

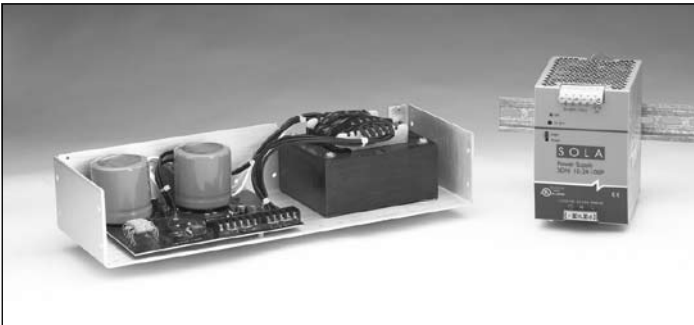
SolaHD has a broad range of standard power supplies to suit almost any industrial application. Updated approvals and user friendly features make power system design easy. The product line includes one of the broadest ranges of DIN Rail and linear-based power supplies in the marketplace. The DIN Rail products feature full CE compliance (including all the elements of CE design engineers need to worry about: safety/LVD, EMC, and ingress protection). UL 508 approvals eliminate derating in UL 508 listed panel systems. Global inputs are available for installations around the world.

Three phase input options are available on many of the SDN DIN Rail products that convert 380/480 three phase directly to 24 Vdc. They provide extremely stable, regulated low voltage without the need for a step down transformer saving space and money.

SolaHD now offers a DC UPS to provide backup power to the power supply in the event of a blackout.

#### Linear vs. Switcher

SolaHD has provided both linear and switching technology products for many years. As a leading supplier of power products to the industrial market, both technologies are still important. Switching technology (most of SolaHD's DIN Rail line) is the predominant method of AC-DC conversion for almost any type of electronic system sold today in the world, from PLC's to desktop PC's.



*Linear vs. Switcher*



*Linear Power Supplies for a broad range of applications*

The small size, lightweight and high efficiency of the switching products give them significant advantages over the linear technology products (SolaHD's SL and 83 series). SolaHD switching products provide well filtered and regulated DC of typically less than 1% deviation from the nominal output voltage.

Linears are about 50% efficient while their switching counterparts are typically over 80% efficient. Switchers are light enough to mount on a DIN Rail, while only the smallest linears are capable of being securely mounted to a DIN Rail. Linears are still popular today because they do provide very tight regulation (<.01% typically), almost perfectly clean DC, fast transient response and their low component count helps provide a lower material cost for its user. Linears are typically open frame because of the excessive heat dissipation from their low efficiency.

SolaHD's industry standard linears, however, are available with optional covers for safety. Most linears are recognized to UL 60950 and cannot meet the stricter temperature requirements of the UL 508 Listing, such as with SolaHD's DIN Rail power supplies.

**DC Power Supply Selection Process**

Power supplies can be selected online by visiting our website. Enter your power requirements and a list of matching power supplies will list. You can also manually select a power supply by following the directions below:

- 1) Gather the required information.
  - Input voltage and frequency?
  - Wattage needed?
  - Number of outputs?
  - Voltage of each output?
  - Amperage of each output?
  - Don't forget to take into account the peak loading of each output.
  - Battery Backup
- 2) Calculate the power (wattage) of the DC power supply you need. If more than one output is required, do the following calculation:
  - Multiply the Voltage times the amperage of each output to calculate the wattage of each output. Next, add together the wattage of each output to get the total wattage for the supply.
- 3) Determine which models from the Power Supply Selection Chart (on the next page) meet all of the required specifications.
- 4) Download the specifications sheets from our web site ([www.solaheviduty.com](http://www.solaheviduty.com)).
- 5) Check the mounting style, connections and physical size of the power supply to ensure its suitability for the intended application.
- 6) Check for applicable safety approvals for the country and application the power supply will be used in.

Try our online product selector at [www.solaheviduty.com/psselect](http://www.solaheviduty.com/psselect). Enter your power requirements and a list of matching power supplies will list. It's fast and easy.

**Selection Worksheet**

Output:

\_\_\_\_\_ Vdc x \_\_\_\_\_ Amps = \_\_\_\_\_ Watts

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\_\_\_\_\_ Vdc x \_\_\_\_\_ Amps = \_\_\_\_\_ Watts

\_\_\_\_\_ Vdc x \_\_\_\_\_ Amps = \_\_\_\_\_ Watts

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\_\_\_\_\_ Vdc x \_\_\_\_\_ Amps = \_\_\_\_\_ Watts

Add Watts from each output to calculate

Total Watts = \_\_\_\_\_

Physical Dimensions:

\_\_\_\_\_ H x \_\_\_\_\_ W x \_\_\_\_\_ D

Mounting:

\_\_\_\_\_ DIN Rail

\_\_\_\_\_ Chassis

\_\_\_\_\_ Other

Other required features or options:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If you have filled out this form and cannot find the appropriate power supply, please fax (800-367-4384) or e-mail ([tech@sola-hevi-duty.com](mailto:tech@sola-hevi-duty.com)) this information to the Technical Services group.