

SolaHD DIN RAIL POWER SUPPLY SOLUTIONS



YOU WANT WITH THE FEATURES YOU NEED.



SolaHD offers a complete line of DIN rail power supplies, with choices tailored to every need from high volume deployment in controlled environments to specialized applications in harsh and hazardous locations.

We understand that machine availability is a fundamental business requirement. In any application or setting, these DC power supplies provide industry leading power quality and reliability to keep your processes productive and profitable.

Whatever your needs for performance, efficiency and operating environment, you have the right choice of power supplies from the total power quality leader: SolaHD.

THREE TIERS TO CHOOSE FROM.



PERFORMANCE: SDN-C SERIES

These DIN rail power supplies offer extreme reliability and efficiency, easy troubleshooting and our most resilient design for use in harsh environments, extreme temperatures and hazardous locations.

CORE: SDN-P & SDP SERIES

Choose these industrial grade power supplies when performance counts in environments subject to rugged conditions, wide temperature ranges and power quality issues.

ESSENTIAL: SVL SERIES

When your equipment is installed in a controlled environment, these power supplies convert AC to DC power in a compact footprint.

SDN-C: HIGHEST PERFORMANCE FOR EXTREME APPLICATIONS.



These next generation power supplies offer the highest efficiency in a compact size, providing up to 960 Watts of output power in both single and three phase models. They are built tough and reliable for extreme applications, with ATEX/IECEx certified models available for use in Class I, Division 2 and Class I, Zone 2 hazardous locations.

HIGHEST EFFICIENCY

Lower energy consumption.

Efficient design with active power factor correction that reduces input current.

Lower cooling costs. No input inductor and no need for additional cooling fans in the panel.

No derating. Operates efficiently in temperatures from -40°C to $+60^{\circ}\text{C}$.

EASY TO USE

Simple installation. Easy screw clamp connections; patented no tools required DIN rail clip for quick mounting and removal.

Universal input voltage with sag immunity. Single phase models accept 85–264 Vac; three phase models accept 320–540 Vac at 50/60 Hz.

Eight visual diagnostics at a glance.

Visual diagnostics: multicolored LEDs enable quick, confident troubleshooting of status conditions.

Indicator	Normal	AC Power Loss	AC Input Low	No DC	High Load	Overload	Hot	Too Hot
Input	•	0	0	•	•	•	•	•
Output	•	0	•	0	•	•	•	0
Alarm	0	0	0	•	•	•	•	•

GREATEST RELIABILITY

PowerBoost[™]. Our exclusive technology handles high inrush loads without voltage dips.

Reduced parts count.

Fewer components for lower failure rates compared to more complex designs.

Less heat. Due to higher efficiency, the SDN-C Series is less prone to damaging heat buildup.

Smarter component layout.

Heat sensitive components are placed near cool air intakes and away from heat producing components.

Warranty. SDN-C Series is five years.

SDN-P & SDP: CORE PERFORMANCE FOR INDUSTRIAL PROCESSES.



The SDN-P Series offers single phase models with options from 12 to 48 Vdc at 16 Amps or less. The SDP Low Power Series provides single phase power for applications from 5 to 48 Vdc at 5 Amps or less. Easy to use, efficient and durable, these power supplies are the standard choice for the widest range of industrial applications.

EFFICIENT

Power factor correction.

Reduces harmonic emissions that can waste energy and affect power quality.

Low losses. Efficiencies greater than 80–90% depending on model.

Adjustable voltage. Meet precise application needs while compensating for voltage drop in long wire runs.

EASY TO USE

Simple installation. Easy screw clamp connections; patented no tools required DIN rail clip for quick mounting and removal.

Universal input voltage. No additional transformer required.

LED diagnostics. Basic status information at a glance.

RELIABLE

Rugged case and DIN

connector. Built to withstand shock and vibration.

Wide temperature range.

Operates from –10°C to +60°C without derating.

Trouble free performance.

Short circuit, overvoltage and overtemperature protection; powers high inrush loads without shutdown or foldback.

Warranty. SDN-P Series is five years. SDP Low Power Series is three years.

SVL: ESSENTIAL PERFORMANCE FOR CONTROLLED ENVIRONMENTS.





