



Slide #1:

Welcome to the DSPM product presentation seminar, we have pre-recorded some of this seminar but encourage questions before we proceed to each slide. We will cover the entire product line. Hopefully you have a copy of this presentation in front of you and have had a chance to take a look at before starting this seminar. We encourage you to ask any questions that come to mind. We have technical people and sales people in the room to assist in answering any question you might have. If we are unable to answer your questions, we will get back to you just as quickly as possible with the desired answer.

What you see before you is our family of cabinets for our Lighting Inverter line of products. As we proceed through this seminar you will see the power ratings and capabilities of these cabinets. Most of these are Nema 1 rated, which means they are used in some type of a building whether it be in the basement, a closet or in a hallway.

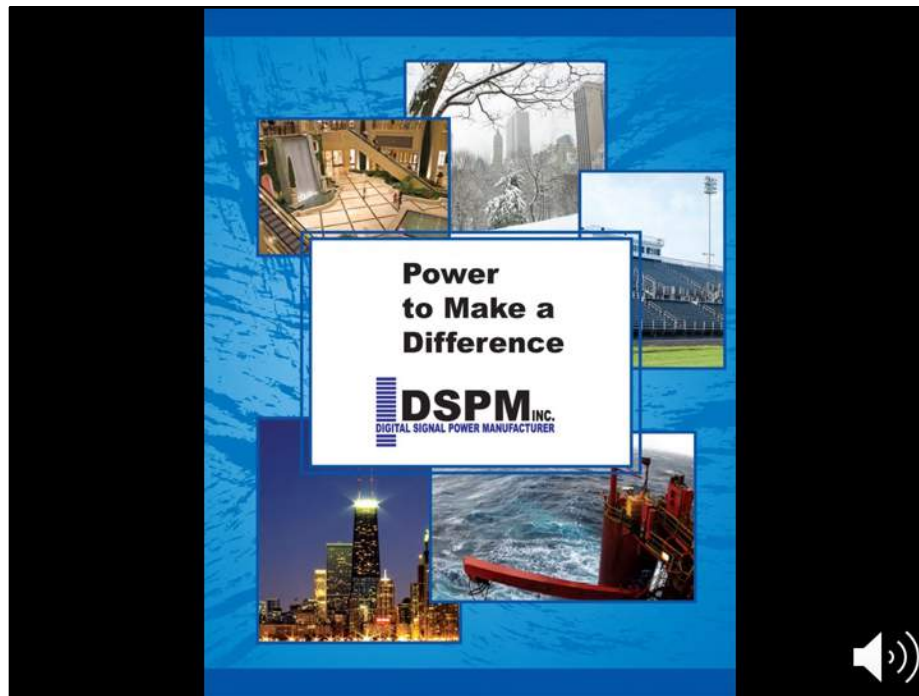
We also have a whole series of outdoor cabinets that are Nema 3R convection cooled with fans only, Nema 4 completely sealed with air conditioning outdoor application and Nema 12 for completely sealed indoor applications.

DSPM Inc.		TABLE OF CONTENTS	
THE DSPM DIFFERENCE			
ECM POWERFUL INNOVATIVE PRODUCT			
ONLINE LIGHTING INVERTER	350 WATTS - 2000 WATTS	SINGLE PHASE	Defender Series
ONLINE LIGHTING INVERTER	2.4 KW - 4.2 KW	SINGLE PHASE	
ONLINE LIGHTING INVERTER	4.7 KW - 21 KW	SINGLE PHASE	
ONLINE LIGHTING INVERTER	3 KW - 125 KW	THREE PHASE	
STAND-BY LIGHTING INVERTER	75 WATTS - 375 LED WATTS	SINGLE PHASE	Cobra Series
STAND-BY LIGHTING INVERTER	350 WATTS - 2000 WATTS	SINGLE PHASE	
STAND-BY LIGHTING INVERTER	2.4 KW - 4.2 KW	SINGLE PHASE	
STAND-BY LIGHTING INVERTER	4.7 KW - 21 KW	SINGLE PHASE	
STAND-BY LIGHTING INVERTER	3 KW - 125 KW	THREE PHASE	Fortress Series
OUTDOOR LIGHTING INVERTER	75 WATTS - 21 KW	SINGLE PHASE	
OUTDOOR LIGHTING INVERTER	3 KW - 125 KW	THREE PHASE	
HARSH ENVIRONMENT LIGHTING INVERTER	75 WATTS - 21 KW	SINGLE PHASE	
HARSH ENVIRONMENT LIGHTING INVERTER	3 KW - 125 KW	THREE PHASE	

Slide #2:

We have broken our product index down into the three basic categories of our product line. The defender series is our double conversion online product ranging in power from 350W to 125 kW both single phase and three phase.

The Cobra series is our standby model which features a 99+% efficiency. This product ranges from 75W all the way up to 125kW both single phase and three phase. And lastly our outdoor units, the Fortress series this includes our Nema 3R, Nema 4 and Nema 12 enclosures.



Slide #3:

To help our customers understand who and what we are, and what we do we have put together our corporate brochure. Our company motto is "Power to Make a Difference." You can download this company brochure from our website at [www.dspmanufacturing.com](http://www.dspmanufacturing.com)

There are many other items on our website to help you in understand our product capability and our potential.

### Who We Are

DSPM (Digital Signal Power Manufacturing) is an engineering based design and manufacture company. Our company philosophy is based on Applied Engineering, or Integrated Engineering Platforms. DSPM has developed a unique fifth generation Digital Control System, which provides precise control and monitoring of all input and output power functions on our complete line of power products. With this topology platform our units can sense power fluctuations and react in virtual real time. The Pulse Width Modulation output is optimized and is capable of a total static start and stop in microseconds, to protect both the load and the power backup equipment.


Digital Signal Power Manufacturing (DSPM) personnel have been involved in the Power Quality Business since 1974. DSPM specializes in the custom, or unique products area. DSPM has evolved from standardized products to also providing Engineered Solutions for our customers.




Our company has been in business since 1986, (incorporated in February 1992) offering 20 plus years of Electronic Power Design and Manufacturing experience. DSPM is committed to offering the latest innovations for quality power requirements in our industry today.

DSPM currently has over 100 combined man-years of experience in the power field. Our team brings you a group of individuals who have the experience in all aspects of design (both mechanical and electrical) along with manufacturing. The sales and marketing staff have been involved with the power quality industry since its inception and understand the need for total quality and reliability in all of our products. DSPM has been involved in producing products utilizing the latest in innovative designs and manufacturing methods.

As a matter of policy, DSPM is committed to "open architecture" designs and bring the philosophy to the customization of our specialized products. The idea is to give the customer more choices and identify the best solutions. Our goal is to recommend the best-of-class products and software to meet your unique requirements, while providing the most cost-effective solutions.

