



SDU Series, DIN Rail AC UPS

The SDU DIN Rail UPS combines an industry leading compact design with a wide operation temperature range and unique installation options. The SDU series provides economical protection from damaging impulses and power interruptions. These units include easy to wire screw terminations for critical devices needing battery back up such as computer based control systems.

Features

- Lightweight, compact industrial design
- Wide operation temperature range (0-50°C)
- Cold start capability
- Phone/dataline surge protection
- Software and cable included for easy installation
- Simulated sinewave output
- RS232 Communication Port
- USB Communication Port (optional)
- Form C Dry Contact Relay (optional)
- Panel/Wall mounting brackets (optional)
- Remote turn-on and shut-off capabilities 
- Limited two-year warranty

Approvals

- 120V models are UL1778  recognized for industrial applications without derating.
 - No derating required in UL508 applications.
- 230V models are CE marked.



Applications

- Programmable Logic Controllers
- Factory Automation
- Robotics
- Conveying Equipment
- Computer-based Control Systems

Related Products

- Portable MCR Power Conditioners
- STV Surge Protective Devices
- SDN DIN Rail Power Supplies
- STFV Plus Active Tracking® Filters

Selection Table

Capacity (VA/W)	Catalog Number	Volts, Frequency In/Out	Typical Back-up Time (minutes)*	Input/Output Connections	Approx. Ship Weight – lbs (kg)
500/300	SDU 500	120 Vac, 50/60 Hz	4	IP20 touch proof, screw terminals. Wire range: 10 ~ 24 AWG.	10.7 (4.7)
850/510	SDU 850		2		11.4 (5.0)
500/300	SDU 500-5	230 Vac, 50/60 Hz	4		11.5 (5.2)
850/510	SDU 850-5		2		11.9 (5.4)

* At full load.

SDU Accessories

Catalog Number	Description	Approx. Ship Weight – lbs (kg)
RELAYCARD-SDU	Dry contact I/O relay box, IP20 touch proof screw terminals, wire size range 12~22 AWG (IEC 2.5mm); N.O./N.C. form "C" contact. Relay contact signal for "On Battery", "Low Battery" and "UPS Shutdown".	1.0 (0.45)
UPSMON-USB	RS232 to USB adapter cable	1.0 (0.45)
SDU-PMBRK	Mounting brackets to secure UPS to wall, back of panel or enclosure.	1.0 (0.45)

Specifications

Catalog Number	SDU 500	SDU 850	SDU 500-5	SDU 850-5
Capacity (VA/Watts)	500/300	850/510	500/300	850/510
Load Power Factor	0.6			
Dimensions – inches (mm)				
Unit (H x W x D)	4.88 x 11.1 x 4.55 (124 x 281 x 116)			
Weight – lbs (kg)	10.7 (4.7)	11.4 (5.0)	11.5 (5.2)	11.9 (5.4)
Input Parameters				
Voltage	120 V (+10%, -20%)		230 V (+/- 20%)	
Frequency	50 +/- 5 Hz or 60 Hz +/- 6 Hz (auto sensing)			
Output AC Parameters				
Voltage (Battery Mode)	Step sinewave			
	+/- 5%			
Frequency (On Battery)	50 or 60 Hz			
	+/- 0.3 Hz			
Overload Protection	UPS automatic shutdown if overload exceeds 105% of nominal at 20 seconds, 120% at 10 seconds, 130% at 3 seconds			
Short Circuit	UPS output cut off immediately			
Battery Parameters				
Battery Type	Sealed, non-spillable, maintenance-free lead acid batteries			
Transfer Time	4 - 6 ms typical			
Back-up Time* (minutes)	4.5/18	2.5/10	4.5/18	2.5/10
Recharge Time	8 hours to 90% capacity after full discharge			
Environmental				
Operating Temperature	32°F to 122°F (0°C to 50°C)			
Storage Temperature	5°F to 140°F (-15°C to 60°C)			
Relative Humidity	1% to 95%, non-condensing			
Ambient Operation	1-95% humidity non-condensing, 0-50°C up to 5,000 ft. (1500m)			
Audible Noise	< 40dBA (1 meter from surface)			
Standards				
Safety	UL 1778 Recognized components for industrial applications in accordance with UL508 without derating. CAN/CSA C22.2 No 107.1-01. Overvoltage Category 3, pollution degree 3. FCC Part 15, Subpart B, Class A		CE Marked; LVD: EN62040-1-1; EMC: EN50091-2, EN61000-3-2, EN61000-3-3, IEC60801-2, IEC60801-3, IEC60801-4, IEC61000-2-2.	
Elevation	5000 ft. without derating			
Shock & Vibration	According to the International Safe Transit Association standard ISTA 2A.			
Mounting	To be mounted on DIN TS35/7.5 or TS35/15 rail system. Chassis mounting permissible via optional brackets. Unit handles normal shock and vibration of industrial use and transportation without coming off rail.			

* At full load/half load.