

NEW

High power & Low Noise High Voltage Power Supplies

RSS series

► 1kV to 20kV/5W to 30W

- Compact, high stability and low noise
- External potentiometer or external voltage enabling output control
- Ideal for PMT, E-Beam, High voltage testing, and many other applications



RSS series

High power & Low Noise High Voltage Power Supplies

► 1kV to 20kV/5W to 30W



RSS series is a low ripple module that is compact and highly stable, which is ideal for photomultiplier tubes, electron beams, and various inspection devices. Voltage and current monitors are included as standard features.

FEATURES

- Overwhelming high stability and low noise of 10 ppm
- External potentiometer or external voltage enabling output control
- Reliability-centered design with protections of arc discharge protection and continuous output short circuit

LINEUP

*P for Positive polarity output, N for Negative polarity output

Output Voltage [kV]	Output Current [mA]	Output Power [W]	MODEL	Ripple [p-p]
0 to 1	5	5	RSS5-1*	10 ppm
	10	10	RSS10-1*	
	30	30	RSS30-1*	
0 to 1.5	3.4	5	RSS5-1.5*	
	6.7	10	RSS10-1.5*	
	20	30	RSS30-1.5*	
0 to 3	1.7	5	RSS5-3*	
	3.4	10	RSS10-3*	
	10	30	RSS30-3*	
0 to 6	0.84	5	RSS5-6*	
	1.7	10	RSS10-6*	
	5	30	RSS30-6*	
0 to 10	0.5	5	RSS5-10*	
	1	10	RSS10-10*	
	3	30	RSS30-10*	
0 to 15	0.34	5	RSS5-15*	
	0.67	10	RSS10-15*	
	2	30	RSS30-15*	
0 to 20	0.25	5	RSS5-20*	
	0.5	10	RSS10-20*	
	1.5	30	RSS30-20*	

OPTION

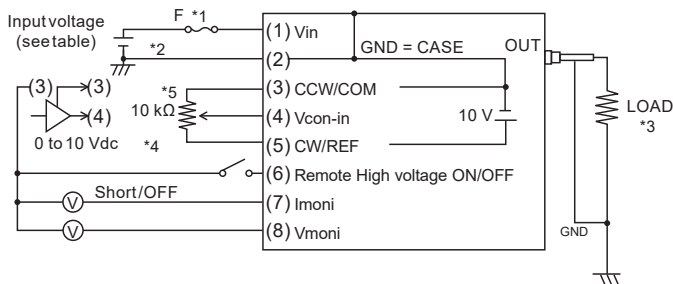
CN8ML Assembled input connector (connector with 250 mm flying leads)

SPECIFICATIONS

These specifications, unless otherwise specified, at maximum rated output after warm up, and scope of application is between 10% and 100% of maximum rated output.

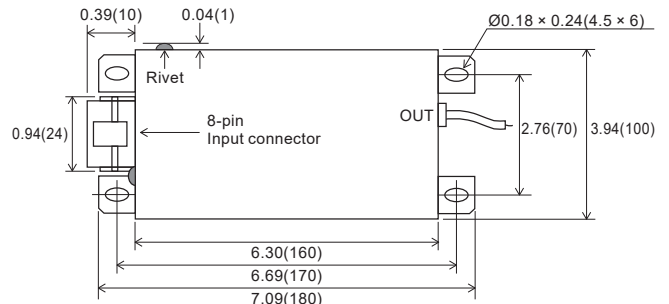
Input voltage/current	MODEL	Input voltage	Input current												
	5 W output	+24 Vdc $\pm 10\%$	0.4 A typ.												
	10 W output		0.7 A typ.												
	30 W output		1.7 A typ.												
Output control	By external potentiometer 10 k Ω or external control voltage (Vcon-in) 0 to 10 Vdc														
Accuracy of setting voltage	$\pm 0.5\%/V_{con-in} = 10.00$ V														
Regulation	Line: 10 ppm (for $\pm 10\%$ input change at max. output) Load: 10 ppm (for 10% to 100% load change at max. output)														
Stability	10 ppm/Hr, 10 ppm/8 Hr														
Temp. coefficient	10 ppm/ $^{\circ}$ C														
Monitor	+10V at the rated output for output voltage and current Accuracy: $\pm 2\%$ F.S. at 1 k Ω output impedance														
Reference voltage	10 V $\pm 0.5\%$														
Protection	Overload, arc discharge, and output short circuit protection														
Input terminal	8-pin connector A compliant connector is provided. [CN8ML] When extending the input lead wire, use AWG22 (equivalent to 0.3mm ²) for (1) and (2), and AWG22 or AWG24 for (3) to (8) (equivalent to 0.3 mm ²). Input Connectors in List														
	Manufacturer	Housing	Contact												
	Molex	51103-0800	50351-8100												
			Hand tool												
			57295-5000												
Output terminal	High voltage shielded cable 0.5 meters length														
Operating temperature	0 to +60 $^{\circ}$ C (Derating: +40 $^{\circ}$ C to +60 $^{\circ}$ C)														
	<p>(Derating)</p> <table border="1"> <caption>Derating Data</caption> <thead> <tr> <th>Ta ($^{\circ}$C)</th> <th>Io (%)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>100</td> </tr> <tr> <td>20</td> <td>100</td> </tr> <tr> <td>40</td> <td>100</td> </tr> <tr> <td>50</td> <td>50</td> </tr> <tr> <td>60</td> <td>0</td> </tr> </tbody> </table>			Ta ($^{\circ}$ C)	Io (%)	0	100	20	100	40	100	50	50	60	0
Ta ($^{\circ}$ C)	Io (%)														
0	100														
20	100														
40	100														
50	50														
60	0														
Storage temperature	-20 $^{\circ}$ C to +60 $^{\circ}$ C														
Relative humidity	20% to 80%, non condensing														

CONNECTION DIAGRAM



- *1 Since this power supply is not installed with a input fuse, please insert UL certified 2 A fuse on Vin terminal.
- *2 GND pin(2) must be properly grounded for safety.
- *3 Return line from the load must be connected to GND or pin (2).
- *4 The input impedance of Vcon-in pin (4) is ≥ 100 k Ω .
- *5 Variable resistor or potentiometer which has superior temperature coefficient and the capacity of 1/4 W or more is recommended.

DIMENSIONS [inch (mm)]



SIDE VIEW



Who We Are

Matsusada Precision Inc. has manufactured High voltage power supplies for more than 50 years in Japan. Recognized by Japanese customers who demand high-quality levels, we have become a high voltage power supply manufacturer which has the highest market share in Japan. Currently, we are developing products not only for high-voltage power supplies, but also for DC power supplies, AC power supplies, electronic loads, high-voltage amplifiers, bipolar power supplies, and X-ray inspection equipment.

We have contributed to customers in various industries such as Semiconductor Production Equipment, Photomultiplier, IGBT, Electrostatic Chuck, Electron Beam, Electrospinning, Plasma, Motor for Electric vehicles, etc.

In addition, we have a direct sales system to respond promptly to customers. Our technical support team with many years of experience will respond promptly from Japan.

Our mission is to deliver products that meet Japan's strict quality standards to customers all over the world. We believe that if you contact us, you will surely find the power supply you need

Matsusada Precision



 **Matsusada Precision Inc.**

4TECT

ООО «4TECT»

Телефон: +7 (499) 685-4444

info@4test.ru

www.4test.ru