

The ultimate traffic protection for the harshest environments

Industry proven, on-line protection
100% of the time, for reliable and
continuous error-free operation
regardless of utility power quality.



Industry proven, continuous on-line protection regardless of utility power quality.

Clary Corporation designs and manufactures Uninterruptible Power Supply (UPS) solutions for the most demanding applications and toughest environments known today. Our focus is on providing ultimate protection for critical equipment used in applications where downtime is simply unacceptable and where other UPS systems fail to deliver. Clary's line of power products for traffic, IT and security applications deliver the same reliability as its military and life support products.

All SP Series systems are solid state, digital, on-line double conversion systems designed to

work flawlessly in harsh environments. Listed by many states as the preferred UPS system for traffic intersection back-up, the SP Series are the only products engineered to meet NEMA standards for traffic back-up systems with an operational temperature range of -40°C to +74°C. Clary SP Series models are designed to mount in existing traffic cabinets or in adjacent stand-alone cabinets.

Manufactured and tested to meet the extreme requirements of traffic control systems, Clary UPS systems comply with the Made in America Act.

Clary power protection has several distinctive advantages.

Operates in extreme environments from -40°C to +74°C,
(-40°F to +165°F)

On-Line Double Conversion Technology

Our systems deliver continuous power and protection to equipment when power anomalies such as brownouts, blackouts, surges and sags occur.

Power Factor Correction for reliable and safe power

Our systems provide a digitally controlled, precision regenerated output sine wave, unlike common standby or line interactive designs.

Continuous Digital Power

Clary UPS will run continuously from batteries or auxiliary generator systems as long as power is available.

Advanced Communications

Compatible with all major network operating systems, connectivity features include remote control, configuration and monitoring.

Custom Solutions

Manufactured in the USA, we own our technology, therefore we can customize our products, or design completely new ones to meet unique application requirements.

NEMA Certification

This assures full operation in any type of IT and traffic control operation. As the only real-time, digital, continuous power systems capable of providing 100% power protection and power back-up to all traffic systems, Clary Systems are certified to operate in all states.



Clary UPS is the only real-time, digital, continuous power system capable of providing 100% power protection as well as power back-up to all traffic systems.

SP560



As a 400W/560VA 120VAC power source, Clary's SP560 delivers constant, conditioned, regenerated AC power. The SP560 conditions power and completely isolates the cabinet from utility power, enabling error-free operation during surges, sags, spikes, and other power anomalies. When configured with the optional battery pack, the SP560 system operates as an On-Line, Double Conversion UPS, extending the reliability of the cabinet's electronics during utility power failures. Designed for indoor/outdoor use, the SP560 occupies only 1U of Vertical Rack Space, its 1.7" x 8.5" x 11" footprint can fit any cabinet.

SP1250LE



The SP1250LE Universal Power Conditioner is an 875 watt, 1250VA system engineered to enhance utility power or repair failing utility power in Traffic, IT or Security Cabinets. The SP1250LE system also protects the cabinet by insuring that no harmful power artifacts arrive at the cabinet to destroy or degrade the cabinet electronics. It will also operate as an On-Line, Double Conversion, UPS when the optional battery pack is configured. This optional feature extends the performance and reliability of the cabinet during blackouts and brownouts.

SP1250LX Model 1250



The SP1250LX and 2000LX are the world's most advanced UPS systems for traffic applications, providing clean, regulated power. Without compromising existing cabinet wiring, both systems keep LED signal heads running for up to 8 hours or more during power failures. The SP1250LX is intended for applications where load usage will not exceed 875 watts, and the SP2000LX is intended for loads that will not exceed 1400 watts. The SP2000LX is recommended for intersections that have not yet replaced the yellow incandescent traffic lamps.

Both systems will fit inside most existing cabinets. The SP1250LX system requires six batteries while the SP2000LX requires eight batteries and sufficient cabinet space or a separate cabinet such as the CBO-123 UPS traffic cabinet.

Available Advanced Communications

Each Clary SP Series UPS has advanced communication features which allow monitoring, configuration and control of the system over an RS232 modem, TCP/IP network connections or USB connection.

