

OVERALL CHARACTERISTICS

83% throughput efficiency

Single conversion UPS, No transfer time

Operating temperature range of 32°F (0°C) to 104°F (40°C); 65°F (19°C) to 85°F (30°C) for batteries

Standard 90 minutes of operating time, 10 and 20 minute operating times available

Full-time, isolating transformer

Variable Range Regulator allows wider range of acceptable input voltage variation

ANSI/IEEE C62.41 category A & B surge voltage withstand capability

APPLICATION

Operates incandescent, electronic ballast loads and HID lighting loads as well as critical loads requiring conditioned emergency power

HOUSING

Free standing, NEMA 1 enclosure with locking doors

Acid resistant powder coat finish

Multiple conduit entries

Refer to chart on back for dimensions

BATTERY

Maintenance free, sealed lead calcium battery with an expected life up to 10 years, and optimum operating range of 65°F (19°C) to 85°F (30°C)*

* Increases or decreases in temperature will affect battery performance. Optimum battery performance realized at 77°F (25°C). Batteries are rated at 100% capacity at 77°F (25°C).

Synthesis-CHUPS

550 - 1,500 VA, Sine Wave Uninterruptible Power Supply for Emergency Lighting Applications



Listed to
UL 924 and UL 924
Auxiliary Equipment

ELECTRONICS

Input

Input power factor self-correcting to > 0.95

Frequency 60.0 Hz ± 2.5 Hz

Input Voltage Tolerance +10% to -15%

Input harmonics < 8% THD

Output

Solid state PWM inverter with sine wave output

Output voltage regulation ±3% of nominal at full load

Output frequency 60 Hz ± 0.2%

Load power factor capability is 0.6 lagging to unity

Overload rating: 125% for 10 minutes

Efficiency: 82% to 86%

Charger

Low voltage disconnect (LVD)

3 Amp, 2-Stage

Recharge time: UL 924 compliant



SHOWN: CHUPS550B

STANDARD METERING/CONTROLS

AC input and output voltage

AC input breaker

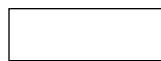
AC output breaker

Battery disconnect device

Automatic battery monitor with alarm

LED indicating lamps for system on utility, system on battery, low battery warning

ORDERING INFORMATION



SERIES

Synthesis
Uninterruptible
Power Supply
for Emergency
Lighting Applications
CHUPS = 90 Min.Backup
CHUPSX = 10 Min. Backup
CHUPSY = 20 Min. Backup



VA RATING

550 = 550 VA
1000 = 1,000 VA
1500 = 1,500 VA



VOLTAGE CONFIGURATION

	Input	Output
A =	120	120
B =	277	277



OUTPUT CIRCUIT BREAKERS

OCB1 = (550 VA)
OCB3 = (1000, 1500 VA)



FACTORY INSTALLED OPTIONS

FSU = Start-up Service
EXT= Extended Warranty¹

NOTES:

1) EXT option only available with FSU

Synthesis - CHUPS, 550 - 1,500 VA

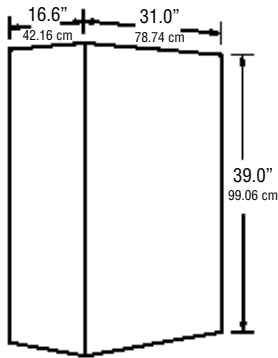
SYSTEM INPUT/OUTPUT

MODEL	CAPACITY	INPUT (Select One)		OUTPUT (Select One)		BREAKERS INCLUDED	HEAT REJECTION (Btu/hr)
		AC INPUT VOLTAGES	INPUT AMPS ¹	AVAILABLE OUTPUT VOLTAGES/ MAX. LOAD AMPS ²			
CHUPS550	550 VA	120 277	6.5 2.8	120 V	277 V	1 1	410
				4.6	2.0		
CHUPS1000	1,000 VA	120 277	11.5 5.0	8.3	3.6	3 3	545
				12.5	5.4	3 3	615

NOTES:

