

SDU SERIES, DIRECT CURRENT UNINTERRUPTIBLE POWER SUPPLY (DC UPS) SYSTEM

The SDU DIN Rail DC UPS is an advanced 24 Vdc uninterruptible power system that combines an industry leading design with a wide operational temperature range and unique installation options. The SDU DC UPS is a powerful, microprocessor controlled UPS that provides protection from power interruptions. With an input voltage range of 22.5 to 30.0 Vdc, the DC UPS is the ideal power back-up solution for your critical connected loads.

These units were designed specifically for use with SolaHD's popular SDN Series of power supplies. SolaHD's external battery module is the only one on the market that allows you to seal the electronics in the panel and maintain safety by placing the battery outside of a non-ventilated enclosure.

These units include easy to wire screw terminations for critical devices needing battery back-up. The SDU DC UPS includes an automatic self-test feature that checks the UPS and battery functions. Battery charging occurs automatically when input DC power is applied. When power fails, the DC UPS will switch to battery back-up. If the battery is no longer useful, the UPS will sound an alarm and an LED indicator will illuminate.

Back-up power protection in modern industrial applications depends mainly on AC UPS. AC is converted to DC, and converted back to AC in the AC UPS, then converted back to DC in the protected equipment power supply. By applying the SolaHD SDU DIN Rail DC UPS, you avoid the inefficiencies of all these conversions. This design maximizes system up-time flexibility, and optimizes reliability assurance.

APPLICATIONS

- Industrial/Machine Control
- Automation Process Control
- · Computer-based Control Systems
- Conveying Equipment
- Material Handling
- Packaging Machines
- Semiconductor fabrication equipment
- DeviceNetTM
- Amusement Park Equipment
- Pharmaceutical Applications
- Control Rooms

FEATURES

- Modular, rugged industrial grade design
- Microprocessor based controls
- Automatic self-test feature for UPS function and battery management check
- Power module wide operation temperature range (-20 to +50°C)
- Flexible batteries back-up expansion capabilities
- Overload protection in normal and battery modes
- User replaceable batteries
- IP-20 rated input and output screw terminals
- No internal fan, no extra cooling required
- Sturdy, reliable all metal DIN Rail mounting connector
- LED status indicators
- Universal dry contact relay terminals provide remote signaling
- Monitoring, diagnostics, and remote turn-on and shut-off capabilities
- · Two year limited warranty

CERTIFICATIONS AND COMPLIANCES

- Listed, Ind. Control Equipment, E61379
- UL 508, CSA C22.2 No. 107.1
- c **Thus** UL Recognized Component, ITE, E137632
 - UL 60950-1/CSA C22.2 No. 60950-1
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 - IEC/EN60950-1

RELATED PRODUCTS

- · SDN-P Series DIN Rail Power Supplies
- SDN-C Series DIN Rail Power Supplies
- STV 25K Series Surge Protective Devices



For product information: www.solahd.com 1.800.377.4384



SELECTION TABLE

Catalog Number	Description	Approx. Ship Weight lbs (kg)
UPS		
SDU 10-24	240 VA, 24V/10A DIN Rail DC UPS power module, battery module is required	1.7 (0.77)
SDU 20-24	480 VA, 24V/20A DIN Rail DC UPS power module, battery module is required	1.7 (0.77)
Battery		
SDU 24-BAT	24V DIN Rail/Panel Mount Battery Module (cable included)	12.0 (5.33)
SDU 24-BATEM	24V External Mount Battery Module (cable included)	16.0 (7.11)
Accessories		
SDU 24EXTBC6	Optional 6 ft. Battery Module cable to 24V DC UPS	0.5 (0.22)
SDU 24-DB9	Optional interface kit to convert relay contacts signals to DB9 signals	1.0 (0.45)
SDU-PMBRK	Optional chassis mount brackets to secure UPS to wall, panel, or enclosure	0.5 (0.22)

There are three individual hardware products when putting an SDU DC UPS system into operation:

- 1. 24 Vdc Power Supply (Recommended SolaHD SDN Series)
- 2. 24 Vdc SDU DC UPS Power Module
- 3. 24 Vdc SDU DC UPS Battery Module; or 24 Vdc SDU DC UPS External Battery Module

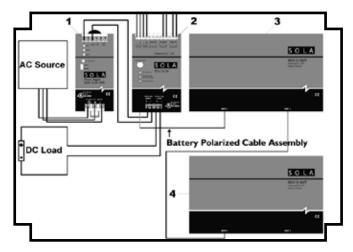
There are two models of the SDU DC UPS Power Module:

- 1. SDU 10-24, 24 Vdc/10amp (battery modules are required)
- 2. SDU 20-24, 24 Vdc/20amp (battery modules are required)

There are two models ① of the SDU DC UPS Battery Modules:

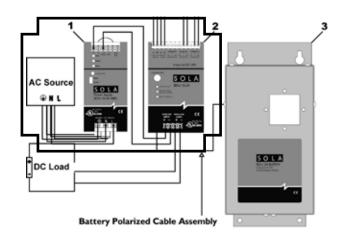
- SDU 24-BAT, DIN Rail/Panel mount for installation in ventilated enclosure, up to 4 battery modules can be connected to the SDU DC UPS.
- SDU 24-BATEM, Panel mount, alternate battery module for external installation of non-ventilated enclosures, only 1 battery module can be connected to the SDU DC UPS.
- ① Can not use a combination of both models of the battery modules, only one model of the battery module can be connected to the SDU DC UPS.

DIN RAIL MOUNTED BATTERY OPTION



- 1) AC/DC Power Supply
- 2) Power Module: SDU 10-24 or SDU 20-24
- 3) Battery Module: SDU 24-BAT
- 4) Optional battery module for extended Back-up.

EXTERNAL BATTERY OPTION



- 1) AC/DC Power Supply
- 2) Power Module: SDU 10-24 or SDU 20-24
- 3) Battery Module: SDU 24-BATEM



