

FORTRESS 1



SPECIFICATIONS

The LSL Fortress 1 maintains efficient AC Emergency Power to operate all emergency lighting fixtures at "full-light" output, providing superior dependability and security to commercial/industrial environments in an outdoor environment.

POWER RATING

- 0.075 KW - 21 KW (or 75 Watts - 21,000 Watts) single phase output unit uses the latest DSP/PWM technology to provide the most advanced performance and reliability features

INPUT

- 120V, 208V, 240V, 277V or 480V input 60Hz

OUTPUT

- 120V, 240V, 277V, 480V, 120/240 or 120/277VAC
True "on-line" design is $\geq 92\%$ efficient at 100% linear load

BATTERIES

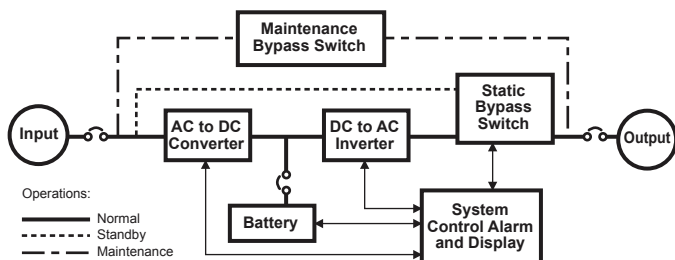
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year prorated warranty
- *Smart Battery Monitoring System* is **TEMPERATURE COMPENSATED** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and overcharge protection standard

LAMPS AND LOADS

- Emergency power provides **FULL LIGHT OUTPUT** from all lamps and fixtures for the entire runtime
- Operates fluorescent, compact fluorescent, incandescent, quartz, H.I.D., LED and other lamp types
- Standard or electronic ballasts, dimming devices or panels, sensors and most control equipment
- Standard or LED Exits and other safety equipment

CODES

- UL 924, UL 1778, meets NFPA 101, NFPA 70, NEC and OSHA standards
- Cities of Chicago and New York approved
- Complies with the Buy American Act



0.075 KW - 21 KW

Single Phase

Uninterrupted
Emergency
Lighting and
Power
Systems



PROTECTION

- Provides overload, surge and undercurrent protection using our technology and The *Watchdog*® Software to protect system performance and reliability
- Surge protection against load surges as defined in ANSI/IEEE C62.45 category A and B

DIAGNOSTICS AND MAINTENANCE

- Our technology and The *Watchdog*® Software provides complete self diagnostic capabilities and LED Monitoring
- Informative advanced Display and Alarms keep you in control of your emergency lighting environment 24/7
- Automatically performs periodic self-tests ensuring a safely lighted environment *prior* to an emergency
- Single point of testing instead of multiple testing points with battery packs

NEMA 3R CABINET

- Modular design enables flexible installation
- Forced air cooling for maximum reliability
- Systems up to 12 KW are self contained; larger systems require external battery cabinet(s)

INSTALLATION

- Modular design and small footprint allow easy installation in an outdoor environment
- Phone assisted factory start-up standard for all systems
- Extended warranty available

SPECIAL APPLICATIONS

- LSL 24/7 offers numerous UL924 optional devices to meet unusual or difficult application parameters
- ECM - Environmental Circuit Module allows fixtures and lamps on the emergency circuit(s) to be operated by normal switching and/or dimming devices in NON-emergency conditions
- Dimming Panel Interface allows use with emergency lights controlled by common dimmer panel

WARRANTY

- 1-Year full warranty on system electronics
- Battery warranty 1-year with 9-years pro-rated System
- 1-year on-site warranty labor with MFG phone assisted start-up
- 5-Year powertrain warranty
- Maintenance contracts available