The SVL Series provides the essential features needed for high volume applications where the power supply will be installed in a controlled environment. Typical examples include ATMs, vending machines, building automation, industrial machinery, life sciences and other applications protected from excess shock, vibration or temperature extremes.

EASY DESIGN INTEGRATION

High power density in a small frame. Compact footprint and light weight to fit your machine.

Universal input voltage. Adapts to locally available power.

QUICK INSTALLATION

Simple to wire. Easy screw clamp connections.

Trouble free mounting. Clips on DIN rail for easy installation.

PRACTICAL OPERATION

Reliable power. Overload, over voltage and short circuit protection.

Power factor correction.

Reduces harmonic emissions that can waste energy and affect power quality.

Visual verification. LED indicator for DC status and blinking over current protection.

For use in controlled environments.

Warranty. SVL Series is two years.

CHOOSE THE RIGHT FEATURES FOR YOUR APPLICATION

	PERFORMANCE CORE		ESSENTIAL								
	SDN-C Series	SDN-P Series	SDP Series	SVL Series							
Power Range	120-960 W Single Phase 120-960 W Three Phase	60-240 W Single Phase	15-100 W Single Phase	15-480 W Single Phase							
INPUT											
Input Voltage Range	85-264 Vac; 90-375 Vdc 320-540 Vac; 450-760 Vdc	85-132/176-264 Vac; 210-375 Vdc	80-264 Vac, 90-375 Vdc	85-264 Vac; 120-375 Vdc							
Efficiency	> 90%	> 88% typical	> 80%	> 79% typical							
Power Factor Correction	Active	Passive	Passive	Active on select models							
OUTPUT											
Nominal Voltage Range	24 V	12 - 48 V	5 - 48 V	5 - 48 V							
Ripple / Noise (25°C)	< 50 mVpp	< 50 mVpp	< 50 mVpp	< 100 mVp-p							
Nominal Current Range	5 - 40 A	2.5 - 10 A	0.6 - 5 A	1.25 - 20 A							
Regulation	< 0.5% line and load	< ±2% overall line and load < 2% line and load		< 0.5% Line and < 1% Load							
PowerBoost	✓		✓								
ENVIRONMENTAL DATA											
Operating Temperature	-40°C to +70°C	-10°C to +70°C	-10°C to +70°C	-20°C to +70°C							
Storage Temperature	-40°C to +85°C	-25°C to +85°C	-25°C to +85°C	-40°C to +85°C							
Power Derating ①	Starts at +60°C	Starts at +60°C	Starts at +60°C	Starts at +50°C							
PROTECTIONS											
Overvoltage Protection	Auto-recovery	Auto-recovery	Auto-recovery	Re-power to recover							
Overload Protection	Auto-recovery	Auto-recovery	Auto-recovery	Auto-recovery							
Short Circuit Protection	Auto-recovery	Auto-recovery Auto-recovery		Auto-recovery							
RELIABILITY											
МТВБ	> 800 khrs per Telcordia	> 500 khrs to > 820 khrs per Telcordia	> 500 khrs per Telcordia	> 350 khrs to > 700k hrs per Telcordia							
GENERAL											
LED Signals	8 visual diagnostics	DC OK LED	DC OK LED	Green DC OK LED, Blinking OCP							
DC OK Relay Contact	✓	✓	✓	Available in select models							
Warranty	5 year	5 year	3 year	2 year							
APPROVALS											
IECEx	✓										
ATEX	✓										
Ex EAC	C ✓										
ABS Type Approval	✓										
CE, EMC & LV	✓	✓	✓	✓							
Class I, Division 2, Haz. Loc.	✓	✓	✓								
UL 508	✓	✓	✓	✓							
CSA C22.2 No. 107.1	✓	✓	✓	✓							
UL 60950-1	✓	✓	✓	✓							
CSA C22.2 60950-1	✓	✓	✓	√							

This table is an overview of the entire power supply offering. Individual model specifications may vary. For detailed information on individual models, please consult the SolaHD catalog.

PERFORMANCE – CORE – ESSENTIAL: SOLAHD OFFERS THE IDEAL POWER SUPPLY FOR ANY APPLICATION.

Visit www.solahd.com to learn more, then contact your local SolaHD representative to discuss your needs and choose the right DIN rail power supply for your application.

 $[\]odot$ >120 Watt models measured at 230 Vac input and +25 °C ambient temperature.