

# MGE Galaxy 5500 Marine

20/30/40/60/80/100/120 kVA

UPS solutions for marine and offshore environments



20-to-120 kVA, state-of-the-art, three-phase power protection designed to meet a wide range of requirements on board for ships and offshore platforms

- Upgradeable power ranges
- Internal maintenance bypass
- Intuitive monitoring
- Parallel capable
- Front-access servicing
- High-power availability

## Now designed specifically for offshore and marine environments

The MGE Galaxy 5500 Marine is a three-phase uninterruptible power supply (UPS) solution designed to handle the harsh conditions found in offshore and marine environments. It addresses specific marine challenges and applications such as mechanical reinforcements to absorb high levels of vibration and shock.

### Complete solutions based on extensive marine experience

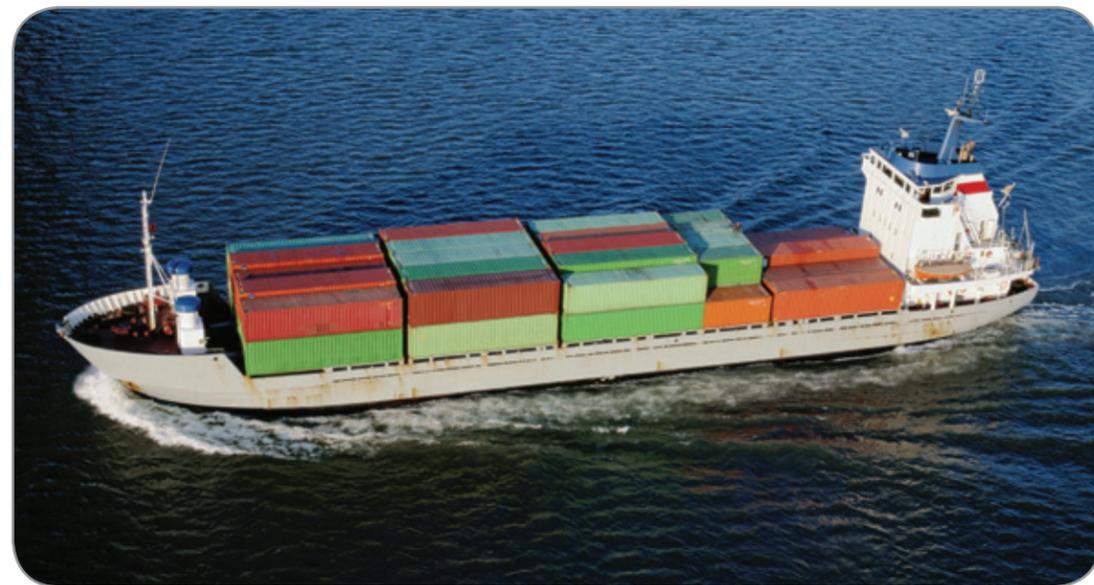
With 30 years in the offshore and marine market, Schneider Electric™ has the experience and solutions to meet the strict power protection needs of the offshore and marine environments.

To better serve our customers, we have designed a standard offshore and marine solution which is composed of:

- Uninterruptible power supply
- Transformer IP22
- 30-minute battery backup time
- For other request, contact us

### DNV type approval

While easy to install and maintain, the MGE Galaxy™ 5500 Marine still meets marine standards. Our UPS is range-tested and validated according to marine standard type approval certificates on all power ratings from 20 to 120 kVA.



## MGE Galaxy 5500 Marine: flexible, efficient, and cost-effective

### Power availability

**Fault tolerance:** A built-in, 100-percent-rated static bypass switch prevents interruption by allowing load transfer to utility power during heavy overloads.

**Redundant components:** Provide increased backup for greater reliability and ensure continuous operation.

**High overload capacity:** Improves downstream circuit discrimination.

### Installation and serviceability

**Easy to install:** All connections are made through the front, eliminating the need for rear or side access.

**Front-access servicing:** Simplifies installation and maintenance while minimizing space requirements.

**Multiple levels of service:** With package or individual service component options, our services are structured so you can choose what APC™ by Schneider Electric will do for you.

### Flexible and upgradeable

**Expandable power ranges:** Scalable power levels to accommodate varying power requirements.

**Higher capacity or redundancy:** Parallel up to six modules to adapt to increasing power needs.

**Simple integration:** Easily works with networking and monitoring systems.

**Extended backup options:** Choice of backup times from five minutes to eight hours to meet varying requirements.

**Compatible:** Operates with inductive and leading power factor loads.

**Field upgradeable:** Change from single to parallel capability, increasing total power capacity by simultaneously using multiple UPS units.

