

# 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

### INPUT

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

### OUTPUT

- 120V, 208V, 240V, 277V, 480V, 120/240 or 120/277VAC  
True "on-line" design is  $\geq 92\%$  efficient at 100% linear load

### BATTERIES

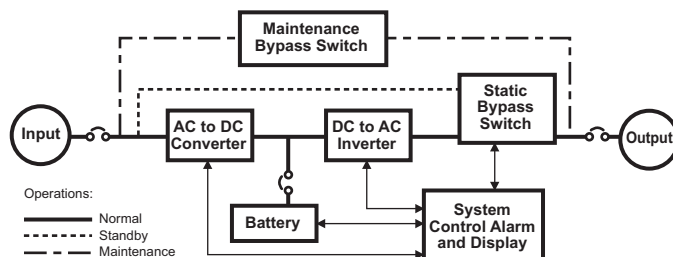
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year prorated warranty
- DSP/PWM Smart Battery Monitoring System is **TEMPERATURE COMPENSATED** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and DSP/PWM overcharge protection standard

### 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

### CODES

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



Catalog Number	
Project	Notes
Signature	Date

### 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

### 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

### NEMA 4X 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)

### 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

- 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

### 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

# FORTRESS 1 HARSH



Fortress Harsh 1	Power Rating	UPS			Battery			Weight (combined)	British Thermal Unit	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions			Cabinet Dimensions						Input	Output		
FTH1 (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 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	41"	48"	32"	not required			340	142.8					
	0.7	41"	48"	32"	not required			370	190.4					
	0.875	41"	48"	32"	not required			390	238					
	1.05	41"	48"	32"	not required			420	285.6					
	1.4	41"	48"	32"	not required			550	380.8					
	2.0	41"	48"	32"	not required			610	544					
	2.4	41"	48"	32"	not required			660	652.8					
	2.6	41"	72"	32"	not required			820	707.2					
	3.0	41"	72"	32"	not required			930	816					
	3.4	41"	72"	32"	not required			980	924.8					
	3.8	41"	72"	32"	not required			1030	1033.6					
	4.2	41"	72"	32"	not required			1180	1142.4					
	4.7	41"	72"	32"	not required			1550	1278.4					
5.25	41"	72"	32"	not required			1550	1428						
7.0	41"	72"	32"	not required			1800	1904						
8.0	41"	72"	32"	not required			1800	2176						
10.0	41"	72"	32"	not required			2250	2720						
12.0	41"	72"	32"	not required			2250	3264						
14.0	41"	72"	32"	41"	72"	32"	2900	3808						
18.0	41"	72"	32"	41"	72"	32"	4100	4896						
21.0	41"	72"	32"	41"	72"	32"	4500	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 - 180**

Description of example:

(8.0 KW, 120 Voltage In, 277 Voltage Out, 3 277V Environmental Control Modules, 3 Output 277 Voltage Circuit Breakers, 180 minute run time)

FTH1															
FAMILY	POWER RATING		VOLTAGE <sup>1</sup>		OPTIONS						TIME <sup>3</sup>				
	KW		Input/Output		Input/Output		ECM120 - 120V Environmental control module <sup>2</sup> /qty						Minutes		
	0.075	3.0	120/120		277/120		ECM277 - 277V Environmental control module <sup>2</sup> /qty						5		
	0.1	3.4	120/208		277/208		NOF120 - Normally OFF output circuit / qty						10		
	0.125	3.8	120/277		277/277		NOF277 - Normally OFF output circuit / qty						15		
	0.2	4.2	120/480		277/480		NOH120 - Normally OFF "Hold ON"/qty						20		
	0.3	4.7	120/120-240		277/120-240		NOH277 - Normally OFF "Hold ON"/qty						25		
	0.35	5.25	120/120-277		277/120-277		OCB - 20 Amps output circuit breakers / voltage / quantity						30		
	0.525	7.0	208/120		480/120		EPO - Emergency power off						45		
	0.7	8.0	208/208		480/208		RSSP - Remote Indicator Panel						60		
	0.875	10.0	208/277		480/277		SNMP - SNMP Card						90 (Standard)		
	1.05	12.0	208/480		480/480		FAX - Fax Modem						120		
	1.4	14.0	208/120-240		480/120-240		FC - Form C Contacts						180		
	2.0	18.0	208/120-277		480/120-277		STU1 - Onsite start-up						240		
	2.4	21.0	240/120				IDB - Internal dimmer bypass								
	2.6		240/208				EMB - External maintenance bypass switch								
			240/277				HTR - Heater								
			240/480				EW - Extended warranty								
			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.



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