



THE COMPETITIVE ADVANTAGE

The recognized standard of excellence in marine power generation



How do Northern Lights products stack up to the competition?

Northern Lights marine generator sets (5-20 kW @ 1800 RPM; 4.5 kW - 16 kW @ 1500 RPM)

NORTHERN LIGHTS	COMPETITOR
<ul style="list-style-type: none"> Common service points, including filters, fills and drains are on a single side. In addition to easy access, this permits the generator set to be installed near a wall or bulkhead, saving valuable space. 	<ul style="list-style-type: none"> Service points are often difficult to access and dictate the genset's placement in the engine room.
<ul style="list-style-type: none"> Engine provides high torque at low RPM. 	<ul style="list-style-type: none"> Typically based on higher RPM engines that have a shorter engine life.
<ul style="list-style-type: none"> Experienced engineering and high-quality components reduce belts and hoses to a minimum. 	<ul style="list-style-type: none"> Low-cost, unreliable belts and hoses used throughout, creating multiple failure points.
<ul style="list-style-type: none"> Single-piece cast iron heat exchanger, expansion tank and exhaust manifold. Resistant to corrosion and electrolysis. 	<ul style="list-style-type: none"> Marinization components are often welded together, and can fail in a marine environment. Heat exchangers use aluminum or plastic intakes.
<ul style="list-style-type: none"> Copper-nickel heat exchangers and cast iron manifolds resist corrosion and electrolysis. They empty of seawater when not in use and don't require zincs. 	<ul style="list-style-type: none"> Copper heat exchangers and aluminum exhaust manifolds are more prone to corrosion and need zinc replacement.
<ul style="list-style-type: none"> Seawater pump is gear driven (no belts) and use mechanical water seals. 	<ul style="list-style-type: none"> Pumps are often difficult to access, belt driven and have rubber lip seals, which are prone to degradation through drying and expansion.
<ul style="list-style-type: none"> Simple DC logic design is reliable, inexpensive and simple to repair. Relays are easy to replace when required 	<ul style="list-style-type: none"> Electrical system uses printed circuit boards which are more expensive and less reliable.
<ul style="list-style-type: none"> Integrated base frame and enclosure design creates a quiet, clean, compact package. Allows for double isolation mounts. High-grade stainless steel latches. 	<ul style="list-style-type: none"> Sound enclosure has less impressive vibration and sound attenuation. More latches; inferior quality.
<ul style="list-style-type: none"> Auxiliary winding for 300% short circuit protection. This protects the overall generator, and is required by many classification societies. 	<ul style="list-style-type: none"> Classification compliance through short circuit protection available as an option, not standard.
<ul style="list-style-type: none"> Equipped for the easy installation of shutdown and pre-alarm switches. 	<ul style="list-style-type: none"> Shutdown and pre-alarm switches are not readily available, and are not easily installed.

Northern Lights products are backed by a dealer network over 350 strong in more than 40 countries, with unparalleled factory support. By any measure, Northern Lights power generation systems are the world's best.

THE BENCHMARK FOR DIESEL GENERATORS

Northern Lights defines quality in every area.

- Each generator is **designed and engineered for long life, easy installation & service, simplicity and most importantly durability**. Elegant simplicity and ultimate reliability result from engineering away complicated excess parts.
- Only the **best available materials and components** are used in order to provide long life and excellent performance with low service costs.
- **Quality is part of every manufacturing step**, from careful hand assembly to testing every engine and generator with its wiring harness and control panel.
- **Simplicity**: extra parts are engineered out; if it isn't there it can't fail. Fewer problem areas mean fewer repairs and lower costs.
- **Serviceability**: Northern Lights are engineered for low maintenance and easy service. Routine inspection and maintenance is more likely to be performed when it's easy and inexpensive.

