



SP 170-PDA

The only combination UPS and PDA in the marketplace



Overview

Clary's SP 170-PDA is another in a series of the world's most advanced Uninterruptible Power Systems (UPS), designed to provide clean regulated power to controllers and other sensitive equipment inside the cabinet. Industry proven, the SP 170-PDA meets or exceeds Caltrans PDA requirements with on-line, double-conversion protection 100% of the time for reliable, continuous, and error-free operation regardless of utility power quality. Available in

3 models from 1250 VA / 850 W to 2000 VA / 1400 W, the SP 170-PDA has an operational temperature range of 0°C to +60°C (32°F to +140°F), and will fit inside most existing cabinets. Options are available to accommodate intersections that have not yet replaced the yellow incandescent traffic lamps. Advanced communication features allow monitoring, configuration and control of the system over RS232, modem or network connections.

Features

- Provides full operation in intersections with all LEDs in all positions
- Police panel compatibility allows complete shutdown during emergencies
- Compatible with most traffic cabinets
- Auxiliary contacts allow full operation for short power interruptions and flash operation for longer interruptions or low battery
- Power event counter records number of power utility failures
- Works with intersections that have red LEDs by utilizing flash mode



Specifications

Electrical Input

Voltage	120 VAC +12%, -25% (before battery use)
Frequency	48 Hz to 62 Hz

Electrical Output

Voltage	120 VAC ±3%
Frequency	50 Hz or 60 Hz
Crest Factor Ratio	<ul style="list-style-type: none"> · 50% load up to 4.8:1 · 75% load up to 3.2:1 · 100% load up to 2.4:1
THD	4.00% maximum
Dynamic Response	±4% for 100% step load change 0.5 ms recovery time
Overload	<ul style="list-style-type: none"> · 110% for 10 sec · 200% for 50 ms
UPS Protection	<ul style="list-style-type: none"> · Input and output short circuit · Input and output overload · Excessive battery discharge

Environmental

Temperature	-40°C to +74°C (-40°F to +165°F)
Humidity	0% to 95% non-condensing
Altitude	Sea level to 10,000 ft
Noise Level	46 dBA at 5 ft

Mechanical

Input	Hardwired to chassis terminal block
Outputs	Hardwired to chassis terminal block

Design

Standard Features	<ul style="list-style-type: none"> · Power factor corrected input · Fully regenerative · True on-line continuous power · Low distortion sine wave output · Designed for non-linear loads · Extended brownout protection · EIA/RS232 data interface
Certifications	<ul style="list-style-type: none"> · FCC Class A · IEEE 587/ANSI C62.4 · IEC 555 @ 120 VA · NEMA
Typical Recharge Time (to 85% capacity @ 100% load)	<ul style="list-style-type: none"> · 48-72 hrs (more time required with extended battery option) · < 20 hrs (with optional fast battery charger)

Control and Indicators

Visual Indicators	<ul style="list-style-type: none"> · Battery level · Load level AC in · Inverter on · Low battery · Summary alarm · Alarm silence
Switches / Control Panel	<ul style="list-style-type: none"> · System power · Cold start · Test · Alarm silence · Event counter with reset · Hour meter · Battery disconnect
Audible Alarms	<ul style="list-style-type: none"> · Utility interrupt · Inverter failure · Overload · Low battery · Self test
Intelligent Computer Interfaces	<ul style="list-style-type: none"> · Serial interface for EIA 232 · Optional NTCIP and TCP/IP via standard RJ45 connector · Full interactive remote computer monitoring and control of most features including load control (requires optional monitoring software) · NTCIP and TCP/IP ready
Contact Closures	<ul style="list-style-type: none"> · "D" connector · Open collector (see user manual for additional interface information)

Options

Cabinet	NEMA or 332 cabinet style configurations
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Configurations

Model	VA	Watts	Input Current	Output Current	Rating	Backup Time* 100% / 50% Load	Weight	Rackmount H x W x D
SP 170-PDA/2000	2000	1400	14.3 A	20.0 A	2000 VA / 1400 W	1.0 hours / 3.5 hours	30 lb	7.0" x 19.0" x 16.0"
SP 170-PDA/1250 Plus	1250	875	8.8 A	10.4 A	1250 VA / 875 W or 1400 W for 10 sec.	1.5 hours / 4.0 hours	30 lb	7.0" x 19.0" x 16.0"
SP 170-PDA/1250	1250	875	8.8 A	10.4 A	1250 VA / 875 W	1.5 hours / 4.0 hours	30 lb	7.0" x 19.0" x 16.0"

* Backup time is based on 41 Ah batteries