Job Name: _____

Type: _____

Part #: _____

Notes: _____

Fortress Outdoor 1	Power Rating	UPS			Battery			Weight (combined)	British Thermal Unit	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions			Cabinet Dimensions						Input	Output		
LSFT1 (Consult factory for others)	KVA/KW	W	H	D	W	H	D	(lbs)	BTU's	Sealed, Maintenance free (AGM) lead calcium	<i>Select</i>	<i>Select</i>	Input and output circuit breakers standard	UL924 UL1778 NFPA 101 NFPA 70 NEC
	0.075	20"	24"	8"	not required			100	20.4					
	0.1	20"	24"	8"	not required			110	27.2					
	0.125	20"	24"	8"	not required			120	34					
	0.2	20"	24"	8"	not required			130	54.4					
	0.3	20"	24"	8"	not required			140	81.6					
	0.35	20"	24"	8"	not required			150	95.2					
	0.525	45"	51"	35.5"	not required			630	142.8					
	0.7	45"	51"	35.5"	not required			640	190.4					
	0.875	45"	51"	35.5"	not required			670	238					
	1.05	45"	51"	35.5"	not required			710	285.6					
	1.4	45"	51"	35.5"	not required			790	380.8					
	2.0	45"	51"	35.5"	not required			870	544					
	2.4	45"	51"	35.5"	not required			920	652.8					
	2.6	45"	51"	35.5"	not required			930	707.2					
	3.0	45"	51"	35.5"	not required			980	816					
	3.4	45"	51"	35.5"	not required			1030	924.8					
	3.8	45"	51"	35.5"	not required			1090	1033.6					
	4.2	45"	51"	35.5"	not required			1150	1142.4					
	4.7	45"	51"	35.5"	not required			1630	1278.4					
	5.25	45"	51"	35.5"	not required			1630	1428					
7.0	41"	72"	32"	not required			1880	1904						
8.0	41"	72"	32"	not required			1880	2176						
10.0	41"	72"	32"	not required			2250	2720						
12.0	41"	72"	32"	not required			2640	3264						
14.0	41"	72"	32"	41"	72"	32"	2945	3808						
18.0	41"	72"	32"	41"	72"	32"	4145	4896						
21.0	41"	72"	32"	41"	72"	32"	4555	5712						

ORDERING INFORMATION

Choose the bold face catalog nomenclature that best suites your needs.

Write them on the appropriate line. Order accessories as separate catalog number.

Example:

LSFT1 - 8.0 - 120/277 - ECM277/3 OCB/277/3/20/1 - 120

Description of example:

(8.0 KW, 120 Voltage In, 277 Voltage Out, 3 277V Environmental Control Modules, 3 Output 277 Voltage Circuit Breakers at 20amps, 2 pole, 120 minute run time)

LSFT1

FAMILY	POWER RATING	VOLTAGE ¹		OPTIONS	TIME ³
	<u>KW</u>	<u>Input/Output</u>	<u>Input/Output</u>	ECM120 - 120V Environmental control module ² /qty	<u>Minutes</u>
	0.075	3.0	120/120	ECM277 - 277V Environmental control module ² /qty	5
	0.1	3.4	120/208	NOF - Normally OFF output circuit/voltage / qty/pole	10
	0.125	3.8	120/277	NOH - Normally OFF "Hold ON"/voltage/qty/pole	15
	0.2	4.2	120/480	OCB - Output circuit breakers / voltage / quantity/amps/pole	20
	0.3	4.7	120/120-240	EPO - Emergency power off	25
	0.35	5.25	120/120-277	RSSP - Remote Indicator Panel	30
	0.525	7.0	208/120	SNMP - SNMP Card	45
	0.7	8.0	208/208	FC - Form C Contacts	60
	0.875	10.0	208/277	STU1 - Onsite start-up	90 (Standard)
	1.05	12.0	208/480	IDB - Internal dimmer bypass	120
	1.4	14.0	208/120-240	EMB - External maintenance bypass switch	180
	2.0	18.0	208/120-277	HTR - Heater	240
	2.4	21.0	240/120	EW - Extended warranty	
	2.6		240/208		
			240/277		
			240/480		

NOTES:

1-Consult factory for other voltage requirements.

Special voltages may effect the weight, size and number of cabinets.

2-One ECM is used per switching device or circuit.

3-Consult factory for other run times.