

12 Ah and 24 Ah Rechargeable Power Supplies



BP12 with standard mounting bracket. The 27758 mounting kit, is also offered if more secure mounting is required.



BP24 24 Ah battery pack

# **Overview**

Campbell Scientific's BP12, BP24, and PS24 are 12 Vdc power supplies intended for systems with above-average power require-

ments. The BP12 rechargeable battery has a 12 Ah rating. The BP24 rechargeable battery and PS24 power supply have a 24 Ah rating.

# **Technical Description**

### 12 Vdc Sealed Rechargeable Batteries

The BP12 and BP24 consist of a sealed rechargeable battery, two battery cables, and hardware for mounting the battery in an enclosure. One of the cables terminates in a connector for attachment to a Campbell Scientific regulator, and the other cable terminates in stripped and tinned leads for attachment to the CR6 datalogger's onboard regulator. When used outdoors, the BP12 or BP24 and regulator need to be housed in a larger environmental enclosure (ENC16/18, ENC24/30, or ENC24/30S).

#### Regulators

The regulator controls the current flowing to the battery and prevents the battery current from flowing to the charging source. Our CH150 and CH200 regulators are microcontroller-based smart chargers with temperature compensation that optimize battery charging and increase the battery's life.

The CH150 is for standard applications. The CH200 includes RS-232 and SDI-12 terminals that allow a datalogger to monitor various input, output, and status parameters.

## **Integrated Power Supply**

The PS24 is for situations where it is desirable to have the power supply housed in a separate enclosure. The PS24 consists of a 24 Ah battery, either the CH150 or CH200 regulator, and a 10 by 12 inch environmental enclosure. Several options are offered for mounting the enclosure to a tripod or tower.

### **Charging Sources**

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

#### **Adapters**

Campbell Scientific offers two adapters that fasten onto our CH200 and CH150. The A100 allows the CH200 or CH150 to power peripherals and external devices at nondatalogger sites such as repeater stations. The A105 adapter increases the number of 12 V and ground terminals available on the CH200 or CH150. The A100 and A105 cannot be used at the same time.



# **Ordering Information**

#### **Power Supplies**

**BP12** 12 V Sealed Rechargeable Battery w/Mounts, 12 Ah **BP24** 12 V Sealed Rechargeable Battery w/Mounts, 24 Ah PS24 24 Ah Power Supply with 10 in. by 12 in. Enclosure (must choose an enclosure mount option (see below)

#### **Regulator Options for PS24**

-NC No Regulator (requires a user-supplied regulator)

-C1 CH150 Regulator

-C2 CH200 Regulator

#### **Enclosure Mount Options for PS24**

-NM No Enclosure Mounting

-MM Tripod Mast Mounting. Fits mast with a 3.18 to 5.33 cm (1.25 to 2.1 in) outer diameter

-LM Leg Base Mounting for CM1xx tripods

-TM **Tower Mounting** 

-PM Large Diameter Pole Mounting. Fits poles with 10.2 to 25.4 cm (4 to 10 in) outer diameter

- EM Hangar Mounting Kit. Fits a mast or pole with a 7.6 cm (3 in)

#### **Secured Mounting Bracket for BP12**

27758 Secured Mounting Kit can be used instead of the bracket that is shipped with the BP12

#### Regulators for BP12 and BP24

CH150 12 V Charging Regulator **CH200** 12 V Charging Regulator

#### Adapters for the CH150 or CH200

A100 Null Modem Adapter

A105 12 V Terminal Expansion Adapter

#### Wall Chargers for CH150, CH200, or PS24

29796 Wall Charger 24 Vdc 1.67 A Output, 100 to 240 Vac, 1 A Input, 5 ft Cable. Must choose a power plug option (see below).

22110 Wall Charger 24 Vdc 1.67 A Output, 100 to 240 Vac, 1 A Input for prewired enclosure. Must choose a power plug option (see below).

#### Power Plug Options for 29796 or 22110 (choose one)

-US US/Canada Plug -IP 7 International Plugs

#### Solar Panels for CH150, CH200, or PS24

Need to choose a Cable Termination Option and Mounting Option.

10 W Solar Panel with 20 ft Cable **SP10** SP20 20 W Solar Panel with 20 ft Cable

SP50-L 50 W Solar Panel with user-specified cable length. Enter length, in feet, after the -L.

#### **Cable Termination Options**

Cable terminates in stripped and tinned leads for connection to the regulator

-PW Cable terminates in a connector that attaches to a prewired enclosure

#### **Mounting Options**

-SM Standard Mounting Kit Extended Mounting Kit

# Specifications\*

	BP12	BP24
Output Voltage	12 Vdc	12 Vdc
Nominal Rating	12 Ah	24 Ah
Battery Cables Length	0.6 m (2 ft)	0.6 m (2 ft)
Weight	4.4 kg (9.8 lb)	10.2 kg (22.4 lb)
Battery Dimensions	15.0 x 9.4 x 8.9 cm (5.9 x 3.7 x 3.5 in)	16.5 x 17.5 x 12.5 cm (6.5 x 6.9 x 4.9 in)
Battery with Mounting Bracket Dimensions	19.1 x 10.3 x 9.7 cm (7.5 x 4.0 x 3.8 in)	21.3 x 17.7 x 13.0 cm (8.4 x 7.0 x 5.1 in)

#### PS24 Enclosure

- Internal Dimensions: 25.4 x 30.5 x 11.4 cm (10 x 12 x 4.5 in)
- Rating: NEMA 4X (modified for cable entry)
- > Color: White

Construction: fiberglass-reinforced polyester enclosure with door gasket, external grounding lug, stainless steel hinge, and a lockable hasps

\*Specifications for the regulators are provided in the PS150 and CH150 Power Supply and Charge Controller product brochure, and the PS200 and CH200 Smart Power Supply and Charge Controller product brochure.