### Low total cost of ownership

**Power factor corrected input:** Prevents the need for oversizing cables, circuit breakers, and generators.

**Efficient:** Up to 94 percent in online double conversion mode.

**Flexible design:** Allows for a wide range of configurations to suit any operating environment.



## MGE Galaxy 5500 features

### 1 IGBT-based technology for power quality

Supplies clean, stable power to sensitive loads, ensuring critical power protection, optimum performance, and extended life.

### 2 Dual input

Allows for connection to two separate input sources for increased availability.

### 3 Parallel operation

Connect as many as six units in parallel for capacity and redundancy to grow with your power requirements.

### 4 Redundant components

Provide increased backup for greater reliability and ensure continuous operation.

### 5 Built-in static and maintenance bypass

Enables the UPS unit to transfer the load to utility power, without interruption, in the event of heavy overload or fault.

### 6 Preinstalled network management card

Allows for easy network integration, compliant with IPv6, SNMPv3, and PowerChute™ suite.

### 7 Skid marine

Skid and shock absorbers align with the UPS and are designed for marine environment constraints.

### 8 Skid offshore

These take into account offshore environmental constraints.

### 9 3 points locked + lock door

Designed to meet significant vibration and facilitate maintenance phases.



## MGE Galaxy 5500 Marine options

### Integrated isolation transformer

The MGE Galaxy 5500 Marine can be equipped with an isolation transformer, fully integrated to the UPS unit depending on the customer's galvanic isolation need (output or input). Integrating the transformer directly to the UPS unit saves footprint and provides all the benefits of galvanic isolation, including a very robust buffer between the utility and the critical load.

### Options

- Parallel system bypass cabinets
- Communications cards (AP9635CH)
- Covered transformer for isolation and voltage adaptation (440/400 V and 690/400 V)
- Additional protection with optional IEC® filter (C2)
- Synchronization option (to synchronize UPS unit with external source)
- TN-C earthing systems
- Mains 1 and 2 Common
- Empty auxiliary and battery cabinets



Schneider Electric UPS Network Management Card 2 with environment monitoring, out-of-band access, and modbus



MGE Galaxy 5500 Marine Battery Cabinet

## Customized UPS solutions to meet your needs

Schneider Electric is your trusted advisor to plan, build, and operate the marine UPS solution adapted to your needs. Our highly skilled project teams customize your UPS based on your requirements:

### Enhanced performance

Adapted solutions take into account harmonics reduction, earthing systems, galvanic isolation, etc.

### Mechanical UPS modifications

Impact of specific environments (such as dust, water, rodents) and other requirements (like RAL, top/bottom entries, lock).

### Environmental adaptation

Batteries with long autonomy, low-voltage distribution panel and coupling panel, etc.



## Designed according to marine certification

Schneider Electric has extensive experience with onboard equipment, so we have developed the MGE Galaxy 5500 Marine to handle harsh environments and meet marine standards:

- Designed according to International Maritime Organization (IMO) and International Association of Classification Societies Ltd. (IACS) marine requirements
- Successfully passes severe marine tests
- Compliant with the requirements of the major classification societies: DNV GL, Lloyds Register, ABS and others



## Expert services for start-up, monitoring, and maintenance

### Gain peace of mind about your critical applications.

Schneider Electric Critical Power & Cooling Services (CPCS) provides the highest quality services and solutions by trained and trusted professionals. Our world-class services offer a smart way to build, operate, and maintain your critical applications, ensuring the right people, in the right place, at the right time.

### Assembly and Start-Up Service

Assembly and Start-Up Service by a certified Field Service Engineer (FSE) ensures full factory warranty coverage. A Schneider Electric-certified installation of your solution ensures your equipment is properly and safely configured for optimal performance. This service is offered during normal business hours with scheduling upgrade options available to suit your needs.

### Advantage Plans

Flexible service packages offer hassle-free system maintenance to improve uptime at a predictable cost. These packages provide your system with the care it needs to operate most efficiently while minimizing downtime. The Advantage Plus, Prime, and Ultra are full-service packages that include technical support, preventive maintenance, onboard, in-port, and on-platform response, and remote monitoring. Response time upgrades are available.