## “Who We Are” explains DSPM’s experience and dedication. Learn about our policies and company.



Slide #4:

DSPM stands for Digital Signal Power Manufacturing, we are an engineering design based and manufacturing company. We manufacture all of our products in our plant in Ontario, California. We are in compliance with the Buy American Act. We have been involved in the power industry since 1974, we truly understand power. DSPM has been in business since 2003 and we have shipped thousands of units to the Lighting Industry.

**“Customization”  
helps our  
customers  
understand that  
we have the  
capabilities to  
customize our  
products to meet  
their needs.  
Also why our  
standard cabinets  
are superior to  
most other  
manufacturers.**

### Customization

DSPM has developed a full line of Central Lighting Inverters (CLI), Uninterruptible Power Systems (UPS), Frequency Converters, Automatic Voltage Regulators and Power Conditioners. These units are available in single and three-phase configurations. DSPM has been a leading designer for Harsh Environment Enclosed units that allow the full product line to be installed outdoors or in extremely harsh environments. All products conform to UL and IEC safety standards. DSPM has provided power quality products for diverse applications where standard solutions would not work. The Department of Defense, Aerospace, Industrial, Security, Mass Transit, Airports, Data Centers, Telco, Sport Stadiums, Oil and Gas Industry and many other industries have benefited from our capabilities.





Our patent pending cabinet design uses overlapping sheet metal to form a rugged internal structure that keeps our cool down and our strength to a maximum.



Our rounded corners allow for safe movement around our cabinets without the problem sharp edges cause.



No unprotected controls are exposed for accidental tripping, maintaining your control over the electrical environment.



The opening at the bottom of the units allows for the cool air to be drawn into the cabinet, while also providing an exhaustively pressing reminder of who we are.



Fork lift openings are reinforced to allow for lifting of even the heaviest of units.

Slide #5:

Along with our standard product line we have the ability to customize products to unique applications. Whether it is an outdoor application or on the sea, our engineering capability allows us to build a reliable product to the customers unique specifications when requested. Our standard Nema 1 enclosure has many man years of experience and you will find the design to be very user-friendly and well thought out.

### Sea Launch

When you think of Mission Critical requirements, you cannot get more critical than launching a rocket into space. When Boeing designed the "Sea Launch" sea going platform, they thought of DSPM to provide safe reliable power. With each launch costing millions of dollars and only having one chance to get it right, they did not want to have to worry about power availability when they need it. DSPM has provided "The Difference" for Sea Launch.

Our systems provide power to mission critical equipment that is absolutely needed for the safe launching of every rocket that Boeing has sent into orbit. We have been there since the beginning of the project. We have supported these systems for many years and look forward to providing others with their types of critical requirements.

Our units are subjected to the rigors of ocean travel and environment. Additionally, the vibrations that occur during the actual launching are tremendous. Our standard units were customized to Boeing's specifications, independently tested and evaluated at testing laboratories.

We had each unit certified to meet the specifications, with the testing lab reports to back it up. When you need a rugged, reliable, "Mission Critical" unit, DSPM will provide whatever you need, with the reliability you expect.



## Sea Launch is one of our unique applications. With such an important project they needed the most rugged and reliable unit available and DSPM was able to deliver.



Slide #6:

An example of our engineering capability is the sea launch system. The sea launch system launches satellites from the ocean and to do that they utilize DSPM technology. Not only does this represent our ability to handle salt environments but are systems control the lights on the launch vehicle so that the vibrations and shock capabilities are put to the test every time they launch.



**The military  
and our  
airports  
needed units  
for their  
critical loads.  
Turning to  
DSPM we built  
them units  
that suited  
their needs.**

### Military

DSPM has provided High Frequency Automatic Voltage Regulators for the US government, requiring sub cycle total response time, instead of just the normal three to four cycle response. Automatic Voltage Regulators for the US State Department, requiring unique front-end voltage compensation capabilities and specialized connectivity are helping to keep our country secure.

Frequency Converter: DSPM designed and manufactured 60 to 400 Hertz Frequency Converters for Military Programs, Commercial and Airport operations. Our systems can be modified to meet outdoor or extreme environmental conditions. Our standard product line ranges from 10 Kva to 225 Kva.



### Airports

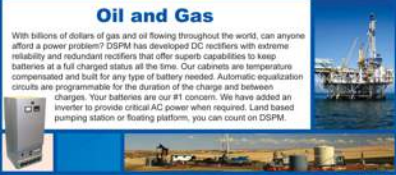
When our Nations Capital needed an emergency backup system to protect Reagan International Airport, they turned to DSPM. DSPM provided backup systems that help keep our President, citizens and foreign visitors safe. These systems backup the airport lighting and security systems, with DSPM providing the "Power to Make a Difference" our nation's Capital is always safe and secure. Our units are always there when needed. Let us do the same for your critical loads.

Slide #7:

We have many sites that are military applications. We build both commercially available units at various military bases and completely militarized units when required by the military. We have also built units for many of the airports around the country including Dulles International in the Nation's capital.


### Oil and Gas

With billions of dollars of gas and oil flowing throughout the world, can anyone afford a power problem? DSPM has developed DC rectifiers with extreme reliability and redundant rectifiers that offer superb capabilities to keep batteries at a full charged status all the time. Our cabinets are temperature compensated and built for any type of battery needed. Automatic equalization circuits are programmable for the duration of the charge and between charges. Your batteries are our #1 concern. We have added an inverter to provide critical AC power when required. Land based pumping station or floating platform, you can count on DSPM.




### Telecom

The packaging ability of DSPM allows us to customize our cabinets to conform to the requirements our customers need. In the case of the Power Battery Metering Distribution (PBMD) units, the entire structure was designed to meet Sprint's requirements. The overall package combines the UPS, Utility Meter and Teles Connections (for the T1 requirements as well as fiber), full output distribution, including a full Bypass System Feature. The unit has a field replaceable power compartment, eliminating the need for site analysis of any system problems, without interruption of service day or night.




### Medical

DSPM combines all of our technologies to control your medical equipment. We combine our Lighting Inverters and UPS systems to provide a complete solution for your medical environment. With a power range of 3 KVA up to 150 KVA (single or three phase) we can provide the perfect solution for your equipment. DSPM combines our UL and IEC experience to provide dependable, safe and compliant products.




### Schools and Universities

When your sons and daughters are away studying for their future, DSPM is on the job. We keep many of our schools and universities lighting systems operational at all times. When an emergency occurs you can sleep at night knowing they are safe.



## DSPM builds for all types of industries such as Oil and Gas, Telecom, Medical and Schools and Universities.



Slide #8:

We supply to a number of markets including the oil and gas industry, which require us to handle harsh environments. The telecommunication industry, both indoor and outdoor, as well as medical applications. We have many schools and universities using our products to protect the children and futures of this country.



