



INTRODUCING THE SYNCHRON™ AC INVERTER POWER SYSTEM



UNINTERRUPTIBLE POWER

UNSTOPPABLE DESIGN

EXCEPTIONAL ECONOMY

IMPORTANT:

Features and specifications are subject to change without notice. Contact factory for most recent product information.

WARRANTY

The system is guaranteed, under normal and proper use, against defects in workmanship and materials for a period of two years from the date of shipment. Batteries supplied as part of the system are covered under a separate pro-rata warranty as described below:

Lead-Calcium Batteries
1 year full plus 9 year pro-rata period

IMPORTANT

Failure to connect system batteries to an energized charging circuit within 90 days from the date of shipment will void the warranty.

Current @

Current Lighting Solutions, LLC
701 Millennium Blvd.
Greenville, SC 29607

currentlighting.com/dual-lite

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Current @





NEW NON-STOP SAFETY, RELIABILITY AND VALUE

Dual-Lite's new Synchron AC Inverter System provides interruption-free power to all critical life safety loads and other secondary support systems. "No break" switching between utility and inverter power means that all connected equipment will continue to operate normally under emergency conditions. In addition to maximizing safety for occupants, the Synchron saves time, money and space.



Egress Lighting to the "Public Way"

The Synchron lends itself to solving the new requirements to provide lighting to the "Public Way" ...whether that means 10 feet from the building...or 100 feet. The Synchron will operate any Wall Pack or Bollard...at full light output...for the full 90 minutes...lighting the path to safety.

So Sophisticated, It's Simple

With the Synchron, no additional lighting fixtures for emergency illumination are needed, no secondary backup power or lighting equipment is required, and there's no need for special wiring; it connects into your existing electrical panel. Unlike unsightly traditional emergency lighting, this system supplies power to your existing interior and exterior lighting fixtures.

Reduced Maintenance and Service Costs

Having a single inverter unit in a centralized location greatly simplifies maintenance, testing and service. There is only ONE unit to test and service, saving hundreds of dollars per year. The AC-in to AC-out operating efficiency is 98%—well above other central inverter system equipment; this translates to lower energy bills!

- A cost effective alternative to "traditional" emergency lighting
- Reduced maintenance costs
- Improved building aesthetics
- "No break" power
- Off line design for high efficiency — up to 98%
- Pulse width modulated technology
- 100% load compatible with any lighting source, including HID
- AC input breaker
- DC switch
- Multipurpose LED indicators
- Overload protection
- Compact, easy to install wall mounted design
- Meets or exceeds all UL 924 requirements
- Sealed maintenance free batteries
- Two year Warranty
- AC-output breaker standard on 400 and 525VA models
- Push button test switch
- DC fuse

Rugged PWM design



SYNCHRON SIZING CHART

VA/Watts	400	525	750	1000	1500	2100
Power Factor Range	.8 lead to .75 Lag					
Input/Output Voltage	120/120 or 277/277					
AC Input Circuit Breaker Rating - 120/277V	10/15 Amps			15/15A	20/15A	25/15A
Charger Size	2 Amps					
System DC Voltage	36	36	72	72	72	96
Cabinet Size	22"W x 23"H x 10"D (55.9cm W x 58.4cm H x 25.4cm)			32"W x 36.5"H x 12"D (81.3cm W x 92.7cm H x 30.5cm)		
BTU/Hour - Line/Inverter	70/260	92/341	131/382	175/510	263/765	368/886
Weight [lbs. (kg) - including batteries]	143 (65.1)	173 (78.8)	281 (128)	346 (157.6)	400 (182.2)	480 (218.7)

System Status At A Glance....

The Synchron system's three multipurpose LED indicators provide a simple, intuitive interface to notify the user of operating status as well as visual service alerts to operational malfunctions should they occur. Depending on their state of operation, the LED indicators are capable of notifying the user to the following operational conditions:



- Normal Standby Operation
- Inverter On
- AC Input Interruption
- No Load Connected
- Circuit Breaker Tripped
- Battery Charger Malfunction
- Overload Shutdown
- High Temperature Shutdown
- Temperature Probe Malfunction

Electrical Specifications

Input

- Input voltage: 120, 277, ±10%
- Input frequency: 60Hz ±3%
- Synchronizing slew rate: 1 Hz per second nominal
- Electronics operating temperature: 0°C to 40°C (32°F to 104°F)

Output

- Output voltage: 120, 277
- Output regulation: (static) +10/-5% based on a 5% — 100% resistive load
- Output distortion: Less than 5% THD linear load
- Load power factor range: .75 lag to .8 lead
- Output frequency: Normally, synchronized to utility, +.05 Hz during emergency
- Overload: 115% momentary
- Transfer time: No break

Electrical Specifications (con't)

Battery

- Battery charger: Automatic, temperature compensated with internal diagnostic indicators
- Recharge time: Meets UL 924 requirements
- Battery protection: Automatic low-battery voltage disconnect. Automatic restart upon utility return
- Standard battery: S-Sealed lead-calcium 10-year life
- Battery voltage: 36, 72 or 96VDC (system dependent)
- Runtimes: 90 minutes standard
- Relative humidity: 95% non-condensing
- Note: 100% battery capacity rated at 25°C (77°F). Optimum system performance between 20°C (68°F) and 29°C (85°F); temperatures outside of this range will affect battery performance and life.

ORDERING GUIDE

DLS	-	750	-	120	-	NA1503U
SYNCHRON SERIES		VA/WATTS		INPUT/OUTPUT VOLTAGE		CIRCUIT BREAKER DESIGNATOR (SEE BELOW)

Output Circuit Breakers

400 and 525VA models are supplied standard with one 15 amp normally-on output circuit breaker. Output circuit breakers are optional on all 750 to 2100VA models. Output circuit breakers are available in single-pole configurations for normally-on or normally-off operation. A maximum of six monitored or ten unmonitored normally-on breakers may be specified. Normally-off configurations are limited to a maximum of four circuit breakers and include a built-in 15-minute re-transfer delay to accommodate HID lighting restrike cycles.

TYPE	VOLTAGE RATING	AMPERE RATING	QUANTITY	SUPERVISION
Blank = Normally-On ⁽¹⁾	A = 120VAC	15	01 to 10	Blank = Monitored
N = Normally-Off ⁽²⁾⁽³⁾⁽⁴⁾	B = 277VAC	20 30		U = Unmonitored

(1) A maximum of 6 monitored or 10 unmonitored normally-on circuit breakers may be specified.
 (2) A maximum of four normally-off circuit breakers may be specified.
 (3) Maximum rating of normally-off circuit breakers is 20 amperes.
 (4) Normally-off output circuit breakers include a built-in 15-minute retransfer delay for HID lighting loads.