification

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#### Introduction of Power Supply (Power Pack)

The electric precipitator consists of an Ionizing part, a Collecting cell part . This method is called as a double stage electric charge method. An ionizing part grants a High Voltage (DC  $10 \text{KV} \sim 12 \text{KV}$ ) and makes an electric field, which ionizes pollutants. Also a collecting part is formed to collect pollutants by providing a cell High Voltage (DC  $5 \sim 6 \text{KV}$ ) to the collecting part. This can eliminate  $0.01 \, \mu\text{m}$  particles dust and can be considered as the best way with more than 97% of efficiency.

#### Specifications

- 1) Model: SJ-1260AN
- 2) Sources of electricity : AC 230V  $\pm$  10 % , 1 $\Phi$  50Hz-60Hz or

AC 110V  $\pm$ 10 %, 1 $\Phi$  50Hz-60Hz.

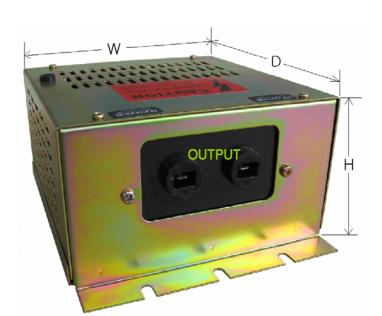
(It is not free voltage model but customer option.)

3) Output:

IONIZER : 10KV~12KV

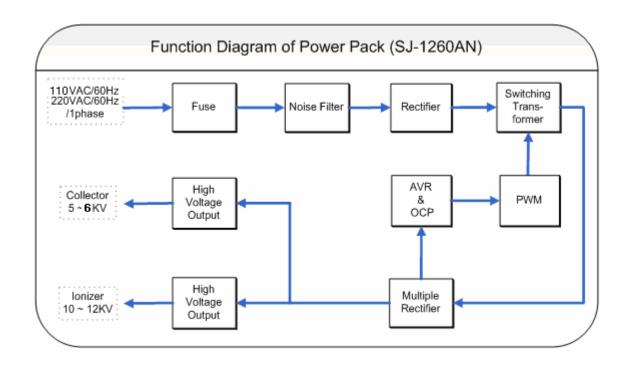
COLLECTOR: 5KV~6KV

- 4) Power: 80VA
- 5) Safety device: embedded protection circuit of surge and Overload
- 6) Protection time: 0.1sec
- 7) Alarm function: the outside terminal LAMP or BUZZER (selectable)
- 8) Indication: under a normal operation or a normal load, green LED lighted whereas under an Overload (or surge), a red LED is constantly blinked.
- 9) Dimension: H80x W145 x D155 (mm)





#### **Function Diagram**





#### Installation

- 1) Confirm the exact connection by the power pack wiring drawing.
- 2) Confirm the connection between a Power Pack and an Earth.

  ( see the figures in the Page 3)
  - i ) Input Terminal:

AC 110V 50Hz-60Hz or AC 220V 50Hz-60Hz (black, red Lead)

ii) GND Terminal:

Ground terminal
GOUND (green Lead)

iii) Condition Terminal:

White x 2 lead state
Condition contact ( connection )

- 3) Confirm the connection between a terminal and electric line
- 4) Confirm the connection of high voltage terminal in Power Pack
  - \* DC 5KV~ 6KV ---- Terminal in Collector (Cell) side
  - \* DC 10KV~12KV ---- Terminal in Ionizer side
  - \* confirm exactly a connection part of high voltage terminal
  - \* A good contacting connector must be used at connecting part and for the connection of high voltage line and an electric line a high pressure contraction tube must be used to endure enough durability and internal pressure.



#### Operation

- 1) In the above 2). (Page.6), first check the clause i), ii), iii), and then turn on the power pack external power switch-NFB or SW.
- 2) After turning it on, check whether the LED P.L in a front lower part of a POWER PACK can be lighted in green.
- 3) If it is lighted in green, POWER PACK is in normal operation.
- 4) Output: DC 5 ~ 6 KV (adjustable), DC 10~12 KV (adjustable).

  \* Simultaneous adjustable (blue VR-2 on the PCB).
- 5) Input and terminal: red& black / AC 220V or AC 110V input

: Green /Earth (ground)

: White, white / condition contact

- At present, it's in B contact. At abnormal, it maintains a contact state (when it's bickering)
- Condition contact is convertible by changing an internal connector pin to A contact.

Remark: Green LED should be a ground connection in use.

(A poor connection is the cause of a trouble)

- 6) Indicating LED: two colored LED is on the upper side of a case.
  - In normal, green LED is constantly lighted.

In abnormal, red and green LED is alternatively lighted.