## DSPM also builds for the Port Authority, Stadiums, Department Stores and Malls. Along with countless others!



### Port Authority

When the Port Authority of Long Beach, California decided to review their emergency electrical requirements, some of the items on the list were constantly exposed to an ocean environment. The security interfaces needed to be extremely reliable and dependable systems that would not fail at critical moments. The Port Authority called on DSPM to provide a system to meet those requirements. Our commitment to every detail provided a solution that can be copied all over the country. With thousands of ships and trucks passing in and out of our ports daily you can count on DSPM to provide a complete and total solution for these critical applications.



### Department Stores & Malls

Shoppers in your facilities or moving in or out of parking structures need lighting to move safely, no matter the weather conditions, or the status of utility companies. Providing backup for your cash registers, security cameras or your emergency lighting is critical for the future of your business, and safety. You can count on DSPM to provide the right power at the right time, no matter what your requirements are.



### Stadiums

With thousands of people at a single event, can you imagine what panic can ensue without electrical power at a critical time? Any emergency can cause panic but with a DSPM emergency power system in place you can relax knowing you are protected at all times. DSPM systems will constantly monitor the utility power grid and all of our internal operators make sure that electrical power is always available when you need it the most.

Slide #9:

DSPM has a number of units at various ports around the country, many department stores and malls utilize the DSPM technology, keeping the shoppers safe in the event of an emergency. One of our favorite applications to install is stadiums or really any gathering of the public. This can be at church, a library, or a movie theater which we allow for complete and safe evacuation for any of these facilities.



Slide #10:

Our Environmental Control Module (ECM) allows us to customize the lighting environment to unique applications. We have devoted an entire seminar to this module and its unique capabilities. This device features a 20 amp rating and is available in voltage levels from 120V through 277V. This device has a common, normally open, and normally closed contacts. It is small enough to fit in a receptacle enclosure in the wall but powerful enough to handle continuous 20 amps.

# Powerful Innovative Product Brochure

## ECM

### ENVIRONMENTAL CONTROL MODULE

#### POWERFUL INNOVATIVE PRODUCT

Digital Signal Power Manufacturing Inc., emergency lighting and power systems maintain efficient AC emergency power to operate all emergency lighting fixtures at full-light output. This provides superior dependability and security to commercial and industrial environments.

The DSPM® difference is the innovative ECM (Environmental Control Module) which is connected to selected fixtures and/or lamps which allows normal operating parameters to be maintained. In the event of an AC power outage, the fixtures, lamps, and/or loads connected to the ECM will continue or immediately begin operating at full-light output for a maximum of 90 minutes or other options as required by UL/ENA agency codes.

#### Applications:

- Emergency Transfer
- Stand-by Mode With Wall Switch Override
- Normally On
- Emergency Dimmer System
- Stand-by Mode
- Wall Switch Override
- High/Low Voltage Dimmer
- Full Transfer HD
- 9 Pin Wall Switch System
- Low Voltage Interface
- 3 Lamp Common Switch
- Stand-by Generator
- Low Voltage Dimmer/Relay Control
- 90 Minute Dim Ballast
- Utility Generator or 4th Hand by Mode
- Stand-by Mode Ignoring both hot and neutral connections with wall switch

**DSPM®**  
Digital Signal Power Manufacturing Inc.

1000 S. Quebec Street  
P.O. Box 100  
P.O. Box 100  
P.O. Box 100

**DSPM®**  
Digital Signal Power Manufacturing Inc.

## ECM

### ENVIRONMENTAL CONTROL MODULE

#### POWERFUL INNOVATIVE PRODUCT

#### SPECIFICATIONS

The patented ECM is connected to selected fixtures and/or lamps to allow normal operating parameters to be maintained in the event of an AC power outage. The fixtures, lamps and/or loads connected to the ECM will continue or immediately begin operating at full-light output for a maximum of 90 minutes.

#### COMPATIBILITY

• ECM operates lamps at normal output regardless of power source.

• No ballast required.

#### USE WITH LAMP TYPES

- Incandescent
- Fluorescent or compact fluorescent
- LED

#### USE WITH BALLASTS

- Electronic or magnetic
- Dimming or non-dimming

#### USE WITH MOST CONTROL DEVICES OR BUILDING MANAGEMENT SYSTEMS

- Dimmer and dimming systems
- Occupancy and other sensors

```

    graph LR
        MP[Main Panel] --> ECM[ECM]
        ECM --> CP[Control Panel]
        ECM --> B[Ballast]
        ECM --> L[Lamp]
        L --> OL[To other loads]
    
```

Customer Name	
Address	
City	
State	
Zip	

#### INSTALLATION

- ECM modules can be installed inside the fixture assembly.
- I.e., subject to space, in the fixture or under the fixture.
- ECM modules can operate individual or multiple loads.
- ECM modules can be centrally located for commercial applications.

#### WARRANTY

- 3 Years limited warranty
- No maintenance required

#### SPECIFICATIONS

Maximum dimensions (inches)	1.25" x 1.25"
Operating Voltage	120V (24 in 277 VAC)
Rating	Class 1
Code	UL Recognized

For detailed information visit our website at [www.dspmi.com](http://www.dspmi.com)

#### ORDERING INFORMATION:

Eastern:  
ECM-DT1-2

ECM <sup>®</sup>	Family	Utility Voltage	Quantity
		120 277	

#### Notes:

- Maximum number of lamps per ECM module is 10.
- Maximum number of lamps per ECM module is 10.
- Maximum number of lamps per ECM module is 10.

You can download the brochure and the datasheet from our website, [www.dspmanufacturing.com](http://www.dspmanufacturing.com).

11

## What kind of applications can it be used with?

- Emergency Transfer
- Stand-by Mode With Wall Switch Override
- Normally "Off"
- Emergency Dimmer Bypass
- Stand-by Mode
- Wall Switch Override
- Nitelite Override Mode
- Fast Transfer HID
- 3-Way Wall Switch Bypass
- Low Voltage Interface
- 3 Lamp Common Switch
- Stand-By Generator
- Low Voltage Dimming Ballast/Control
- Hi-Lume Dim Ballast
- Utility/Generator in a Stand-By Mode
- Stand-By Mode Bypassing Both Hot and Neutral Connections With Wall Switch



Slide #12:

The ECM module is approximately a 1 ½ inch cube and is small enough to fit almost anywhere but powerful enough to handle 20 amp of switching current. The device is UL 924 listed and is approved for Emergency Lighting applications. There is a list of some of the applications, and you can find these applications documented on our website with individual sheets to explain the wiring and application of this unique Environmental Control Module.



Slide #13:

We will now cover the Defender Series which is our double conversion online series. This product will handle any light on the market today, whether it be HID or LED. This system allows for the lights to be protected 100% of the time through the inverter and there is no switchover time when the power is lost.

