



FORTRESS 1 HARSH

SPECIFICATIONS

- The Fortress Harsh 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

DIAGNOSTICS AND MAINTENANCE

- DSP/PWM technology and DSPM 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



0.075 KW - 21 KW
Single Phase
Uninterrupted
Emergency
Lighting and
Power
Systems

PROTECTION

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

INPUT

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

OUTPUT

- 120V, 208V, 240V, 277V, 480V, 120/240 or 120/277VAC
True “on-line” design is ≥92% efficient at 100% linear load

BATTERIES

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

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 DSPM phone assisted start-up
- 5-Year powertrain warranty
- Maintenance contracts available

CODES

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

INSTALLATION

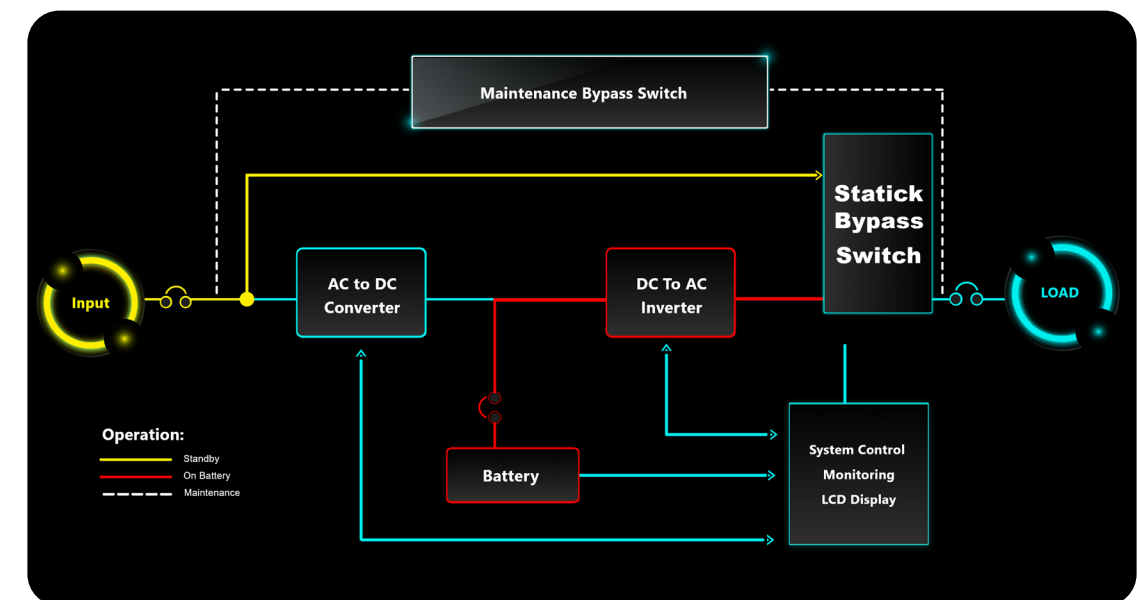
- Modular design and small footprint allow easy installation in electrical closet or other convenient locations
- Phone assisted factory start-up standard for all systems
- Extended warranty available

SPECIAL APPLICATIONS

- DSPM 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

NEMA 4 or 12 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)



Fortress Harsh 1	Power Ratings	UPS			Battery			Weight (Combined)	British Thermal Unit	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions			Cabinet Dimensions						Input	Output		
		KVA/Kw	W	H	D	W	H	D	(lbs)					
FTH1 (Consult factory for others)	0.35	(41+6)"	(48+4)"	36"	not required			950	95.2	Sealed, Maintenance free (AGM) lead calcium	Select 120, 208, 240, 277 or 480	Select 120, 277, 480, 120/240 or 120/277	Input and output circuit breakers standard	UL924 UL1778 NFPA 101 NFPA 70 NEC
	0.525	(41+6)"	(48+4)"	36"	not required			1140	142.8					
	0.7	(41+6)"	(48+4)"	36"	not required			1170	190.4					
	0.875	(41+6)"	(48+4)"	36"	not required			1190	238					
	1.05	(41+6)"	(48+4)"	36"	not required			1220	285.6					
	1.4	(41+6)"	(48+4)"	36"	not required			1350	380.8					
	2	(41+6)"	(48+4)"	36"	not required			1410	544					
	2.4	(41+6)"	(48+4)"	36"	not required			1460	652.8					
	2.6	(41+6)"	(48+4)"	36"	not required			1620	707.2					
	3	(41+6)"	(48+4)"	36"	not required			1730	816					
	3.4	(41+6)"	(48+4)"	36"	not required			1780	924.8					
	3.8	(41+6)"	(48+4)"	36"	not required			1830	1033.6					
	4.2	(41+6)"	(48+4)"	36"	not required			1980	1142.4					
	4.7	(41+6)"	(48+4)"	36"	not required			2350	1278.4					
	5.25	(41+6)"	(48+4)"	36"	not required			2350	1428					
	7	(41+6)"	(72+4)"	36"	not required			2600	1904					
	8	(41+6)"	(72+4)"	36"	not required			2600	2176					
	10	(41+6)"	(72+4)"	36"	not required			3050	2720					
	12	(41+6)"	(72+4)"	36"	not required			3050	3264					
	14	(41+6)"	(72+4)"	36"	(41+6)"	(72+4)"	36"	3700	3808					
	18	(41+6)"	(72+4)"	36"	(41+6)"	(72+4)"	36"	4900	4896					
21	(41+6)"	(72+4)"	36"	(41+6)"	(72+4)"	36"	5300	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:

FTH1 - 8.0 - 120/277 - ECM277/3 OCB/277/3/20/1 - 180

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, 180 minute run time)

FTH1		POWER RATING		VOLTAGE ¹		OPTIONS		TIME ³
KW		Input/Output	Input/Output	ECM120 - 120V Environmental control module ² /qty		ECM277 - 277V Environmental control module ² /qty		Minutes
0.075	3.0	120/120	277/120	NOF - Normally OFF output circuit/voltage / qty/pole		NOH - Normally OFF "Hold ON"/voltage/qty/pole		5
0.1	3.4	120/277	277/277	OCB - Output circuit breakers / voltage / quantity/amps/pole		EPO - Emergency power off		10
0.125	3.8	120/480	277/480	RSSP - Remote Indicator Panel		SNMP - SNMP Card		15
0.2	4.2	120/120-240	277/120-240	FC - Form C Contacts		STU1 - Onsite start-up		20
0.3	4.7	120/120-277	277/120-277	IDB - Internal dimmer bypass		EMB - External maintenance bypass switch		25
0.35	5.25	208/120	480/120	HTR - Heater		EW - Extended warranty		30
0.525	7.0	208/277	480/208					45
0.7	8.0	208/480	480/277					60
0.875	10.0	208/120-240	480/480					90 (Standard)
1.05	12.0	208/120-277	480/120-240					120
1.4	14.0	240/120	480/120-277					180
2.0	18.0	240/277						240
2.4	21.0	240/480						
2.6		240/120-240						
		240/120-277						

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.

Specifications subject to change without notice.



439 S. Stoddard Avenue San Bernardino, CA 92401

Ph: 1.877.DSPM POWER 1.877.377.6769 Fax: 909.930.3335

Data Sheet