Uninterruptible Power for Traffic Signal Applications

Model SP170-PDA Series

SIGNAL POWER™

The SP170-PDA Series UPS and the Outpost™ Series batteries are designed for outdoor use and will operate in extreme temperature environments of -40°C to +74°C (-40°F to +165°F).

SP170-PDA/1250, 1250 (PLUS) or 2000

SP170-PDA Series meets or exceeds CALTRANS PDA Requirements with "On-Line" UPS Technology

SP170-PDA Series Features:

- Direct replacement for CalTrans PDA assembly and designed to meet or exceed CalTrans requirements
- Local Keypad programmability - no laptop necessary
- Local display of battery status, power system status, UPS system status, UPS information and event logs
- External By-pass to support ease of upgrade, hot-swap or maintenance
- Four Programmable Relays with 16 assignable status conditions to set or reset relays
- Signaling via open collector contacts, RS232 Serial or optional SNMP Adapter
- TCP/IP- communicates with other equipment for fast status notification via optional SNMP Adapter
- Can keep an intersection running for up to 8 hours or longer
- Online Technology, Full Flash modes or Assignable Relay Modes available for system flexibility
- Does not compromise existing cabinet wiring for ease of installation
- Provides ON-LINE conditioned, power factor corrected power for cabinet equipment protection
- SP170-PDA/1250, SP170-PDA/1250 (PLUS) and SP170-PDA/2000 models available
- Easily up-gradable, without changing chassis, by sliding out 24 Volt Power Supply or UPS module
- Self test diagnostics for UPS and battery system
- Separate 24.0 Vdc Power Supply for reliable output

Where POWER is a way of life

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SP Series, Model SP170-PDA Specifications

ELECTRICAL

Input

Voltage	120 VAC +12% (135 VAC), -25% (90 VAC) (before battery use)
Frequency	48 to 62 Hz

Output AC

Voltage	120 VAC ±3%
Frequency	50 or 60 Hz
Rating:	
SP170-PDA/1250	1250 VA/875 Watts
SP170-PDA/1250(+)	1,250 VA/875 Watts or 1400 watts for 10 seconds.
SP170-PDA/2000	2000 VA/1400 Watts
Total Harmonic Distortion (THD)	3.0%Typ.,5% Max.
Dynamic Response	±4% for 100% Step Load Change 0.5 ms Recovery Time
Overload	110% for 10 sec; 200% for .05 sec
UPS Protection	Input and Output Short Circuit; Input and Output Overload; Excessive Battery Discharge

Output DC

Voltage	24.0 VDC, ±3%
Current	0 - 5.0 amps

ENVIRONMENTAL

Operating Temp.	-40°C to +74°C (-40F to+165°F)
Humidity	0% to 95% Non-condensing
Altitude	Sea Level to 10,000 ft (some derating of temp. w/altitude > 6,000 ft)

MECHANICAL

Input	Hardwired to Input Terminal
Outputs	Hardwired to Output Terminal

CUSTOM Options

Cabinet	NEMA, 332 Cabinet Style Configurations Available; NEMA 3R Type II and Type III
Communications	Optional: SNMP Adapter

Consult Factory for other Custom options

DESIGN

Standard Features	Power Factor Corrected Input; Fully Regenerative; True On-Line Continuous Power; Low Distortion Sinewave Output; Designed for Non-linear Loads; Extended Brownout Protection; EIA/RS232 Data Interface
Specifications	Meets FCC Class A, IEEE 587/ANSI C62.41, IEC 555 @ 120 VAC and NEMA Stds.
MTBF	Inverter: > 100,000 hrs System w/Bypass: 150,000 hrs Calculated from Component Spec
Typical Recharge Time to 85% Capacity @ 100% Load	48-72 hrs (more time required with extended battery option) Less than 20 hrs with optional Fast Battery Charger

CONTROLS AND INDICATORS

LCD Display	System Set-up and System Status Features including, Day and Date, System Load Level, Battery System Status, and Event logs.
Control Panel	Power On; Cold Start; Test; and Alarm Silence switches.
Audible Alarms	Utility Interrupt; Inverter Failure; Overload; Low Battery; Self Test
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 ("D" connector)	Open Collector for Remote Annunciation of Power Up, Power Down, On Battery, Low Battery and Alarms

Specification subject to change without prior notice.

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Model	VA/Watts	Input Current (A)	Output Current (A)	Backup Time 100% / 50% Load	Unit Weight (lbs)	Rackmount H x W x D (in)
Model SP170-PDA Series						
SP170-PDA/1250	1250/875	8.8	10.4	1.5 hrs. / 4.0 hrs.	30	7.0 x 19.0 x 16.0
SP170-PDA/1250 (PLUS)	1250/875/1400	8.8	10.4	1.5 hrs. / 4.0 hrs.	30	7.0 x 19.0 x 16.0
SP170-PDA/2000	2000/1400	14.3	20.0	1.0 hrs. / 3.5 hrs.	30	7.0 x 19.0 x 16.0

CLARY®
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