

*The SPS's rugged construction is designed for real world conditions with a wide operating temperature range and battery charging components capable of withstanding condensing humidity. Materials are selected for corrosion resistance.*

# SPS Power System

for above-ground outdoor applications

## Features

### Real-time Battery Condition Reporting

Smart circuits of the SPS's battery manager automatically check the battery condition every five minutes by disconnecting the charger and placing a resistive load on the battery. This periodic testing provides a real-time indication of battery condition.

### Alarms

If the SPS charging circuit loses its AC power source, a loss of charge alarm is activated. If the battery manager detects a voltage below 12.2 volts, a low battery voltage alarm is activated. If the battery voltage registers below 11.8 volts, a very low voltage status signal is activated. A low battery voltage alarm with charging voltage present acts as an early warning to let the user know that the battery is approaching the end of its useful life.

### Auto-Disconnect

If the charging source is lost for an extended period of time, the communication devices will continue to draw current and thereby drain the battery. To prevent battery damage, an "auto-disconnect" isolates all loads from the battery when the battery voltage drops to 11.0 volts. When AC power for charging is restored, the battery is automatically reconnected and all devices become operable.

### SPS Battery

The battery used in the SPS is a maintenance-free, 33 amp-hour lead-acid type that is completely sealed. It has a pressure relief valve that only opens during excessive gas buildup should overcharging occur. Gasses are vented via a hose to the outside of the enclosure, preventing the buildup of corrosive and explosive gasses within the enclosure. The battery typically has a five year life depending upon duty and environment. Alternate battery types are available.

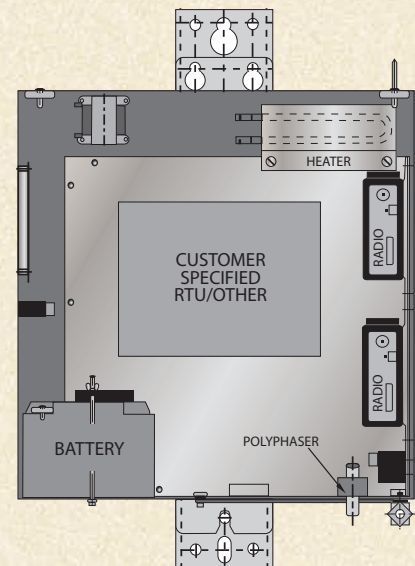


SPS containing (2) radios, a DigitaLogic IGIN, DigitaLogic IDAS, an I/O module, and optional radio kill switch

The Cleaveland/Price SPS is an outdoor power supply for above-ground applications. It is also available in a submersible model (SPS-V) for below ground vault installed applications. The SPS has brackets for wall mounting and can be supplied with an optional galvanized steel channel support for pole mounting.

The SPS is specifically designed to house the customer's components of choice. SPS applications include:

- Remote monitoring and control
- Data collection
- Communications router



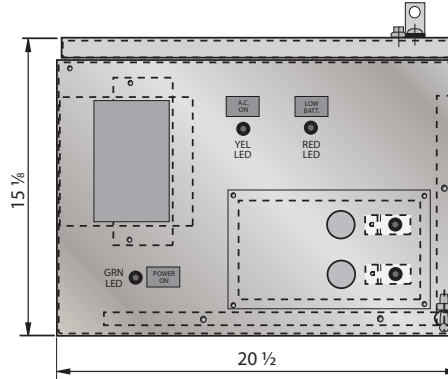
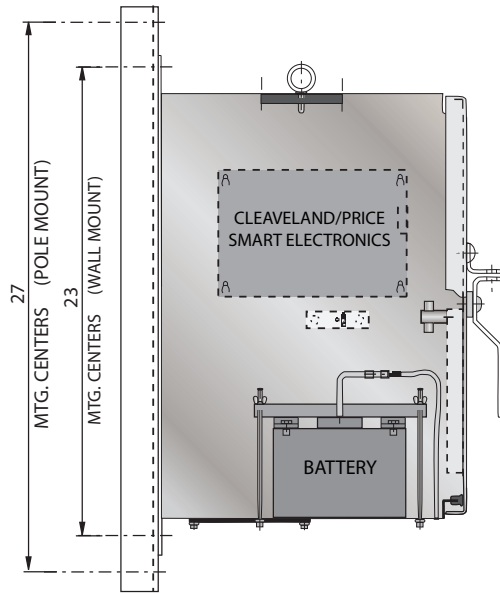
**CLEAVELAND/PRICE INC.**

14000 Rt. 993, Trafford, PA 15085 (724) 864-4177

FAX (724) 864-9040

E-mail: [sales@cleavelandprice.com](mailto:sales@cleavelandprice.com)

# SPS Power System



Cleveland/Price can design the SPS to meet customer specifications and can populate the SPS with the customer's components of choice to provide a true plug and play device.

Net weight of SPS with customer's typical components:  
 With pole mounting bracket 104 lbs.  
 Without pole mounting bracket 88 lbs.

## Charging the Battery

The battery is charged through a transformer and rectifier, that delivers an electronically controlled charge from the customer's AC source. The charging circuit has a temperature compensation feature to prevent overcharging or undercharging the battery, which could occur with temperature fluctuation.

## Enclosure

The enclosure of the SPS is constructed for long, maintenance-free life. The aluminum enclosure is rated NEMA 3R and is powder coated white to reflect sunlight and extend battery life. Other features include:

- Continuous stainless steel hinge
- Padlockable stainless steel door handle
- Cabinet grounding connector
- Gasketed door
- Documentation pocket
- Open position door catch
- Removable lifting eyes
- Custom mounting panel for customer's devices

## Circuit Board

The circuit boards of the SPS's smart electronics are conformal coated to withstand condensing humidity, open door rain, frost, and environmental pollutants.

## Surge and Electrostatic Protection

Incoming AC to the SPS is fused and surge protected by the field-proven Smurff™ surge protector. SPS circuits have been tested to withstand surges and electrostatic voltages beyond the values set by ANSI C37.90.1 and C62.41, and Mil. Std. DOC-HDBK263.

## Heater and Thermostat Protection

A thermostatically controlled 100 watt anti-condensation heater is provided in the SPS power supply.

## Accessories / Options

- Coaxial cable lightning arrestor
- Enclosure mounted antenna
- 120 VAC GFI convenience outlet
- Pole mounting bracket
- External status indicating lights
- Stainless steel enclosure
- Internal light with door switch
- Transparent dead front panel
- Radio kill switch with external LED indication
- Intruder alarm
- Solar charging option

## SPS Specifications

Input Voltage	120 V or 240 V
Battery Voltage	11.0 V – 15.0 V
Load Voltage	12 V nominal, 24 V nominal
Maximum Battery Charging Current	5 A
Max. Load Current	2.5 A @ 12V, 0.65 A @ 24V (higher ratings available)
Status Indications – Alarms	Loss of AC, Low Battery Voltage, Very Low Battery Voltage
Operating Temperature Range	-40°C to 50°C