# Single Phase 350W - 2000W

## DEFENDER<sup>®</sup> MINI

ONLINE EMERGENCY LIGHTING INVERTER  
KEEP THE LIGHTS "ON" WHEN YOU NEED THEM THE MOST  
(UNUSUAL PHASE: 120V AC - 1000V AC)

Defends your environment against unwanted power outages  
and electrical disturbances by providing:

- DSPM Watchdog software always on guard.
- Display monitor keeps eye on control 24/7.
- Superbats DSPMSE technology for unsurpassed reliability.
- Economical for the lowest overall cost for your light safety with an Energy Star Rating.
- Temperature compensating technology that controls batteries for the best battery life.
- Built-in performance time batteries.
- Full light output for entire 16 minutes.
- Self-diagnoses for a safe and secure lighted environment.
- Run time never expires for all types of lamps.
- ECM module is a patented technology used by DSPM.
- Reduces solutions for multiple applications such as indoor and outdoor emergency lighting, exit, cash registers, computers, strategic electronics, and more.
- 10 Year pre-rated battery warranty.
- 5 Year power loss warranty.
- Listed in UL508, UL1776, and UL508.
- Cities of Chicago and New York approved.
- Complies with the Buy American Act.

**DSPM<sup>®</sup>**

100 N. Quince Street, Suite 100  
Chicago, IL 60612  
Tel: 773.326.1000  
Fax: 773.326.1001

## DEFENDER<sup>®</sup> MINI

### SPECIFICATIONS

The Defender Mini maintains efficient AC Emergency Power for extended emergency lighting (battery or "hot lead") output, providing emergency dependency and security in commercial/industrial environments at an added budget.

### POWER RATING

• Hot lead: 1000-watts (high output) and low lead: 350-watts (low output) for the most designed performance in reliability/duration.

### INPUT

• 120V, 200V, 240V, 277V (variable frequency)

### OUTPUT

• 120V, 200V, 240V, 277V (variable frequency)  
• Two output stages in 100% efficiency at 100% load load

### BATTERIES

• Battery: maintenance free, lead-acid (VRLA) battery  
• 10 Year pre-rated battery  
• DSPM's Smart-Battery-Watching System's TEMPERATURE COMPENSATED technology maintains optimum and reliable life in environmental conditions ranging and 100% efficient charging

### LAMPS AND LOADS

• Emergency light inverter FULL LIGHT OUTPUT from 1-watt to 100-watts in the entire system  
• Operates fluorescent, compact fluorescent, incandescent, LED, CFL, LED and other lamp types  
• Operates in electronic ballast, dimming driver or power sources and load control equipment  
• Operates in LED, CFL and other lamp types

### CODES

• UL: ICA, UL-1772, UL-1773, UL-1774, UL-1775, UL-1776, UL-1777, UL-1778, UL-1779, UL-1780, UL-1781, UL-1782, UL-1783, UL-1784, UL-1785, UL-1786, UL-1787, UL-1788, UL-1789, UL-1790, UL-1791, UL-1792, UL-1793, UL-1794, UL-1795, UL-1796, UL-1797, UL-1798, UL-1799, UL-1800, UL-1801, UL-1802, UL-1803, UL-1804, UL-1805, UL-1806, UL-1807, UL-1808, UL-1809, UL-1810, UL-1811, UL-1812, UL-1813, UL-1814, UL-1815, UL-1816, UL-1817, UL-1818, UL-1819, UL-1820, UL-1821, UL-1822, UL-1823, UL-1824, UL-1825, UL-1826, UL-1827, UL-1828, UL-1829, UL-1830, UL-1831, UL-1832, UL-1833, UL-1834, UL-1835, UL-1836, UL-1837, UL-1838, UL-1839, UL-1840, UL-1841, UL-1842, UL-1843, UL-1844, UL-1845, UL-1846, UL-1847, UL-1848, UL-1849, UL-1850, UL-1851, UL-1852, UL-1853, UL-1854, UL-1855, UL-1856, UL-1857, UL-1858, UL-1859, UL-1860, UL-1861, UL-1862, UL-1863, UL-1864, UL-1865, UL-1866, UL-1867, UL-1868, UL-1869, UL-1870, UL-1871, UL-1872, UL-1873, UL-1874, UL-1875, UL-1876, UL-1877, UL-1878, UL-1879, UL-1880, UL-1881, UL-1882, UL-1883, UL-1884, UL-1885, UL-1886, UL-1887, UL-1888, UL-1889, UL-1890, UL-1891, UL-1892, UL-1893, UL-1894, UL-1895, UL-1896, UL-1897, UL-1898, UL-1899, UL-1900, UL-1901, UL-1902, UL-1903, UL-1904, UL-1905, UL-1906, UL-1907, UL-1908, UL-1909, UL-1910, UL-1911, UL-1912, UL-1913, UL-1914, UL-1915, UL-1916, UL-1917, UL-1918, UL-1919, UL-1920, UL-1921, UL-1922, UL-1923, UL-1924, UL-1925, UL-1926, UL-1927, UL-1928, UL-1929, UL-1930, UL-1931, UL-1932, UL-1933, UL-1934, UL-1935, UL-1936, UL-1937, UL-1938, UL-1939, UL-1940, UL-1941, UL-1942, UL-1943, UL-1944, UL-1945, UL-1946, UL-1947, UL-1948, UL-1949, UL-1950, UL-1951, UL-1952, UL-1953, UL-1954, UL-1955, UL-1956, UL-1957, UL-1958, UL-1959, UL-1960, UL-1961, UL-1962, UL-1963, UL-1964, UL-1965, UL-1966, UL-1967, UL-1968, UL-1969, UL-1970, UL-1971, UL-1972, UL-1973, UL-1974, UL-1975, UL-1976, UL-1977, UL-1978, UL-1979, UL-1980, UL-1981, UL-1982, UL-1983, UL-1984, UL-1985, UL-1986, UL-1987, UL-1988, UL-1989, UL-1990, UL-1991, UL-1992, UL-1993, UL-1994, UL-1995, UL-1996, UL-1997, UL-1998, UL-1999, UL-2000

350 W - 2000 W

Single Phase

Uninterrupted  
Emergency  
Lighting and  
Power  
Systems

The smallest of the Defender line is the Defender Mini. The power ranges from 350W to 2000W in a single enclosure which includes a minimum of 90 minutes of battery backup and has many options that are integrated into this small enclosure. It also has wall mounting brackets available that will allow this device to be hung on the wall if required, if not it'll sit on the floor. This is a standard Nema1 enclosure and will handle environments up to 104° F. The data sheet, brochure, technical manual and many other documents are available on our website.

14



# Single Phase 2.4 KW – 4.2 KW

## DEFENDER PLUS

ONLINE EMERGENCY LIGHTING INVERTER

KEEP THE LIGHTS "ON" WHEN YOU NEED THEM THE MOST

UNIQUE PHASE 2.4 KW – 4.2 KW

Defends your environment against unexpected power outage and electrical disturbances by providing:

- DSPM Watchdog software always on guard.
- Daytime monitor keeps you in control 24/7.
- Dependable DSPMNT technology for unsurpassed reliability.
- Economical for the lowest overall cost for your light safety with an Energy Star Rating.
- Temperature compensating technology that controls batteries for the optimal battery life.
- Full light output for up to 90 minutes.
- Built-in emergency for a safe and secure light environment.
- Peak size meets required for all types of homes.
- ECM module is a patented technology used by DSPM.
- Proven solutions for multiple applications such as indoor and outdoor emergency lighting, exit, cash registers, computers, storage electronics, and more.
- 10 Year pre-rated battery warranty.
- 8 Year power train warranty.
- Listed in UL924, UL1776, and UL938.
- Class of Chicago and New York approved.
- Complies with the Buy American Act.