### Remote Monitoring Service (RMS)

RMS is an economical and easy-to-use Web-based service that lets you quickly respond to environmental or system changes. Trained technicians provide secure, 24-hour monitoring of your physical infrastructure to diagnose and resolve problems before they become critical.

### Preventive Maintenance

Preventive Maintenance onboard, in-port, and on-platform examinations of your critical systems are designed to prevent problems before they occur and keep your system running at maximum efficiency.



Packages	Advantage Plus	Advantage Prime	Advantage Ultra
Annual preventive maintenance visit	Yes	Yes	Yes
Next-business-day on-site response <sup>1</sup>	Yes	Yes	Yes
Remote monitoring service	Yes	Yes	Yes
Technical support	Yes	Yes	Yes
Parts <sup>2</sup>	Discounted rates	Discounted rates	All included
Labor and travel	Standard rates	All included	All included

1: Upgrades to an eight-hour or four-hour on-site response time and an upgrade to 24/7 preventive maintenance service may be selected where available.  
2: Batteries and proactive replacement of parts not included.

# Technical specifications

Rated power (kVA/kW)	20/18	30/27	40/36	60/54	80/72	100/90	120/108
<b>Normal AC supply input</b>							
Input voltage (V)	250 V <sup>1</sup> to 470 V, three-phase						
Normal and bypass AC inputs	Separate, common in option						
Frequency (Hz)	45 Hz – 66 Hz						
Input power factor	> 0.99						
THDi	< 3% full load						
<b>Bypass AC input</b>							
Input voltage range	380 V, 400 V, 415 V= +/- 10%, 440 V =+6 -10%						
Frequency	50 Hz/60 Hz, +/- 10%						
<b>Output</b>							
Phase-to-phase output voltage (V)	380 V/400 V/415 V/440 V, three-phase + neutral						
Load power factor	0.9						
Output frequency	50 or 60 Hz, +/- 0.1%						
Overload capacity utility operation	125% for 10 minutes, 150% for 60 seconds						
Output voltage regulation	+/- 1%						
Voltage distortion (THD)	< 2% phase-to-phase and phase-to-neutral for non-linear loads						
Output voltage tolerance	+1% static, +/- 2% at 100% load step						
<b>Overall efficiency</b>							
Efficiency at full load (AC-AC) at 100% load	Up to 94%						
ECO mode	Up to 97% <sup>2</sup>						
<b>Communication and management</b>							
Control panel	Multifunction LCD, status, and control console						
<b>Dimensions and weights</b>							
Weight in kg (UPS without battery), offshore/marine	456/488 kg			566/588 kg			
UPS offshore (H x W x D)	2,130 x 735 x 950 mm						
UPS marine 60/80 kVA (H x W x D)	2,240 x 735 x 1,095 mm						
UPS marine 120 kVA (H x W x D)	2,220 x 735 x 1,095 mm						
Battery cabinet narrow (H x W x D)	2,000 x 700 x 800 mm, weight: 110 kg						
Battery cabinet wide (H x W x D)	2,000 x 1,000 x 800 mm, weight: 136 kg						
Auxiliary cabinet narrow (H x W x D)	2,000 x 700 x 800 mm, weight: 148 kg						
Auxiliary cabinet wide (H x W x D)	2,000 x 1,000 x 800 mm, weight: 199 kg						
<b>Regulatory</b>							
Safety	IEC 62040-1, EN 62040-1						
EMC/EMI/RFI	IEC 62040-2, EN 62040-2						
Approval	CE, TUV						
Marine approval	Yes						
<b>Environmental</b>							
Operating temperature	0 °C to 40 °C <sup>3</sup>						
Storage temperature	-20 °C to 45 °C						
Relative humidity	0% – 95% non-condensing						
Operating elevation	0 m – 1,000 m						
Storage elevation	0 m – 12,000 m						
Max. audible noise at 1 m from unit	55.5 dBA			61.4 dBA		60.2 dBA	

#### They trust us:

ABB Marine Solutions, STX Europe, DCNS, Hyundai Heavy Industries, Kongsberg Maritime, Meyer Werft, Northrop Grumman, Raytheon®, Samsung Heavy Industry, AIDA Cruises, Brittany Ferries, Carnival Cruise, CMA CGM, Cunard, French Navy, Hurtigruten, MSC, NCL, RCI

<sup>1</sup> At 70% load level

<sup>2</sup> Only available in unitary products

<sup>3</sup> There is a risk of premature battery aging above 25 °C