



SP-1400LT

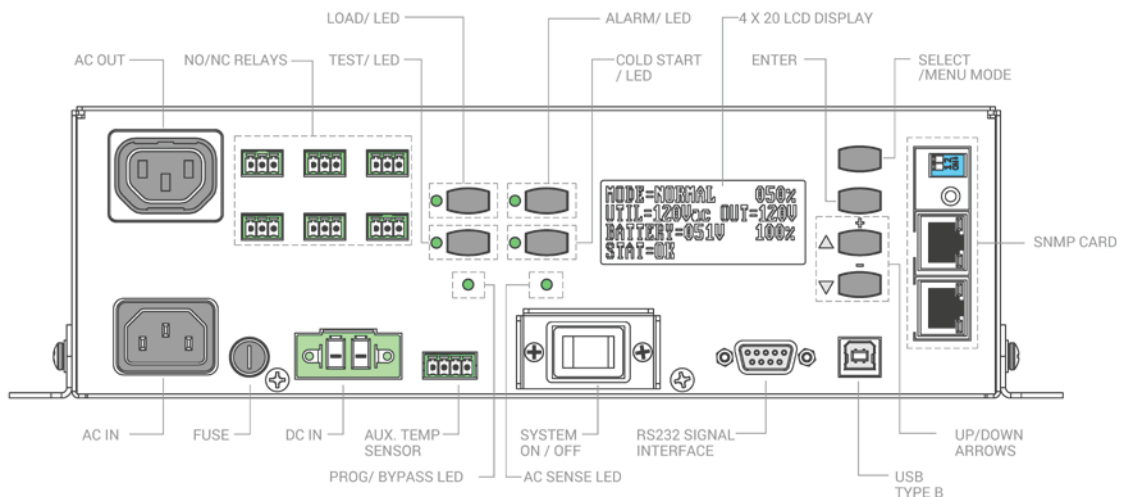
Online UPS with integrated PIM and programmable display



Overview

The SP 1400LT is a small form-factor online-UPS optimized for use in modern reduced form-factor ATC traffic cabinets. The LT Series are advanced UPS systems that provide clean, regulated double-conversion power for controllers and other sensitive equipment inside the traffic cabinet. Rated for 1400 VA/1000 W, with operational temperature of -40°C to +74°C (-40°F to 165°F), the SP 1400LT has been independently tested and certified to comply with NEMA temperature standards as well as NEMA standards for

shock and vibration. Compatible with most existing traffic cabinets, the SP 1400LT may be rack or shelf mounted. The SP1400LT provides full operation in LED signaled intersections when configured with optional Lithium Ion Phosphate or VRLA batteries. Advanced communication features allow monitoring, configuration and control of the system over RS232, modem or network connections. Available with battery bus voltages of 48 V or 72 V.



Features

- Reduced form-factor: 2U vertical by 8.5x11 inch (d,w).
- Operates in extreme environments from -40°C to +74°C (-40°F to +165°F)
- On-line, conditioned, regenerated power for cabinet equipment protection





Specifications

Electrical Input

Voltage	75 VAC to 155 VAC (before going to batteries)
Frequency	45 Hz to 65 Hz

Electrical Output

Voltage	120 VAC ±3%
Frequency	50 Hz or 60 Hz
Current	10.4 A
Rating	1400 VA / 1000 W
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

Mechanical

Input	1 IEC style
Outputs	1 IEC style
Dimensions (H x W x D)	8.5" x 11.0" (2U)
Weight	8 lb
Cooling	<ul style="list-style-type: none"> · Variable speed, low velocity, forced air · User-replaceable fans

Note:

- Remote battery monitor and remote temperature sensor optional
- Supported battery chemistries: VRLA, LiFePO4, Cyclon-SLA

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"> · IEEE 587/ANSI C62.4 · IEC 555 @ 120 VA · NEMA
Typical Recharge Time (to 85% capacity @ 100% load)	48-72 hrs (more time required with extended battery option)

Control and Indicators

Switches / Control Panel	<ul style="list-style-type: none"> · System power · Cold start · Test · Alarm silence · Four line LCD display panel
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 · 1 each DB9-F (RS232 and signal interface pins) and 1 each USB · 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"> · 6 user programmable NC/NO/C relays · Rated 120C/4A (see user manual for additional interface information)

Options

SNMP Interface	Allows full control and monitoring interface over network connection. Compatible with HP Openview™, IBM Netview™, CA Unicenter TNG™, and other major software offerings.
Battery Bus Voltage	48V Nominal