

**INTERNATIONAL HEADQUARTERS**  
20 Willow Springs Circle, York, Pa. 17402, (717) 767-6511 FAX: (717) 764-0839  
Web site- <http://www.redlion-controls.com> E-mail- [sales@redlion-controls.com](mailto:sales@redlion-controls.com)

**EUROPEAN HEADQUARTERS**  
892 Plymouth Road, Slough, Berkshire SL1 4LP  
ENGLAND +44 1753 696888 FAX: +44 1753 696339

## MODEL 513 - NON-INTERRUPTIBLE POWER SUPPLY

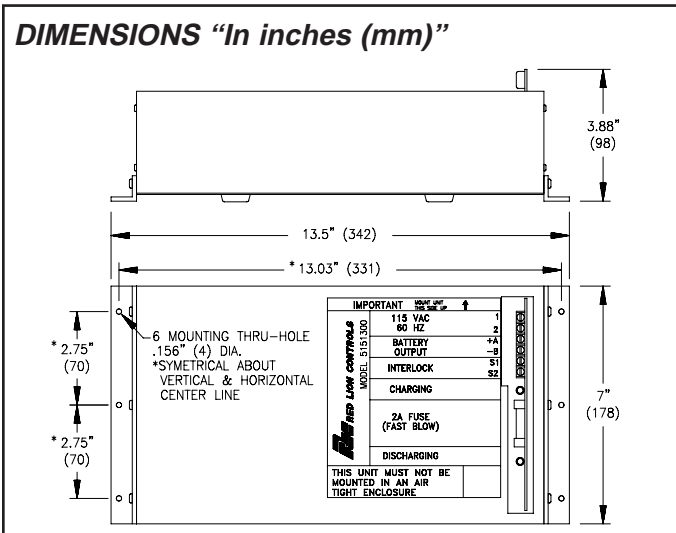


- 8 AMP-HOUR BACK-UP CAPACITY
- MAINTAINS FULL OPERATIONAL CAPABILITY-NOT JUST "MEMORY BACK-UP"
- BACK-UP FOR TEN OR MORE COUNTERS & ACCESSORIES FROM ONE UNIT
- NON-LEAK, GELLED ELECTROLYTE BATTERY
- SEPARATE CHARGE & DISCHARGE REGULATOR CIRCUITS MAINTAIN 100% CAPACITY

### DESCRIPTION

The Model 513, Non-Interruptible Power Supply is designed to permit continued operation of single or multiple counter systems during power-loss conditions. Sustaining operation during power-loss is decidedly superior to simple "memory retention" or "memory back-up" in most industrial applications. "Memory retention" simply ensures that count data, existent at the instant of power-loss, will be retained. This is adequate only in situations where the machine or process is in a stand-still condition when power-loss occurs. Most industrial processes and production machines do not stop instantly when power loss occurs, and counts lost during the period a machine is coasting to a stop will cause significant error and waste.

The Model 513 maintains a fully charged back-up power source that is applied instantly and smoothly during a power loss, keeping all counting circuits and sensors activated so no data is lost. The 8 amp-hr capacity also ensures that back-up can be provided for an extended period, even with heavy loads imposed by multiple counter sensor systems. (Note: Both Series 600 and SC Counters have provisions for L.E.D. display blanking during backup operation to reduce load and extend back-up operating time.)



### ORDERING INFORMATION

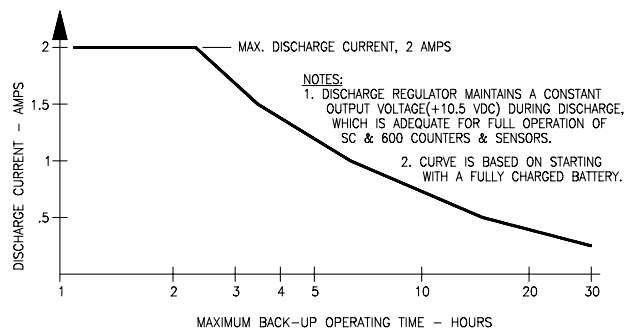
MODEL NO.	DESCRIPTION	A.C. POWER INPUT	PART NUMBER
513	Non-Interruptible Power Supply (Less batteries)	115 VAC	5151301
		230 VAC	5151311
-	12 V Rechargeable Gel. Battery	-	0100200

Model 513 Units shipped less battery. Battery must be ordered separately & installed in the field.

### SPECIFICATIONS

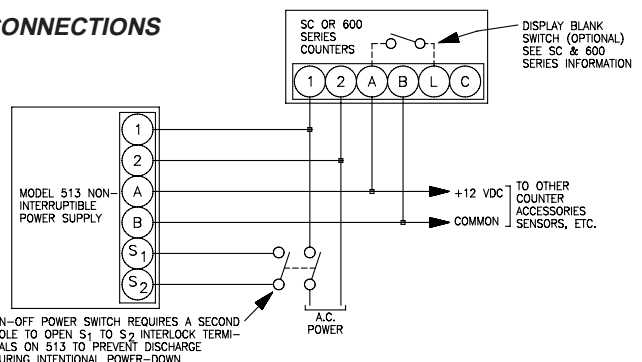
- PRIMARY SUPPLY VOLTAGE:** Available in 2 voltage ratings for 115 VAC and 230 VAC,  $\pm 10\%$ , 50/60 Hz.
- BATTERY CAPACITY:** 10.5 VDC output voltage, 8 amp-hr @ 20 hr discharge rating. Max. discharge current 2 amps.
- DISCHARGE TIME:** See curve below.
- CHARGING TIME:** Full charge recovery from deep discharge in 24-30 hrs.
- OPERATING TEMPERATURE RANGE:**  $-20^{\circ}$  to  $+50^{\circ}$ C.
- MOUNTING:** Bulkhead mounting with 6 screws. Must be mounted in proper orientation (marked with "UP" arrow on case). Unit must not be mounted in an air-tight enclosure.
- WEIGHT:** 2.75 lbs (1.3 kg) (less battery)  
Battery weight 8 lbs (3.6 kg).

