

# Emery Electric

## MARINE SOLAR POWER CASE STUDY



SYSTEM SPECIFICATIONS	
<b>Location</b>	Victoria, British Columbia
<b>System Power</b>	22.6kW in 9 configurations
<b>Components</b>	<ul style="list-style-type: none"><li>• FX inverter/charger</li><li>• MATE3 system display and controller</li></ul>

### OVERVIEW

Since 1996, 80-year-old Emery Electric has provided maintenance, repair and engineering upgrades to Royal Canadian Navy vessels. In 2006, the company began servicing the Navy's eight Orca vessels. Primarily used for training, these boats prepare naval officers for at-sea service. Orca vessels are an integral part of the Royal Canadian Navy's training program. It is essential that their power sources be water resistant, durable and reliable.

### CHALLENGE

- Select a power management inverter/charger with sufficient output and small enough footprint to work within the space and weight restrictions of the Orca vessels
- Ensure ease of installation with an inverter/charger that can be mounted without difficulty
- Install an inverter/charger that can be preprogrammed to require no additional attention from the crew and that resists seawater that might enter vessel machinery rooms

### SOLUTION

- 8 Orca vessels installed with 9 OutBack Power FX inverter/chargers and a MATE3 controller
- FX inverters have a die-cast aluminum chassis with a powder-coated finish to prevent corrosion
- Inverters power 120V electrical components for tasks like steering, navigation and fire pump hauling
- MATE3 controller makes maintenance easy by providing display of the complete power system

### OUTCOME

- Inverter/chargers mount easily on bulkhead walls and occupy minimal space on board Navy vessels
- Versatile FX inverter/chargers can serve in multiple roles; power conversion and battery charging
- FX inverter/charger reliability reduces maintenance costs and helps eliminate downtime
- MATE3 controller delivers remote power management and monitoring capabilities