**DSPM.**

Mail to: DSPM, Inc.  
10000 S. 10th Street  
Suite 100  
Tucson, AZ 85747  
Phone: (520) 881-1111  
Fax: (520) 881-1112  
Email: info@dspm.com

## DEFENDER PLUS

### SPECIFICATIONS

The Defender Plus multiple efficient AC Emergency Phase Inverter and emergency lighting features "100% duty" cycle, priority output dependency and security is performance-oriented and is a real subject.

### POWER RATING

- 1.5 KW - 4.2 KW at 120V/240V
- 2.4 KW (single phase)
- 4.2 KW (single phase)
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### INPUT

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### OUTPUT

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### BATTERIES

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### LAMPS AND LOADS

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### CODES

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

Model Name:	
Model:	Serial:
Phase:	Power:

### 2.4 KW - 4.2 KW

### Single Phase

Uninterrupted  
Emergency  
Lighting and  
Power  
Systems

### PROTECTION

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### DESIGNING AND MAINTENANCE

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### GABINET

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### INSTALLATION

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### SPECIAL APPLICATIONS

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

### WARRANTY

- 1.5 KW - 4.2 KW, 120V/240V
- 100% duty cycle
- 100% duty cycle
- 100% duty cycle

DEFENDER PLUS 10

The next model available is the Defender Plus which is a power rating of 2.4kW to 4.2kW. Again, this is a fairly small enclosure, it is 2 ft<sup>2</sup> by approximately 36 inches tall. This product also has all the batteries installed for a minimum of 90 minutes and will fit in most any application where the environment does not exceed 104° F. It is one of our standard Nema 1 enclosures and has many options available. Some of those options are normally off circuits, output distribution built inside the unit. The built-in LED display provides a wealth of information as well as alarm codes in the event of a failure. All of our systems are rated at 100% load (although we do not recommend running them at 100%) and they are capable of running at 100% indefinitely.

# Single Phase 4.7 KW - 21 KW

## DEFENDER 1

**ONLINE EMERGENCY LIGHTING INVERTER**  
KEEP THE LIGHTS "ON" WHEN YOU NEED THEM THE MOST

**Single Phase 4.7 KW - 21 KW**

Defends your environment against unwanted power outage and electrical disturbances by providing:

- DSPM Watchdog software sleeps on guard.
- Display monitor keeps you in control 24/7.
- Revolutionary DSPM technology for unsurpassed reliability.
- Economical for the lowest overall cost for your light safety with an Energy Star Rating.
- Temperature compensating technology that controls batteries for the longest battery life.
- Sealed maintenance free batteries.
- Full light output for entire 90 minutes.
- Self-diagnostics for a safe and secure lighted environment.
- Pure sine wave output for all types of loads.
- ECM module is a patented technology used by DSPM.
- Backup solutions for multiple applications such as indoor and outdoor emergency lighting, exits, cash registers, computers, strategic electronics, and more.
- 10 Year pre-sealed battery warranty.
- 5 Year power train warranty.
- Listed to UL204, UL1778, and UL308.
- Cities of Chicago, Los Angeles and New York approved.
- Complies with the Buy American Act.

**DSPM**  
1001 N. Hudson Ridge Plaza  
Chicago, IL 60611  
Tel: 773.444.1111  
Fax: 773.444.1112

## DEFENDER 1

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

**SPECIFICATIONS**  
The Defender 1 business efficient AC Emergency Power Inverter and uses the latest DSPM technology to provide the most advanced performance and reliability. Features:

**POWER RATING**  
• 4.7 KW - 21 KW in a 100 Amps - 21,000 Rated single phase input and uses the latest DSPM technology to provide the most advanced performance and reliability. Features:

**INPUT**  
• 120V, 208V, 240V, 277V or 480V input range

**OUTPUT**  
• 120V, 208V, 240V, 277V or 480V output range  
• True sine wave output  
• 100% pure sine wave output  
• 100% pure sine wave output  
• 100% pure sine wave output

**BATTERIES**  
• 10 Year pre-sealed battery warranty  
• 5 Year power train warranty  
• 10 Year pre-sealed battery warranty  
• 5 Year power train warranty

**FEATURES AND LOADS**  
• 10 Year pre-sealed battery warranty  
• 5 Year power train warranty  
• 10 Year pre-sealed battery warranty  
• 5 Year power train warranty

**CODES**  
• UL 204, UL 1778, UL 308, UL 1778, UL 308, UL 1778, UL 308  
• Cities of Chicago, Los Angeles and New York approved

**WARRANTY**  
• 10 Year pre-sealed battery warranty  
• 5 Year power train warranty  
• 10 Year pre-sealed battery warranty  
• 5 Year power train warranty

Slide #16:

All of the preceding products have been single phase and this is the largest of the single phase product line. The Defender 1 product line ranges from 4.7 KW through 21 KW. There is no need for a battery cabinet up to the 14 kW level, above the 14 kW level a battery cabinet is required. Again the batteries are included inside the cabinet for a minimum of 90 minutes in many of the options previously mentioned are available in the DE one configuration also. Again some of those include normally off circuitry, internal distribution up to 30 individual pole positions. This is our standard Nema 1 enclosure and is also capable of going to a 104° F environment. On the back of all of our data sheets there is a guide in developing the model number that is right for you.

# Three Phase 3 KW - 125 KW

## DEFENDER 3

ONLINE EMERGENCY LIGHTING INVERTER  
KEEP THE LIGHTS "ON" WHEN YOU NEED THEM THE MOST  
3 KW - 125 KW

Defends your investment against unwanted power outage and electrical damage for protection.

- DSPM Watchdog software always on guard.
- Display monitor keeps you in control 24/7.
- Dependable DSPM/EM technology for unsurpassed reliability.
- Economical for the lowest overall cost for your safety with an Energy Star Rating.
- Temperature compensating technology that controls failures for the longest battery life.
- Global performance from batteries.
- Full light output for entire 90 minutes.
- Self-adjustable for air and device lighted environment.
- Pure sine wave output for all types of loads.
- CCM technology is patented technology used by DSPM.
- Backup solutions for multiple applications such as: indoor and outdoor, alarm lighting, extra, cash registers, computers, strategic electronics, and more.
- 15 Year proven safety warranty.
- Used in schools, hospitals, and homes.
- Listed in UL, UL1973, and UL1974.
- Cities of Chicago and New York approved.
- Complies with the Buy American Act.

