High-Voltage Power Supply Designed for Ion Pumps

Best for accurately reading small current values in µA

AIP series
3.5kVdc, 5kVdc and 7.5kVdc
AIP series is the exclusive power supply for operating ion pumps that allows you to read small current values with the current monitor to monitor high vacuum. It detects overcurrent with the output current meter relay and outputs status to protect the load from deteriorated vacuum. Select the output voltage of 3.5kV, 5kV or 7.5kV, according to the pump used.

### Output Voltage (fixed) | Output Current | Model | Ripple
--- | --- | --- | ---
3.5kV | 4mA | AIP-3.5P4 | 1%<sub>p-p</sub>
 | 50mA | AIP-3.5P50 | 1%<sub>p-p</sub>
5kV | 50mA | AIP-5P50 | 1%<sub>p-p</sub>
7.5kV | 30mA | AIP-7.5P30 | 1%<sub>p-p</sub>

*1 : Value at no load.  *2 : Value at output short-circuit.
Specifications

**Input voltage**
115VAC ± 10%, 50/60Hz, single-phase

**Output voltage display**
3.5-digit digital meter

**Output current display**
Analog meter, 2.5 class with range switching, 50mA / 5mA / 500μA / 50μA / 5μA

**Overcurrent detection**
The output current meter relay detects overcurrent with High and Low settings

**Overcurrent status output**
Outputs status by external contact signal (at open and close for high and low systems)
Output from D-sub (15-pin) connector at the rear panel

**Output current monitor**
Output from BNC terminal (~10mV / 1μA)

**Operating temperature**
0 to +40 °C

**Storage temperature**
-10 to +60 °C

**Storage humidity**
20 to 80%RH (no condensation)

**Accessories**
Instruction manual
Input AC cable 2.5m, 3P x1
Output HV shielded cable 2.5m (flying lead) x1

<table>
<thead>
<tr>
<th>Input</th>
<th>Standard</th>
<th>CABLE TYPE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(115V input)</td>
<td>(With 3-pin plug)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output</th>
<th>3.5 and 5kV models</th>
<th>CN-SHV-HVP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.5kV model</td>
<td>CN-15-MHVP</td>
</tr>
</tbody>
</table>

Dimensions inch(mm)

<table>
<thead>
<tr>
<th>Model</th>
<th>D</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIP-3.5P4</td>
<td>10.67</td>
<td>Approx. 5kg</td>
</tr>
<tr>
<td>AIP-3.5P50</td>
<td>15.83</td>
<td>Approx. 9kg</td>
</tr>
<tr>
<td>AIP-5P50</td>
<td>15.83</td>
<td>Approx. 9kg</td>
</tr>
<tr>
<td>AIP-7.5P30</td>
<td>15.83</td>
<td>Approx. 9kg</td>
</tr>
</tbody>
</table>
Customer Inquiry Sheet (AIP 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 purchase
  - Other ( )

- Give us your requirement / comment

- Please fill in below.

  Address:

  Company:

  Dept.: Title:

  Name:

  Tel: Fax:

  E-mail:

Warranty

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 shown 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.