

BPALK and PS100

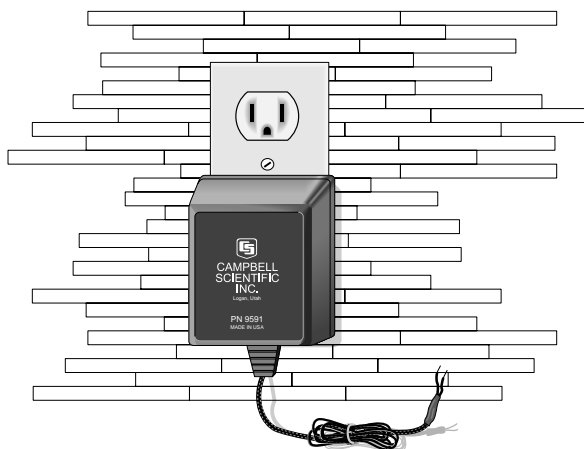
Power Supplies for CR800, CR850, and CR1000



The BPALK Alkaline Battery Pack includes eight “D” cell batteries for powering a CR800, CR850, or CR1000 datalogger.



The PS100 is used with our CR800, CR850, or CR1000 dataloggers. It includes a rechargeable battery and a regulator.



One end of the #9591 transformer plugs into a wall ac outlet while the other end connects to the PS100 Power Supply.

The BPALK and PS100 are 12 Vdc power supplies for our CR800, CR850, CR1000, CR10X, CR510, or CR500 dataloggers, and peripherals. They can also be used as a separate auxiliary 12-V power supply to power remotely located sensors or peripherals, such as a multiplexer located at a distance from the datalogger enclosure. However, to avoid errors in analog measurements and ground loops, the power supplies must share a common ground.

BPALK Alkaline Power Supply

The BPALK is an alkaline 12-Vdc, 7.5-Ahr power supply that consists of eight replaceable D-cell alkaline batteries, battery connectors, and a temporary 12-V AA battery pack [#8862] used during D-cell replacement. The 8862 requires eight AA-cell batteries (not included).

Alkaline batteries are not rechargeable, and their Amp hour ratings decrease with temperature extremes. Alkaline batteries may leak when used outside the temperature range of -25° to +50°C, or when the battery voltage drops below 9.6 V.

PS100 Rechargeable Power Supply

The PS100 is a 12-Vdc, 7-Ahr rechargeable power supply that consists of a sealed rechargeable battery and a voltage regulator. The regulator controls the current flowing to the battery and prevents the battery current from flowing to the charging source. The sealed rechargeable battery should be trickle-charged via ac power or solar power (see below).

Charging Sources for PS100

Several wall chargers and solar panels are available for recharging the PS100's sealed rechargeable battery. Solar panels charge batteries by converting sunlight into direct current. Wall chargers use power from external ac power lines to recharge the batteries.

Adapters for PS100

Campbell Scientific offers two adapters that fasten onto our PS100 power supply. The A100 allows the PS100 to power peripherals and external devices at non-datalogger sites such as repeater stations. The A105 adapter increases the number of 12 V and ground terminals available on the PS100. The A100 and A105 cannot be used at the same time.

Ordering Information

Power Supplies

BPALK	12 V, 7.5 Ahr Alkaline Battery Pack
PS100	12 V Power Supply with Charging Regulator and 7Ahr Sealed Rechargeable Battery

Adapters for the PS100

A100	Null Modem Adapter
A105	12 V Terminal Expansion Adapter

Wall Chargers for PS100

9591	Wall Charger 18 Vac 1.2 A Output, 110 Vac Input, 6 ft Cable
22110	Wall Charger 18 Vac 1.2 A Output, 110 Vac Input, 6 ft Cable for prewired enclosure.
14014	Wall Charger 18 Vdc Output 90 to 264 Vac 47 to 63 Hz Input. Must choose a power cable option (see below).
22111	Wall Charger 18 Vdc Output 90 to 264 Vac 47 to 63 Hz Input for prewired enclosure. Must choose a power cable option (see below).

Power Cable Options for 14014 or 22111 (choose one)

-NC	No Power Cable
-USC	US Cable
-EUC	Continental European Cable
-UKC	United Kingdom/Ireland Cable
-AUC	Australia/New Zealand Cable
-CNC	China Cable

Solar Panels for PS100

SP10	10 W Solar Panel with 20 ft Cable
SP10-PW	10 W Solar Panel with 20 ft cable for prewired enclosure
SP20	20 W Solar Panel with 20 ft Cable
SP20-PW	20 W Solar Panel with 20 ft cable for prewired enclosure

Specifications*

BPALK Alkaline Battery Pack

Nominal Rating:	7.5 Ahrs @ 20°C
Batteries:	8 Alkaline D cells (not rechargeable)
Output Voltage:	12 Vdc
Weight:	1.8 kg
Dimensions (including mounts and connectors):	7.1" x 2.9" x 3.1" (18.1 x 7.4 x 8.0 cm)
Operating Temperature:	-25° to +50°C

PS100 Rechargeable Power Supply

Output Voltage:	12 Vdc
Nominal Capacity:	7 Amp hours
Input Voltage (CHG terminals):	15 to 28 VDC or 18 VAC RMS
Battery Connections	
Charging Output Voltage:	Temperature compensated float charge for battery
Temperature Compensation Range:	-40° to +60°C
Max. Charging Current:	1.2 A (allows one SP20 or SP10 to be used)
Power Out (+12 terminals)	
Voltage:	Unregulated 12 V from battery
Temperature Current Limited with 3 A Thermal Fuse:	> 3 A @ < 20°C; 3 A @ 20°C; 2.1A @ 50°C; 1.8 A @ 60°C
Weight:	6.9 lbs (3.1 kg)
Dimensions (including mounts and connectors)	
Height:	4.1" (10.5 cm)
Width:	7.6" (19.0 cm)
Depth:	2.8" (7.0cm)

*Information about calculating power usage is included in our Power Supply Overview brochure and Power Supply application note. Brochures and application notes are available from: www.campbellsci.com