**DSPM**

100 N. 10th Street  
100 N. 10th Street  
100 N. 10th Street  
100 N. 10th Street

## DEFENDER 3

### SPECIFICATIONS

The Defender 3 supplies efficient AC Emergency Power to deliver all emergency lighting loads for "fail safe" output, providing accurate dependency and security in sophisticated emergency situations and a solid budget.

### POWER RATING

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
The most advanced technology for safety and reliability.

### INPUT

120VAC, 60Hz, 200 VA, 1000 VA, 1000 VA

### OUTPUT

120VAC, 60Hz, 200 VA, 1000 VA, 1000 VA  
120VAC, 60Hz, 200 VA, 1000 VA, 1000 VA

### BATTERIES

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

### LAMPS AND LOADS

Emergency power provides FULL LIGHT OUTPUT from  
all lamps and loads in the system.  
• Dependable, rugged, compact, lightweight, maintenance  
free, 120VAC, 60Hz, 200 VA, 1000 VA, 1000 VA  
• Resistor or inductive loads, depending on power,  
voltage and load characteristics.  
• Resistor or inductive loads, depending on power,  
voltage and load characteristics.

### CODES

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

Model	Power
1.5 KW	1.5 KW
125 KW	125 KW

3 KW - 120 KW

Three Phase

Uninterrupted  
Emergency  
Lighting and  
Power  
Systems

### PROTECTION

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

### DIAGNOSTICS AND MAINTENANCE

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

### GABINET

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

### INSTALLATION

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

### SPECIAL APPLICATIONS

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

### WARRANTY

1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)  
1.5 KW - 125 KW in 1200 Watts - 1200 Watts (3 KW phase)

The Defender 3 represents our three-phase product line, the smallest of which is 3kW and the largest of which is 125kW. All of our products are UL approved to both UL1778 and UL924. The batteries are included in the inverter cabinet in some of the smaller models but most of these products require multiple battery cabinets in order to provide the 90 minutes of backup. This model features an LCD display and offers many of the same options. The back of the datasheet allows you to develop the model number that is right for you and configure the options for your unique situation. All of our products have Ethernet capability for remote monitoring, alarming and testing functions.



Slide #18:

The Cobra Product line represents our energy efficient standby lighting inverter product. This product is housed in same cabinets as the Defender series but come standard in the standby mode. The major advantage of this product line is the efficiency is increased to 99+%. The input power is shunted to the output terminal blocks with the inverter in a hot standby mode waiting for the utility to fail. In the single phase product line we offer slow transfer which takes approximately 3 to 5 cycles. In the three-phase product line we offer fast transfer which typically occurs in less than one cycle. Again the same options are available as in the defender line.



[illegible]

The Cobra Mini comes in a power range from 350W to 2000W. Again, the batteries are included in the cabinet is approximately 2 ft<sup>2</sup> by 18" deep. This model comes standard with an LED status panel, internal 90 minutes minimum battery run time at full load along with all of the options available for the Defender product line.

20



[illegible]

The Cobra Plus comes in a power range from 2.4kW to 4.2kW. Batteries are included which will provide a minimum of 90 minutes at full load. All of our standard options are available with this unit and as all Cobras provide for a minimum of 99+% efficiency. The cabinet is approximately 2 ft<sup>2</sup> by 36" tall. This product will also handle the 140° F ambient temperature. The LED panel will show the inverter in hot standby and provides a wealth of information as well as alarm codes if there any problems with the machine.

21

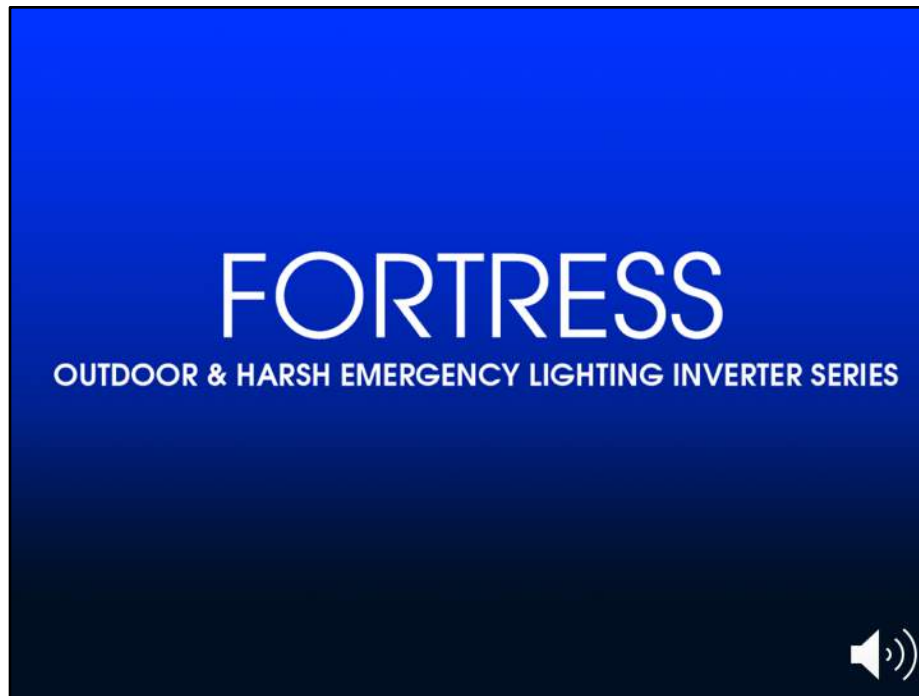
[illegible]

The Cobra 1 is the largest single phase models available. The power range functions from 4.7kW to 21kW. The 14kW and below model offers all batteries in a single enclosure, the enclosure is approximately 39" wide by 18 ½" deep and is 72" tall. The 15kW through 21kW requires an extra battery cabinet to provide for the 90 minutes' minimum battery backup at full load. All standard options are available on this unit and this unit will also operate up to a 140° F environment.

[illegible]

The Cobra 3 is our three-phase model smallest power level is 3kW all the way to 125kW. The 3kW through 8kW models do not require a battery cabinet but all other sizes require one or more battery cabinet. All battery cabinets are matching and provide internal disconnects for each battery string so that maintenance can be performed on the batteries independently when maintenance is performed.

23



Slide #24:

Our Fortress series come standard in either Nema 3R, Nema 4 or Nema 12. The Nema 3R model is a convection cooled forced air capable of withstanding 122° F continuous operation at full load. The Nema 4 and Nema 12 units come standard with air conditioning in a sealed enclosure for the harshest of environments. The Nema 4 and 12 also offers 122° F standard ambient operating temperature with this model has the additional feature of keeping the batteries at a 77°F operating temperature regardless of the external ambient as long as the ambien is 122° F or less.

The product is UL approved up to 30kVA both single-phase in three-phase models. The higher power levels are available and if UL is required we can arrange for field visits to have the UL inspector approved the unit on-site.