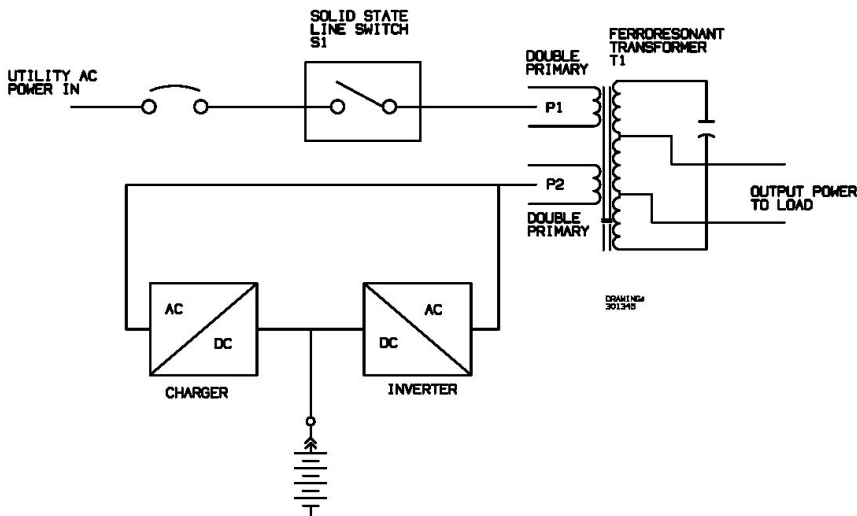
1) Maximum input current

DIMENSIONS/WEIGHTS



	550 VA	1000 VA	1500 VA
Cabinet & Electronics	223 lbs. (101 kg)	223 lbs. (101 kg)	262 lbs. (119 kg)
Sealed Lead Calcium Batteries			
90 Min. Backup	121 lbs. (60.5 kg)	203 lbs. (92 kg)	288 lbs. (131 kg)
10 Min. Backup	44 lbs. (97 kg)	59 lbs. (119 kg)	88 lbs. (194 kg)
20 Min. Backup	54 lbs. (119 kg)	88 lbs. (194 kg)	108 lbs. (238 kg)

SYSTEM ONE-LINE DIAGRAM



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

WARRANTY

Electronics: 1 year
 Battery: 1 year full, 9 years pro-rata
 Extended warranty options available



CHLORIDE
SYSTEMS

272 West Stag Park Service Road • Burgaw NC 28425
 Telephone: (910) 259 1000 • Facsimile: (800) 258 8803
 www.chloridesys.com

CHLORIDE SYSTEMS

TYPE: _____

CATALOG NO.: _____

Synthesis - CHUPS, 550 - 1,500 VA

SUGGESTED SPECIFICATION

Furnish and install Chloride's Emergency Lighting System known as Synthesis CHUPS () Series with a VA rating of _____. The system shall be sine wave output, and shall be UL listed to Underwriters Laboratories standard 924 and FCC Class A certified.

Equipment and accessories furnished under the terms of this specification shall be the standard product of a single manufacturer and shall be equal in all respects to those supplied by Chloride. Catalog numbers and model designations which appear herein indicate design, quality and the type of material as well as required operating characteristics. All equipment shall be in compliance with the applicable UL standards.

The connected load shall be powered normally by conditioned utility through the on-line isolating transformer and upon failure of the utility input, the load shall automatically continue to be powered via the Synthesis CHUPS () system's battery and inverter for a minimum of 1.5 hours (alt. run time). Upon restoration of utility power, the inverter will automatically reconnect the load to the utility power.

The Synthesis CHUPS () System shall be capable of powering any combination of fluorescent ballasted lamps, HID, incandescent lamps or other approved loads up to the total rating of the system. The system shall automatically protect itself against damage from overloads and short circuits while powered from either utility AC or during emergency inverter operation.

The Synthesis CHUPS () System shall automatically revert to emergency inverter operation should the average utility AC voltage fall below 80% of nominal line voltage. The system shall use no relays or other moving parts in the main inverter or battery charger circuitry. The power inverter shall be off except during a power failure.

Under inverter emergency operations, output voltage shall be within $\pm 3\%$ of nominal at full load for the specified discharge period; and the frequency shall be 60.0 Hz ± 2.5 Hz%.

During inverter emergency operation, the system efficiency shall not be less than 80%. The system shall use mechanical fans in the electronic circuit compartment. The AC output to the load shall be isolated from the utility input during inverter emergency operation.

The Chloride battery charger shall be completely automatic, transistor controlled with a programmed reference, and capable of restoring the battery to capacity within UL924 requirements after restoration of utility power. The charger power shall be obtained from the main power, without the use of separate transformers. The charger efficiency shall not be less than 90%. The charger shall be all solid state, and shall automatically maintain the battery in the fully charged condition whenever the utility power is available.

Under emergency mode conditions, the Synthesis CHUPS () Inverter shall be powered by sealed, recombination batteries. The sealed lead calcium battery shall be encased in a high impact, heat resistant, plastic container with a permanently sealed cover. The battery shall operate entirely unattended and require no addition of water for a period of 10 years.

A low voltage disconnect circuit designed to reduce battery discharge during extended power outages, shall monitor the battery voltage and disconnect the inverter when battery voltage drops to approximately 85% of nominal voltage.

System metering and controls shall consist of AC input and output voltage, AC input pilot light, battery disconnect device, automatic battery condition monitor with failure alarm, and RS232 server port.

UNIT CHECK LIST

Catalog No. _____	VA Rating: _____
Battery Type: Sealed Lead Calcium	Operating Time Hrs. ____ Min. ____
Input: _____ VAC; <u>Single</u> Phase; # of Wires <u>2</u>	
Output: _____ VAC; <u>Single</u> Phase; # of Wires <u>2</u>	
Output Circuit Breakers:	
(1) 550 VA: AC Volts: _____ Amps: _____	<u>Normally On</u>
(3) 1000, 1500 VA: AC Volts: _____ Amps: _____	<u>Normally On</u>
Options: FSU _____ EXT _____	
REMARKS: _____	

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