DC-UPS
30W, 70W, 100W

Uninterruptible Power Supply for Critical DC Loads

Solarcraft's DC-UPS is both a battery charger and a primary power supply, designed to be combined with a storage battery. This combination produces clean, uninterrupted power to critical DC loads. In the event of AC (utility) power loss, the Solarcraft DC-UPS supplies back-up power for hours, days, or even weeks depending on the load and battery capacity.

Solarcraft DC-UPS is available in six sizes: 30W, 70W, 100W for both 12V and 24V applications. A Low Voltage Disconnect (LVD) option protects batteries from costly damage.

30W 12V STD	30W 12V LVD	70W 12V STD	70W 12V LVD	100W 12V STD	100W 12V LVD
30W 24V STD	30W 24V LVD	70W 24V STD	70W 24V LVD	100W 24V STD	100W 24V LVD

SOLARCRAFT
POWER PRODUCTS

Conventional power supplies are poor battery chargers and battery chargers are poor power supplies. The Solarcraft DC-UPS solves these problems, and has many well-integrated and unique features:

Features

- Low Voltage Disconnect (LVD) option protects batteries from excessive deep discharge, which can damage them.
- True Universal Input – 47-66 Hz, 85-265 VAC (automatic, no jumpers); 110-370 VDC input.
- Power-factor-corrected Input – prevents harmonic degradation of the AC power line feeding the system.
- Generous power reserve for recharging batteries quickly.
- Constant-current Limited Output – avoids the shutdown problems common with conventional power supplies.
- Temperature Compensated Output – provides proper voltage for battery charging over wide temperatures.
- Low Noise Output – allows use with sensitive electronics used in control, monitoring, and communications.
- Glitch-less Switchover – provides continuous load power free of sharp transients.
- Wide Operating Temperature – makes it suitable for indoor or outdoor use (–20 - 60° C, –4 - 140° F).
- Input and Output Magnetic Circuit Breakers – provide precise protection over broad temperature ranges.
- Isolated Form C Alarm Contacts – provide remote signaling or shed loads when AC power fails.
- Status Indicators – provide system status at a glance and aid with troubleshooting.
- Reverse Battery Protection – with a replaceable fuse protects the DC-UPS and your loads from costly damage.
- Convenient Mounting – allows the DC-UPS to be flat panel mounted.
- Rugged Enclosure / Quality Construction – for trouble-free service in harsh industrial or remote applications.

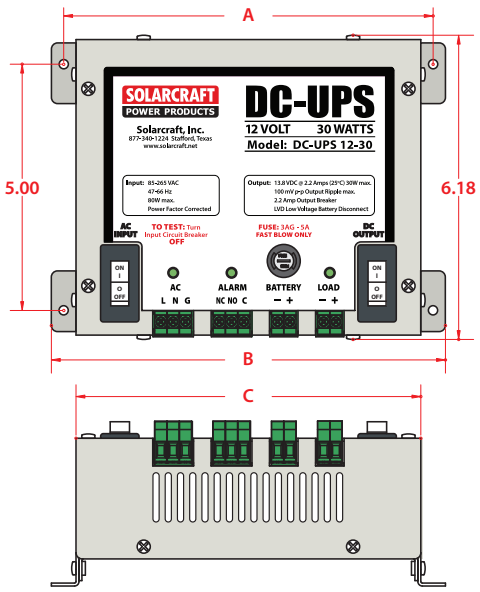
Applications

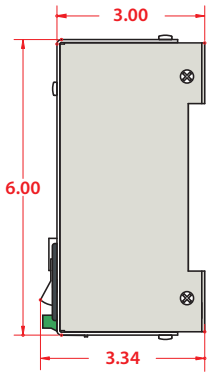
- Radio Base Stations & Repeaters – with large batteries maintain vital communication during natural disasters.
- SCADA Systems – are more reliable with long-term back-up power.
- Tower and Obstruction Lighting – beacons stay flashing during an outage. Remote Telemetry – tolerates huge voltage drops from long power lines.
- Video Cameras – keep on seeing when the power goes out.
- Gate Openers – provide continued access during a power outage or storm.
- Security Systems – never miss a beat when the power is cut.
- Roadway Caution Signs – continue working when needed most.
- LED Traffic Controls – maintain traffic flow during an outage.
- DC Industrial Controls – use back-up power for control and monitoring on the factory floor.
- WiFi/WiMax Back-up Power – keeps communications up and running for public safety.
- Grid-tie Solar Systems – charge 12 or 24 volt batteries with high voltage DC.
- Low Voltage Lighting – stays lit and provides safety on walkways, stairs, and mezzanines.

DC-UPS 30W, 70W, 100W

DC-UPS Specifications

	Parameter		DC-UPS 12V			DC-UPS 24V			Unit
			Min.	Typical	Max.	Min.	Typical	Max.	
Input	AC Input Voltage		85	-	265	85	-	265	Volts RMS
	Input Frequency		47	-	66	47	-	66	Hertz
	Power Factor		0.95	-	-	0.95	-	-	n/a
	DC Input Voltage		110	-	370	110	-	370	Volts
Output = Battery and Load	Battery and Load Voltage @ 25˚C		13.5	13.8	13.9	27.0	27.6	27.8	Volts
	Battery and Load Voltage over 0 - 60˚C (Temp. Compensation Range)		12.9 (60˚C)	-	14.9 (0˚C)	25.8 (60˚C)	-	29.8 (0˚C)	Volts
	Output Voltage Temperature Compensation (0-60˚C only)		-	-0.025	-	-	-0.05	-	Volts/˚C
	Battery Charging Current (no load)	**30W**	3.5	-	-	1.75	-	-	Amps
		70W	10.5	-	-	5.25	-	-	Amps
		100W	10.5	-	-	5.25	-	-	Amps
	Load Current	**30W**	-	-	2.2	-	-	1.1	Amps
		70W	-	-	5.0	-	-	2.5	Amps
		100W	-	-	7.5	-	-	3.75	Amps
	Output Switching Noise		-	-	100	-	-	100	mV p-p
General	Operating Temperature		-20	-	60	-20	-	60	˚C
	Efficiency		75	-	-	78	-	-	%
Alarm Contacts	DC Current Rating at 30 VDC Max		-	-	1.0	-	-	0.3	Amps
	AC Current Rating at 120 VAC Max		-	-	0.3	-	-	0.3	Amps
EMC Emissions	Radiated Noise: 30 MHz - 1 gHz per FCC Class B								
	Conducted Noise: 150 kHz - 30 MHz per FCC Class B								





Dimensions

	30W	70W	100W
A	7.50″	9.25″	9.25″
B	8.00″	9.75″	9.75″
C	7.00″	8.75″	8.75″

Solarcraft, Inc. is located southwest of Houston in Stafford, Texas.

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