# Three Phase 3 KW - 125 KW Outdoor Lighting Inverter



**FORTRESS 3**  
ONLINE OUTDOOR EMERGENCY LIGHTING INVERTER  
KEEP THE LIGHTS "ON" WHEN YOU NEED THEM THE MOST  
RANGE: 3 KW - 125 KW

Defends your environment against unwanted power outage and electrical disturbances by providing:

- DSPM Monitoring software always on guard.
- Display monitor keeps you in control 24/7.
- Dependable DSPM technology for unsurpassed reliability.
- Economical for the lowest overall cost for your light safety with an Energy Star Rating.
- Temperature compensating technology that controls batteries for the longest battery life.
- Sealed maintenance free batteries.
- Full light output for entire 90 minutes.
- Self-diagnostic for a safe and secure lighted environment.
- Plug and wave output for all types of lamps.
- ECM module is a patented technology used by DSPM.
- Backup solutions for multiple applications inside and outdoor emergency lighting, exits, cash registers, computers, storage electronics, and more.
- 10 Year prorated battery warranty.
- 3 Year power input warranty.
- Listed to UL924, UL1778, and UL508.
- Class of Chicago and New York approval.
- Complies with the Buy American Act.

**DSPM**  
1001 S. Jackson Highway  
Chicago, IL 60606  
1-800-444-4444  
Fax: 773-688-0000

**DSPM**  
1001 S. Jackson Highway  
Chicago, IL 60606  
1-800-444-4444  
Fax: 773-688-0000

## FORTRESS 3

**SPECIFICATIONS**  
The Fortress 3 features efficient AC Emergency Power Backup with the latest DSPM technology to provide the most advanced performance and reliability features.

**POWER RATING**  
• 3 KW - 125 KW (120-200-240V 60Hz)  
• 120-200-240V 60Hz (120-200-240V 60Hz)  
• 120-200-240V 60Hz (120-200-240V 60Hz)

**INPUT**  
• 120-200-240V 60Hz (120-200-240V 60Hz)

**OUTPUT**  
• 120-200-240V 60Hz (120-200-240V 60Hz)  
• 120-200-240V 60Hz (120-200-240V 60Hz)

**BATTERIES**  
• 120-200-240V 60Hz (120-200-240V 60Hz)  
• 120-200-240V 60Hz (120-200-240V 60Hz)

**LAMP LOADS**  
• 120-200-240V 60Hz (120-200-240V 60Hz)  
• 120-200-240V 60Hz (120-200-240V 60Hz)

**CODES**  
• 120-200-240V 60Hz (120-200-240V 60Hz)  
• 120-200-240V 60Hz (120-200-240V 60Hz)


**WARRANTY**  
• 120-200-240V 60Hz (120-200-240V 60Hz)  
• 120-200-240V 60Hz (120-200-240V 60Hz)

Slide #26:

The Fortress 3 is our Nema 3R three-phase model and it also comes in two basic cabinet configurations. In the smaller models the batteries are included inside the unit and in the larger systems there are multiple battery cabinets. This unit will operate to 140°F continuously at full load. Eyebolts are standard for lifting this unit onto the concrete pads, as all of the standard options available including the normally off, internal distribution and the Ethernet connections. The battery charger come standard with a temperature compensation circuitry and the standard warranty for the batteries is 10 years prorated one year complete replacement. This is a standard battery warranty for all of our products please see our website for the prorated chart.



# Single Phase 75 Watts - 21 KW Harsh Environment Lighting Inverter




**FORTRESS 1 HARSH**  
ONLINE OUTDOOR EMERGENCY LIGHTING INVERTER  
KEEP THE LIGHTS "ON" WHEN YOU NEED THEM THE MOST  
SINGLE PHASE 75 W - 21 KW

Defends your environment against unwanted power outage and electrical disturbances by providing:

- DSPM Monitoring software always on guard.
- Display monitor keeps you in control 24/7.
- Dependable DSPM technology for unsurpassed reliability.
- Economical for the lowest overall cost for your light safety with an Energy Star Rating.
- Temperature compensating technology that controls batteries for the longest battery life.
- Sealed maintenance free batteries.
- Full light output for entire 90 minutes.
- Self-diagnostic for a safe and secure lighted environment.
- Plug and wave output for all types of lamps.
- ECM module is a patented technology used by DSPM.
- Backup solutions for multiple applications such as indoor and outdoor emergency lighting, exits, cash registers, computers, storage electronics, and more.
- 10 Year pre-rated battery warranty.
- 3 Year power input warranty.
- Listed to UL508, UL1778, and UL508.
- Class of Change and New York approval.
- Complies with the Buy American Act.

**DSPM**  
1001 S. Hudson Highway, Phase 1  
Clematis, FL 34908  
1-800-451-7777  
Fax: 888-888-8888



**FORTRESS 1 HARSH**  
0.075 KW - 21 KW  
Single Phase  
Uninterrupted  
Emergency  
Lighting and  
Power  
Systems

**SPECIFICATIONS**  
The Fortress 1 Harsh is a versatile efficient AC Emergency Power Inverter that converts AC emergency lighting fixtures at 120V output, providing superior dependability and security for commercial and residential environments in an outdoor environment.

**POWER RATING**  
• 0.075 KW (75 Watts) - 21 KW (21 KW) Single Phase  
Input and output the same DSPM technology to provide the most efficient performance and reliability. No loss.

**INPUT**  
• 120V, 60Hz, 240V, 277V or 480V input (NEMA)

**OUTPUT**  
• 120V, 240V, 277V, 480V, 500V or 600V output  
The inverter design is 100% efficient at 100% load.

**BATTERIES**  
• Sealed, maintenance free, maintenance free (VRLA) batteries.  
• 10 Year pre-rated warranty.  
• Temperature compensating technology that controls batteries for the longest battery life.  
• Self-diagnostic for a safe and secure lighted environment.

**TEMPERATURE COMPENSATING**  
• Temperature compensating technology that controls batteries for the longest battery life.

**DIAGNOSTICS AND MAINTENANCE**  
• DSPM Monitoring software always on guard.  
• Display monitor keeps you in control 24/7.  
• Dependable DSPM technology for unsurpassed reliability.  
• Economical for the lowest overall cost for your light safety with an Energy Star Rating.

**WARRANTY**  
• 10 Year pre-rated battery warranty.  
• 3 Year power input warranty.  
• Listed to UL508, UL1778, and UL508.  
• Class of Change and New York approval.  
• Complies with the Buy American Act.

Slide #27:

The Fortress 1 Harsh is our single-phase Nema 4 or Nema 12 outdoor cabinets. The product comes standard with external air conditioning; all batteries are included for a minimum of 90 minutes run time at full load with an operating temperature to 122°F. Our standard cabinets are cold rolled steel that has had special plating and powder coat painting but stainless steel configurations are available for all of the outdoor units if required. All of the standard options are available for this product also. These products come in either online or standby modes of operation.