### DISCHARGE, MAXIMUM BACK-UP TIME VS. LOAD



To use the above curve, total all current loads of counters, sensors, and accessories in the system and find Maximum Back-up Operating Time from curve. Required Supply Currents for Counters, Sensors, and Accessories can be found on individual data sheets or in appropriate RLC catalog section.

### CONNECTIONS



# MODEL APS - OCTAL PLUG-IN ACCESSORY POWER SUPPLY

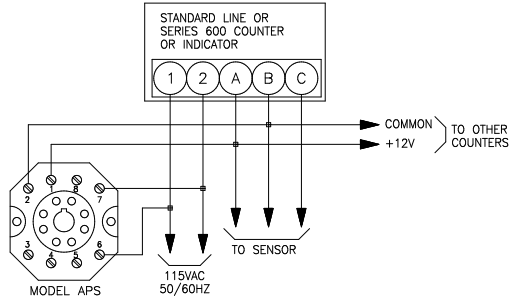


## PROVIDES . . .

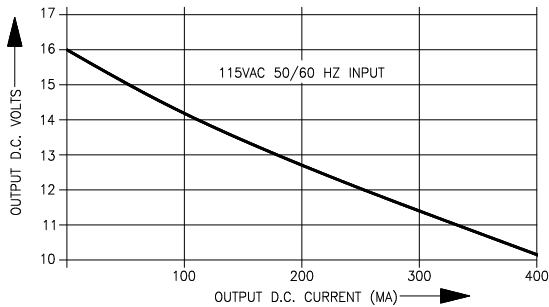
- +12 VDC "HELPER" SUPPLY FOR LOAD SHARING WITH UNREGULATED COUNTER SYSTEMS WITH UNUSUAL SENSOR AND ACCESSORY LOADS, OR . . .
- "STAND-ALONE" APPLICATIONS FOR POWERING SENSORS AND ACCESSORIES

The Model APS is an unregulated +12 VDC supply designed to load share when connected in parallel with internal power supplies of many Red Lion Controls Counters and Rate Indicators. It can also be used as a general purpose "Stand-alone" power supply to power other control circuits, sensors and accessories. The APS is furnished for 115 VAC or 230 VAC,  $\pm 10\%$ , 50/60 Hz primary supply. Operating temperature range is  $-20^{\circ}$  to  $+50^{\circ}\text{C}$ . Output current is per regulation curve.

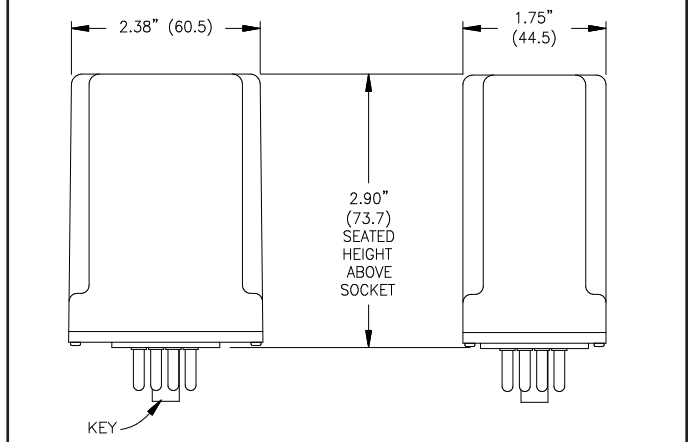
## TYPICAL CONNECTION DIAGRAM



## OUTPUT VOLTS/CURRENT REGULATION CURVE



## DIMENSIONS "In inches (mm)"



## ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBER
APS01	115 VAC Accessory Power Supply	APS01000
APS02	230 VAC Accessory Power Supply	APS02000

Mating Sockets sold separately, see below.

# ACCESSORY PLUG-IN RELAY



These industrial relays have a mechanical life expectancy in excess of 10 million cycles, and are both U/L and CSA recognized.

## RELAY SPECIFICATIONS

**COIL:** 12 VDC Coil -  $120 \Omega \pm 10\%$ ,

Rated +12 VDC @ 100 mA.

115 VAC Coil -  $2250 \Omega \pm 10\%$ ,

Rated 115 VAC @ 52 mA

230 VAC Coil -  $9110 \Omega \pm 10\%$ ,

Rated 230 VAC @ 25 mA

**CONTACTS:** 10 A @ 115 and 230 VAC

(1/6 HP @ 115 V, 1/3 HP @ 230 VAC)

## OPERATING TIMES:

**Energize** - 30 msec max.

**De-energize** - 30 msec max.

Operating times do not include bounce time

(approx. 3 msec).

## OPERATING TEMPERATURE RANGE:

$-45^{\circ}$  to  $+60^{\circ}\text{C}$

**ELECTRICAL LIFE:** In excess of 100,000 operations

@ rated load.

**WEIGHT:** 3 oz (85.1 g)

Mating sockets sold separately. See Ordering Information.

**PLUG-IN RELAYS PROVIDED FOR EASY SERVICING & MAINTENANCE**

## ORDERING INFORMATION

DESCRIPTION	COIL VOLTAGE	PART NUMBER
DPDT Plug-in Relay	12 VDC	RLY10000
	115 VAC	RLY30000
	230 VAC	RLY40000
Base Mount 8-pin Octal Socket		SKT10000
Din Rail 8-pin Socket		SKTDIN00

CONTACTS SHOWN IN DE-ENERGIZED POSITION

