X-ray HV Power Supply
Anode ground type

XPG series

Output Voltage: -160kV to -30kV
Output Power: 600W to 4000W

- Low ripple and high stability
- Integrated Floating AC Filament Supply
- Maximum 3 kW and 4 kW output power models are also available.

* X-ray tube is separate item.

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XPG series

X-ray HV Power Supply
Anode ground type

XPG Series is high stability and low ripple negative X-ray power supply with floating AC filament supply and generates stable X-ray output. Interlock and useful function are installed for safer and convenient operation. With combination with digital controller CO series, control via GPIB, RS-232C, RS-485 and USB is available.

FEATURES
- Maximum 3 kW and 4 kW output power models are also available.
- For Anode ground type X-ray tube
- Integrated Floating AC Filament Supply
- Low ripple and high stability
- Digital interface
- Constant Voltage / Current operation with full protection for safety operation

APPLICATIONS
- X-ray non-destructive inspection
- XRD(X-ray Diffraction)
- XRF(X-ray Fluorescence Analysis)

LINE UP

<table>
<thead>
<tr>
<th>Output Voltage</th>
<th>Output Current</th>
<th>Output Power</th>
<th>Model</th>
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<tr>
<td>-30 kV</td>
<td>20 mA</td>
<td>600 W</td>
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<td>40 mA</td>
<td>1200 W</td>
<td>XPg-30N40</td>
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SPECIFICATIONS

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<th>200 VAC</th>
<th>200 VAC</th>
<th>600 W · 640 W</th>
<th>13 A</th>
<th>20 A</th>
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<tr>
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<td>11 A</td>
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<tr>
<td>4000 W</td>
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<td>-</td>
<td>-</td>
<td>25 A</td>
<td>15 A</td>
<td></td>
</tr>
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</table>

Temperature Coef. 50 ppm / °C

Filament
- 10 V / 5 A AC(except 3000W and 4000W model)
- 12 V / 5 A AC(3000W and 4000W model)
- stand-by 0.5 A
- Filament limit is variable with 10-turn potentiometer on rear panel

Metering
- Output voltage : 3.5-digit digital meter -1999
- Output current : 3.5-digit digital meter 1999

Monitor Output
- Voltage monitor : 0 V to 10 V (output impedance 1 kΩ typ.)
- Current monitor : 0 V to 10 V (output impedance 1 kΩ typ.)

Protections
- Protection against over voltage, over current, output short circuit, Filament protection, arc and over temperature.
- Disable HV output after AC power line recovery.

Other Functions
- Remote ON / OFF switch (outside relay)
- Interlock (outside relay)
- Output status signal (inside relay)

Output Connector
- 30 kV to 60 kV : Federal Standard 75 kV 3-pin
- 100 kV, 160 kV : European Standard R24

Temperature
- Operating : 0 °C to + 40 °C
- Storage : -40 °C to +85 °C

Humidity
- 0 % to 80 % RH (no condensing)

Accessories
- AC line input cable 2.5 m (flying lead) (1)
- Instruction Manual (1)
- These specifications are at the maximum rated output after a 2Hr warm-up period unless otherwise specified.
DIMENSIONS inch (mm)

Connection with X-ray tube

Below diagram shows the connection of power supply and X-ray tube.

[ Standard type ]

[ -Ldf option(Dual filament) type ]

Contact to sales in advance if X-ray tube with C and S of fig.1 or C and L of fig.2 is shorted is used.

Digital Controller CO series

The CO series is a line of adapters used to digitally control Matsusada’s High Voltage, DC, and AC power supplies via personal computer.

It is ideally suited to building safe, stable, versatile and highly accurate automatic inspection and measurement systems, saving your time and cutting labor costs.

And, the fiber optic connection secures electrical isolation, resulting in safer operation even when combined with power supplies of different potentials.

- High resolution 16-bit(1 / 65535)
- Thorough measures against noises
- Complete isolation by fiber optic cable
- Listener / Talker function

For more information, please refer to CO series catalog.
Customer Inquiry Sheet (XPg 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: 

Manufacturer warranty

We warrant the specification, unless otherwise specified, at max. rated output after warm up, and scope of application is between 10 % and 100 % of max. rated output. 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. We will not inspect, adjust or repair any of our power supply products in the field or at any customer site. If you suspect that there has been a power supply failure in the field, please inspect your whole unit by yourself in an effort to determine that the problem is, in fact, arising out of our power supply products. If it is found that the problem is arising out of such power supply product after inspection, please contact your local sales office for additional troubleshooting. A “Return Merchandise Authorization” is required in case the power supply must be sent back to the factory in Japan for inspection and repair. 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. No modification or supplement of this warranty shall be binding unless in writing and signed by a duly authorized officer of Matsusada. Matsusada reserves the right to make any changes in the contents of catalogs or specifications at any time without advance notice. Due to compelling reason such as unavailability of components used, products might be un available or unable to repair. The products specified in catalogs or specifications are designed for use by the person who has enough expertise or under the control of such person, and not for general consumers. Schematics of products shall not be submitted to users. Test result or test data for the products shall be available upon request with charge.

Make sure you read the specification in the latest catalog before you order. Contact nearby sales office for the latest catalog.

PLEASE SEE THE LINK BELOW FOR THE COMPLETE WARRANTY TERMS

http://www.matsusada.com/site/warranty.html

San Jose Office : 2570 N.First Street Suite 200 San Jose, CA 95131  North Carolina : 5960 Fairview Rd. Suite 400, Charlotte, NC 28210
Tel: +1-408-273-4573  Fax: +1-408-273-4673  Tel: +1-704-496-2644  Fax: +1-704-496-2643
International Office : Osaka-City, Osaka Japan
Tel: +81-6-6150-5088  Fax: +81-6-6150-5089
Headquarters : 745 Aoji-cho Kusatsu Shiga 525-0041 Japan