



# DEFENDER 1

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## 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 - 21 KW (or 4,700 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

## 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.
- DSP/PWM Smart Battery Monitoring System is TEMPERATURE COMPENSATED maintaining maximum run-time and battery life.
- Microprocessor controlled recharge and DSP/PWM over-charge protection standard.

## 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

## 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

## LAMPS AND LOADS

- Emergency power provides FULL LIGHT OUTPUT from all lamps and fixtures for the entire runtime
- Operates fluorescent, compact fluorescent, incandescent, quartz, 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

## 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

## 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

## SPECIAL APPLICATIONS

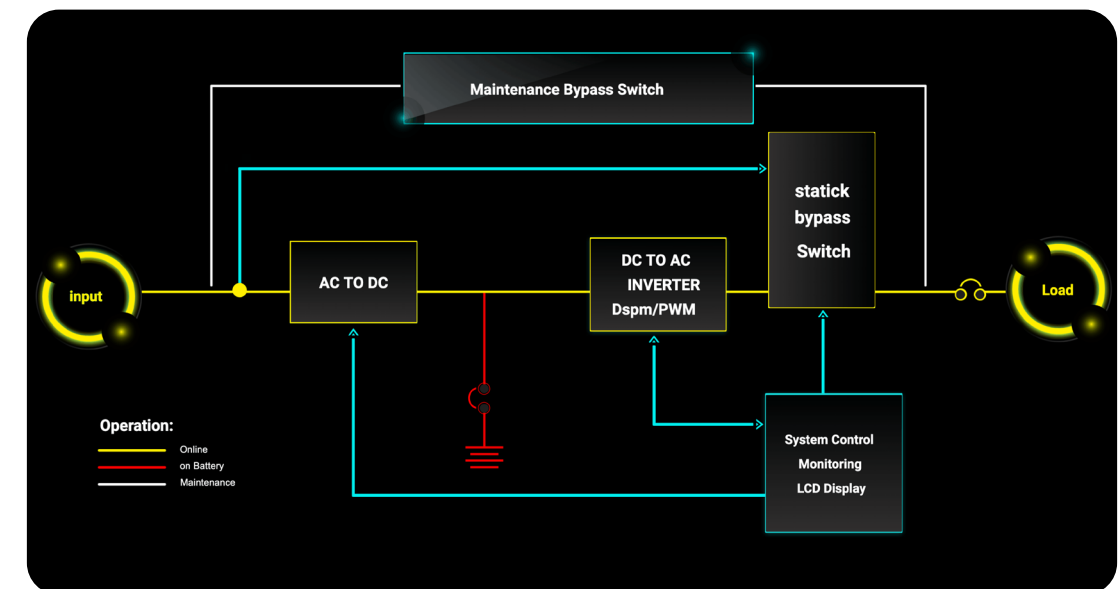
- DSPM offers numerous UL924 optional devices to meet unusual or difficult application parameters
- ECM - Environmental Circuit Module allows fixtures and lamps on the emergency circuit(s) to be operated by normal switching and/or dimming devices in NON-emergency conditions
- Dimming Panel Interface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

## CABINET

- Modular design enables flexible installation
- Forced air cooling for maximum reliability
- NEMA 1 rated
- Systems up to 14 KW are self contained; larger systems



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



Defender 1 Series	Power Ratings	UPS			Battery			Weight	British Thermal Unit	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions			Cabinet Dimensions						Input	Output		
DE1	kVA/KW	W	H	D	W	H	D	(lbs)	BTU s	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
	4.7*	42"	71"	22.5"	not required			1200	1278.4					
	5.25*	42"	71"	22.5"	not required			1200	1428					
	7*	42"	71"	22.5"	not required			1450	1904					
	8*	42"	71"	22.5"	not required			1450	2176					
	10*	42"	71"	22.5"	not required			1820	2720					
	12*	42"	71"	22.5"	not required			2210	3264					
	14*	42"	71"	22.5"	not required			2550	3808					
	18	42"	71"	22.5"	42"	71"	22.5"	3750	4896					
	21	42"	71"	22.5"	42"	71"	22.5"	4375	5712					

Note: (\*) Represents optional smaller cabinet for 4.7 to 14KW with dimensions 40" 48"H 36"D. Please contact us for more information.

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

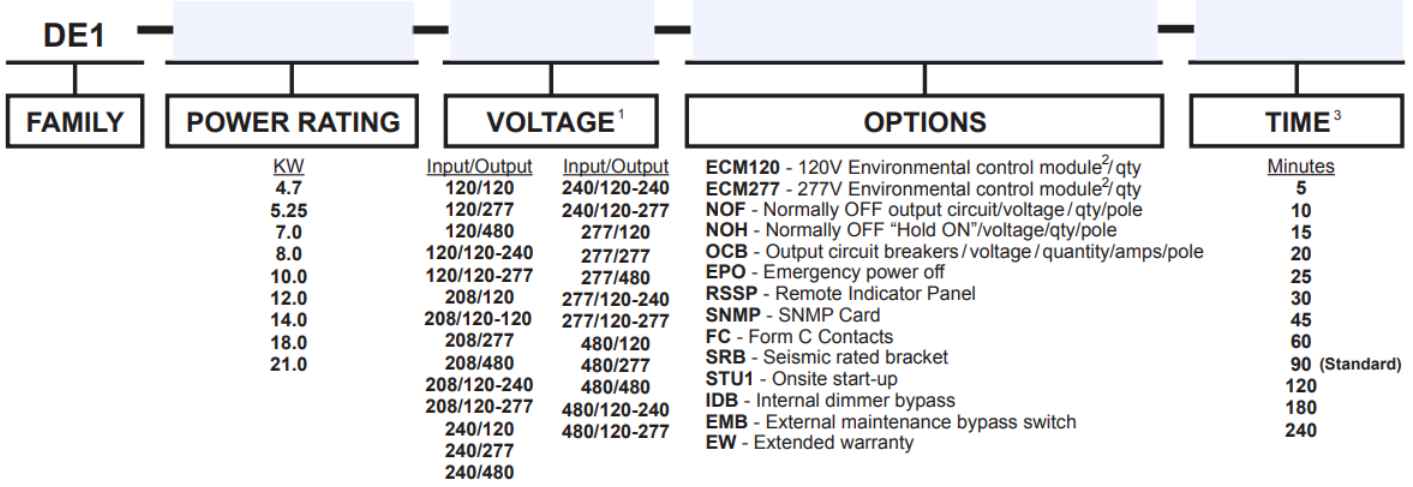
Choose the bold face catalog nomenclature that best suites your needs. Write them on the appropriate line. Order accessories as separate catalog number.

Example:

DE1 - 8.0 - 120/277 - ECM277/3 OCB/277/3/20/1 - 30

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, 30 minute run time)



## 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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