- In an instant over current and short circuit,
- a relay and a LED are bickering in two minutes interval.
- In constant over current and constant shirt circuit,
- LED is in constant bickering, and Relay is designed to prevent
- a Relay contact loss by maintenance of constant A contact state.
- 7) PCB coating: this enhances the durability of semiconductor element and prevents a damage of parts, so clears the cause of break.

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#### Maintenance

- 1) Confirm whether a terminal connection of input AC voltage or not.
- 2) After checking Clause1), confirm the voltage of output terminal (in measuring, use a high voltage measurement TEST PROBE)
- In measuring a high voltage, firstly measures it under no-load state, then if it's normal, measure it under load state.
   ( At this time, connect a terminal of IONIZER and COLLECTOR)
- 4) If in normal state, green LED is constantly lighted.
- 5) If a load is abnormal, that is to say, if it is in over-load or surge, LED is changed to red bicker. At this time, this indicates us abnormality at the side of COLLECTOR and IONIZER. Red bicker is also happened in connecting a larger quantity of cell than a Pack's capacity.
  - \* Reference \*

When this state keeps on, it means a short circuit by a wrong insulation and a foreign substance at the load side of IONIZER or the side of COLLECTOR.

- 6) The normal insulation resistance of a load side is the followings.
  - : IONIZER: over 100 M $\Omega$  (DC 10KV insulation resistance measuring instrument)
  - : COLLECTOR: over 50MΩ (DC 5KV insulation resistance measuring instrument)
  - \* Reference\*

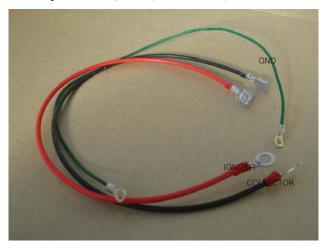
Red LED may be turned on by a over-current circuit caused by the over-load in normal operation, collection of foreign substances, the over-load by a short circuit or a bend of Collector's plate and IONIZER wire or saw plate. But it will soon operate because POWER PACK is normal at that time. Sometimes a FUSE of PCB may break by the over shocking current of an over-load, or a low voltage. At this time, change the FUSE of a rated current.

\* Reference\*

FUSE 2.5A (it's changeable to the capacity of a POWER)

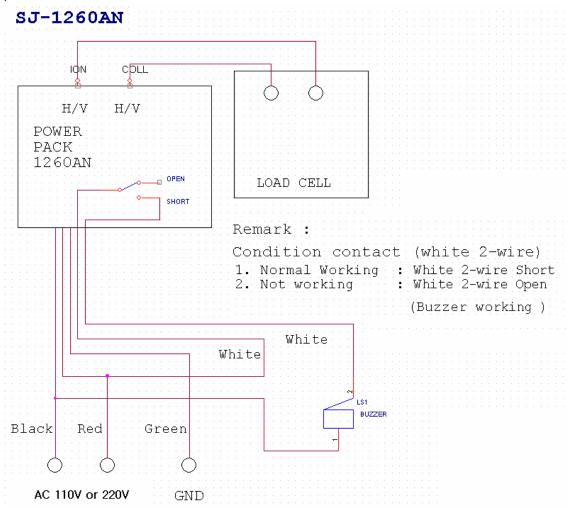


#### Accessory: Wire (GND, IONIZER, COLLECTOR)



#### Application:

#### Example



# HIGH VOLTAGE POWER SUPPLY LIMITED WARRANTY



#### SEJIN ELECTRONICS, CO.

Post Office Box 122-813 • 489-6, Galhyun-dong eunpyung-ku, Seoul, Korea

(082) 02-389-2556 • FAX (082) 02-389-1903

www.senics.com

SEJIN company warrants its high voltage power supply to be free from defects in workmanship or materials, under normal use and service, for a period of One Year from the date of purchase by the original owner. If at any time during the warranty period, the product is found to be defective or malfunctions, SEJIN company will repair or replace the defective part (at its option) and provide the shop labor to repair this high voltage power supply. This warranty shall not apply if it is shown by SEJIN that the defect or malfunction was caused by neglect or abuse during operation by consumer. The repaired or replaced part or unit will be shipped by SEJIN Company to the purchaser, freight prepaid. The warranty on any repaired or replacement part shall be for a duration of time no longer than the remaining or unexpired term of the original warranty.

This warranty does not cover any other charges incurred by the purchaser.

The sole responsibility of SEJIN shall be to repair the product within the terms stated above. SEJIN SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, EXPRESS OR IMPLIED, APPLICABLE TO THIS PRODUCT. Some states do not allow the exclusion or limitation of consequential damages, so this limitation may not apply to you. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED BEYOND THE ONE YEAR DURATION OF THIS WARRANTY.

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