Specifications

Electrical		
	Model	
Input		
Voltage	SP560 SP1250LE	120 VAC 85 VAC to 155 VAC (without battery discharge)
	SP1250LX	75 VAC to 155 VAC (before going to batteries)
Frequency	SP560 SP1250LE	40 Hz to 70 Hz
	SP1250LX	45 Hz to 65 Hz
	Output	
Voltage	ALL	120 VAC ±3%
Frequency	ALL	50 Hz or 60 Hz ±.25%
Current	SP560	4.8A (400W/570VA)
	SP1250LE SP1250LX	10.4A (875W/1250VA)
Crest Factor Ratio (non-linear load and less than 5% THD) Typical	ALL	@50% Load Up to 4.8:1 @75% Load Up to 3.2:1 @100% Load Up to 2.4:1
Total Harmonic Distortion (THD)	SP560 SP1250LE	3.0% Max.
	SP1250LX	4.0% Max.
Dynamic Response	ALL	±4% for 100% Step Load Change, 0.5 ms Recovery Time
Overload	ALL	110% for 10 sec, 200% for .05 sec
UPS Protection	ALL	Input and Output Short Circuit, Input and Output Overload, Excessive Battery Discharge
Mechanical		
Input Connectors	SP560 SP1250LE	(1) IEC Inlet C14
	SP1250LX	Utility Hardwired to PIM
Outputs(Standard)	SP560	(1) IEC Outlet C13
	SP1250LE SP1250LX	(2) IEC Outlet C13 Hardwired to PIM, w/single 15 Amp Receptacle
Overall Dimensions W × D × H (in)	SP560	11" × 8.5" × 1.7"
	SP1250LE	15.25" × 8.5" × 1.7"
	SP1250LX	3.50" × 19.0" × 10.0"
Unit Weight (lbs)	SP560	5 lbs
	SP1250LE	8 lbs
	SP1250LX	27 lbs
Cooling	ALL	Low Velocity, Forced Air
Environmental		
Operating Temperature	ALL	-40°C to +74°C (-40°F to +165°F)
Humidity	ALL	0% to 95% Non-condensing
Altitude	ALL	Sea Level to 10,000 ft (some derating of temp. w/altitude > 6,000 ft)

Options		
	Model	
Cabinet	SP1250LX	NEMA, 332 or CBO-123 Cabinet style configurations available, NEMA 3R Type II and Type III Optional
Consult Factory for Other Custom Options		
Design		
Standard Features	SP560 SP1250LE	Regenerative On-Line, Sinewave Inverter Powers Load Continuously Extended Brownout Protection, External Battery Connector, Digitally Controlled IGBT PWM, Power Factor Corrected on Input, Designed for Non-linear Loads
	SP1250LX	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	SP1250LX	Meets FCC Class A, IEEE 587/ANSI C62.4, IEC 555 @120 VAC and NEMA Standards
MTBF	SP1250LX	Inverter: > 100,000 hrs System w/Bypass: 150,000 hrs Calculated from Component Specifications
Typical Recharge Time Time to 85% Capacity 100% Load	SP1250LX	48-72 hrs (more time required with extended battery option less than 20 hrs with optional Fast Battery Charger)
Controls and Indicators		
Visual Indicators	SP560 SP1250LE	Battery Status, AC Output, Alarm, AC Input
Control Panel	SP560 SP1250LE	Load On/Off, Cold Start
	SP1250LX	Power On, Cold Start, Test, Alarm Silence, Four line LCD Display Panel
Intelligent Computer Interface	SP560 SP1250LE	(1) DB9-F - RS232/Signal Interface (1) USB Type B
Audible Alarms	SP1250LX	Utility Interrupt, Inverter Failure, Overload, Low Battery, Self Test
Serial Interface for EIA 232. Optional NTCIP and TCP/IP via Standard RJ45 and USB Connector	SP1250LX	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)	SP1250LX	Open Collector for Remote Annunciation and On Battery, Low Battery. (See User Manual for additional interface information)

Specifications subject to change without notice.

Distributed By :



980 QUAKER HIGHWAY (146A) ■ UXBRIDGE, MA ■ 01569
508-278-0446 ■ WWW.MARLIN-CONTROLS.COM