# Three Phase 3 KW - 125 KW Harsh Environment Lighting Inverter

## FORTRESS 3 HARSH

**ONLINE OUTDOOR EMERGENCY LIGHTING INVERTER**  
KEEP THE LIGHTS "ON" WHEN YOU NEED THEM THE MOST  
Model: 3 KW - 3 KW - 125 KW

Defends your environment against unwanted power outage and electrical disturbances by providing:

- DSPM Monitoring software always on guard.
- Display monitor keeps you in control 24/7.
- Dependable DSPM technology for unsurpassed reliability.
- Economical for the lowest overall cost for your light safety with an Energy Star Rating.
- Temperature compensating technology that controls batteries for the longest battery life.
- Sealed maintenance-free batteries.
- Full light output for entire 90 minutes.
- Self-diagnostic for a safe and secure lighted environment.
- Pure sine wave output for all types of loads.
- ECM module is a patented technology used by DSPM.
- Backup solutions for multiple applications such as indoor and outdoor emergency lighting, exits, cash registers, computers, storage electronics, and more.
- 10 Year pre-vented battery warranty.
- 3 Year power input warranty.
- Listed to UL924, UL1778, and UL 938.
- Class of Chicago and New York approval.
- Complies with the Buy American Act.



**DSPM**  
1001 S. Hudson Highway  
Chicago, IL 60606  
1-800-451-1000  
Fax: 773-688-1000

## FORTRESS 3 HARSH

**3 KW - 125 KW**

**Three Phase**  
**Uninterrupted**  
**Emergency**  
**Lighting and**  
**Power**  
**Systems**

**SPECIFICATIONS**  
The Fortress Harsh 3 maintains efficient AC Emergency Power to operate all emergency lighting systems at 120-240V output, providing superior dependability and security for commercial and residential environments in an outdoor environment.

**POWER RATING**  
• 3 KW - 125 KW (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

**INPUT**  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

**OUTPUT**  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

**BATTERIES**  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

**TEMPERATURE**  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

**LOADS AND LOADS**  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

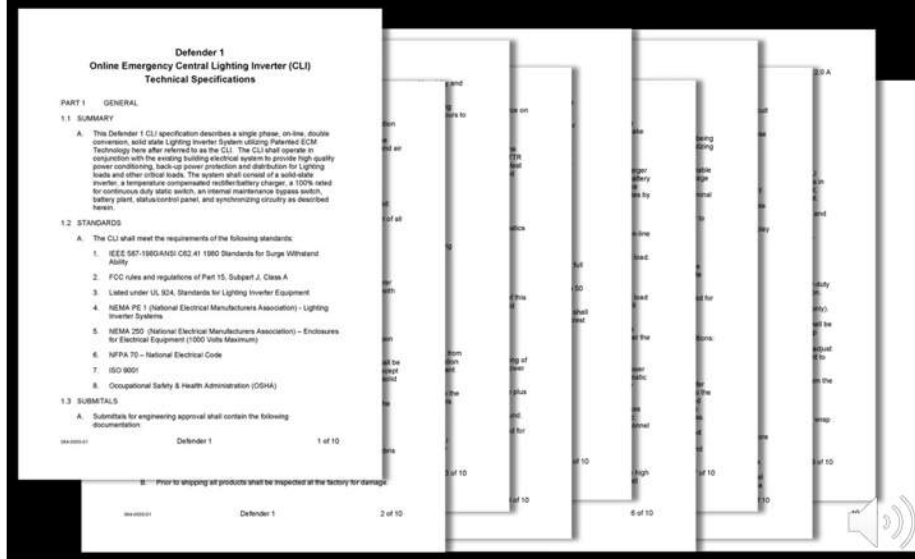
**CODES**  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

**WARRANTY**  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)  
• 120-240V (120-240V)

Slide #28:

The last of our standard products is the Fortress 3 Harsh which is our three-phase Nema 3R or Nema 12 outdoor cabinet unit. The smaller kVA units include internal batteries and the larger units require extra battery cabinets. All cabinets have individual air-conditioners for climate control, which allow the external ambient to be as high as 122°F and it keeps the internal ambient to a comfortable 77°F. This unit is UL approved to 30kVA also but is available up to 125kW. This model is available in the online mode or the standby mode operation.

## Each Inverter also comes with Technical Specifications



### Slide #29:

On our website, you will find complete specifications for all of the above products in a word format or in standard PDF format. All of our units have CAD drawings available for easy importation of the dimensions of the cabinets. Full technical manuals and maintenance manuals are available along with a complete set of brochures and data sheets on all the above products. We have installation guide instructions that will define the input power and output power, input and output current and the voltages for both input and output for ease of determination.

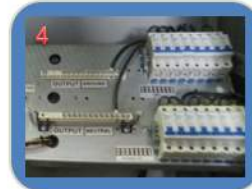
We also have available many training PowerPoint's, and we offer complete service capability either during warranty or after the warranty. Our standard battery warranty is one year full replacement and nine years prorated. We do have available optional twenty-year battery warranties.

To learn more about these options please contact our sales department.

We maintain a 24 hour a day technical service, the phone number is (951)840-0811

## Single/Three Phase Options

1. ECM- Environmental Control Module
2. NOF- Normally OFF Circuit
3. NOH-Normally OFF "Hold On"
4. OCB- Output Circuit Breaker(s)
5. EPO- Emergency Power Off (EPO)
6. RSSP- Remote Indicator Panel
7. SNMP- SNMP Card
8. FC- Form C Contacts
9. SRB- Seismic-Rated Bracket
10. STU(1 or 3)- Onsite Startup
11. EDB- External Dimmer Bypass
12. EMB- External Maintenance Bypass
13. HE- Heat Exchanger
14. HTR- Heater
15. EW- Extended Warranty
16. Maintenance Contracts available
17. Repo- Remote Emergency Power Off (REPO)
18. Modbus, Back Plane, Etc....
19. NiC- NiCad batteries
20. ICT-Internal Control Start
21. ECT-External Control Start



### Slide #30:

This is a list of the options available for both the single-phase and three-phase units. As you can see from the list, we have many options available specifically designed for the Lighting Industry. Prominent among them is the environmental control module and its many functions. Some of the more popular options are the normally off and the normally off hold on. Also, the External Maintenance Bypass Switch allows service to be performed on the unit while the power for the load is coming through the utility. Another convenient option is the output circuit breakers that allow for the distribution of the power from our unit to the individual loads this puts everything inside of one enclosure.

**We truly hope that the new catalogs are easier to use and explain any question that you may have.**

**Remember if you need the Data Sheets they are available as PDF's with the fields ready to fill in.**



Slide #31:

Our catalogs are available for download on our website, along with a wealth of other information as covered above.

We hope you have found this webinar to be helpful and if you need any assistance in specifying and/or understanding our products more fully please do not hesitate to contact one of us.

We thank you for your time and this concludes our webinar thank you very much.



Slide #31:

We maintain a toll-free number which is (877)377-6769 or (877)DSPM-Power

Again thank you for your time.