



## SPECIFICATIONS

*The Defender 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 a small footprint.*

### POWER RATING

- 4.7 KW - 18 KW (or 4,700 Watts - 18,000 Watts) single phase output unit uses the latest DSP/PWM technology to provide the most advanced performance and reliability features

### INPUT

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

### OUTPUT

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

### BATTERIES

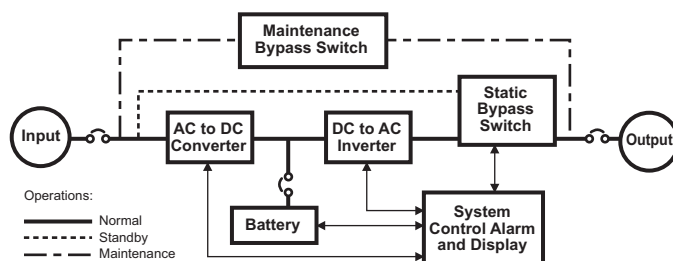
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year prorated warranty
- DSP Smart Battery Monitoring System is **TEMPERATURE COMPENSATED** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and DSP overcharge protection standard

### 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



Catalog Number	
Project	Notes
Signature	Date

## 4.7 KW - 18 KW

### Single Phase

## Uninterrupted Emergency Lighting and Power Systems



### PROTECTION

- Provides overload, surge and undercurrent protection using DSP/PWM "Watchdog Monitoring" Protection System performance and reliability features
- Surge protection against load surges as defined in ANSI/IEEE C62.45 category A and B

### DIAGNOSTICS AND MAINTENANCE

- DSP/PWM Watchdog Monitoring System provides complete self diagnostic capabilities and LED Monitor
- Informative advanced DSP 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

### CABINET

- Modular design enables flexible installation
- Forced air cooling for maximum reliability
- Systems up to 14 KW are self contained; larger systems require external battery cabinet(s)

### 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

### 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



Defender 1 Series	Power Rating	UPS			Battery			Weight (combined)	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions			Cabinet Dimensions					Input	Output		
DE1	KVA/KW	W	H	D	W	H	D	(lbs)	Sealed, Maintenance free (AGM) lead calcium	120, 208, 240 or 277	120, 277, 240 or 120/277	Input and output circuit breakers standard	UL924 NFPA 101 NFPA 70 NEC
	4.7	42"	71"	22.5"	not required			1200					
	5.25	42"	71"	22.5"	not required			1200					
	7.0	42"	71"	22.5"	not required			1450					
	8.0	42"	71"	22.5"	not required			1450					
	10.0	42"	71"	22.5"	not required			1820					
	12.0	42"	71"	22.5"	not required			2210					
	14.0	42"	71"	22.5"	not required			2550					
18.0	42"	71"	22.5"	42"	71"	22.5"	3750						

The Defender 1 provides the simplicity and reliability that is critical when providing an alternative source of power to any environment. Easy installation ..."simplicity"...connect the DE1 to the emergency circuit(s) and everything is backed up..."reliability"...during a power outage. All lighting connected to the DE1 will simply continue to operate at "full light output". DSPM Watchdog© software keeps your environment safe while self-diagnostics help maintain equipment to a high standard. Superior surge suppression assures the highest quality of power being delivered to all loads, all the time. Equipment and lamp life are maximized.

We sincerely hope you never experience a real emergency, but if you do, you deserve the **security, safety and peace of mind** that the Defender 1 from **DSPM** ensures.

## 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:

**DE1 - 8.0 - 120/277 - ECM277/3 OCB/277/3**

Description of example:

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

DE1							
FAMILY	POWER RATING	VOLTAGE <sup>1</sup>		OPTIONS			
	<u>KW</u>	<u>Input/Output</u>		ECM120 - 120V Environmental control module <sup>2</sup> /qty			
	4.7	120/120		ECM277 - 277V Environmental control module <sup>2</sup> /qty			
	5.25	120/277		NOF120 - Normally OFF output circuit / qty			
	7.0	120/120-240		NOF277 - Normally OFF output circuit / qty			
	8.0	120/120-277		NOH120 - Normally OFF "Hold ON"/qty			
	10.0	208/120		NOH277 - Normally OFF "Hold ON"/qty			
	12.0	208/277		OCB - 20 Amps output circuit breakers / voltage / quantity			
	14.0	208/120-240		SRB - Seismic rated bracket			
	18.0	208/120-277		STU1 - Onsite start-up			
		240/120		IDB - Internal dimmer bypass			
		240/277		EMB - External maintenance bypass switch			
		240/120-240		EW - Extended warranty			
		240/120-277					
		277/120					
		277/277					
		277/120-240					
		277/120-277					

### 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.

Specifications subject to change without notice.



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