

## European Solar and Energy Storage Solutions

# Echandia battery Åland



## Overview

---

What is Echandia battery system?

Echandia has developed a lightweight, high-performance battery system based on Toshiba's LTO (Lithium-Titanium-Oxide) cells. This new generation of batteries is extremely fast charging and delivers high power instantly. In 2020 Echandia will launch a breakthrough 6c system that will allow us to fully charge a battery system in less than 10 minutes.

What kind of battery does Echandia use?

Echandia's lightweight, high-performance battery system uses Toshiba's LTO (Lithium-Titanium-Oxide) cells. Echandia is Toshiba's preferred marine module integrator. The result is a fast-charging battery that delivers high power instantly. In 2020, Echandia will launch a breakthrough 6c battery system that can be charged in less than 10 minutes.

What is Echandia Power?

Echandia Power is an air-cooled, lithium-ion battery system, certified for maritime heavy-duty usage. It is ideally suited for hybridization applications where high power is required under shorter periods of time, typically five minutes or under per cycle. The Echandia Power battery system has a lightweight rack construction and high performance.

Are Echandia batteries lighter?

Our battery systems can be up to 50% lighter and significantly smaller than most alternatives. This is possible because our systems require less oversizing to meet the energy requirement. Offering both power and safety, the Echandia battery system is built for heavy-duty applications and certified for maritime use.

Who makes Echandia batteries?

The company manufactures batteries for marine vessels. (Echandia Photo)

Echandia, a Swedish startup making batteries and electronics to power maritime vessels, is opening a manufacturing and sales facility in Western Washington — its first site in North America.

How long does Echandia energy battery last?

Echandia Energy can live up to tough cycling conditions over longer durations, typically six minutes or longer per cycle. The capabilities of Echandia Energy battery system solve multiple challenges for energy demanding operational profiles. It will deliver energy with a guaranteed functional life expectancy of at least five years.

## Echandia battery Åland

---



### **Echandia to supply battery system for a second emission-free ...**

Now we can announce that Echandia has also been appointed to supply highly specialized battery energy storage solutions for the second vessel. Battery power abates fossil fuels. The recently signed order for the battery vessel with its 730-kWh installation, is optimized for high-speed commuting with charging points on both ends of the route.

### **Career**

Since 2018, Echandia has delivered safe energy storage solutions for heavy-duty industrial applications, primarily for maritime industry. Echandia's customers are global shipyards, system integrators and shipowners. Echandia offers durable, robust and safe battery systems that are appreciated by the market.



### **Echandia - energy storage solutions for heavy-duty maritime ...**

Offering both power and safety, the Echandia battery system is built for heavy-duty applications and certified for maritime use. Is it a good fit for your project? Get all the details and technical specifications here.



## Echandia Selected to Provide Maritime Battery Systems for San ...

Echandia has rapidly grown to become one of the world's leading maritime battery system providers, having delivered nearly 70 systems for electrification projects globally. Echandia's battery systems are recognized as the safest, most resilient, and longest-lasting maritime battery systems available. For more information please contact:



## Swedish maritime battery startup opens first U.S. outpost in

Echandia, a Swedish startup making batteries and electronics to power maritime vessels, is opening a manufacturing and sales facility in Western Washington -- its first site in North America.

## Damen and Echandia partner to scale up electric shipping

Under the agreement, users will be able to access Echandia's E-LTO battery system, which will be owned and managed by Vattenfall, with the aim of lowering the barrier to entry for electric shipping.



## Echandia Energy

The Echandia Energy battery system is an air-cooled, lithium-ion battery system, certified for maritime heavy-duty usage. With its lightweight rack construction and high performance, Echandia Energy is ideally suited for applications

that ...



## Echandia to supply Danish Molslinjen with battery systems for ...

The choice of Echandia's system was made based on a substantially lower total cost of ownership combined with outstanding safety features and low weight. Echandia battery systems have a high degree of utilization of installed capacity, which results in an overall system size and weight that few competing systems can match.



## Echandia - energy storage solutions for heavy-duty maritime ...

Offering both power and safety, the Echandia battery system is built for heavy-duty applications and certified for maritime use. Is it a good fit for your project? Get all the details and technical ...

## Echandia , LinkedIn

?Congrats to Echandia Marine AB! This Swedish energy innovator is setting up a new production facility in the USA. ? A SkyDeck IPP alum via our partnership with the Swedish Energy Agency,

Echandia's advanced maritime battery systems will power San Francisco Bay Ferry's groundbreaking REEF (Rapid Electric Emission Free) Ferry Program, which will launch the ...

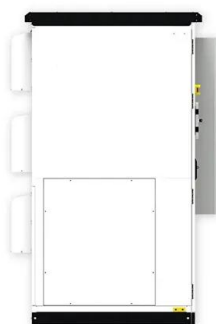


## Echandia Energy

The Echandia Energy battery system is an air-cooled, lithium-ion battery system, certified for maritime heavy-duty usage. With its lightweight rack construction and high performance, Echandia Energy is ideally suited for applications that require safe operation over a long lifetime.

## What causes marine battery fires?

And battery compartments, ventilation and isolation must follow strict class rules to make sure external factors cannot impact battery modules and cells. But obviously, if a battery is inherently safe - i.e., have a close to zero ...

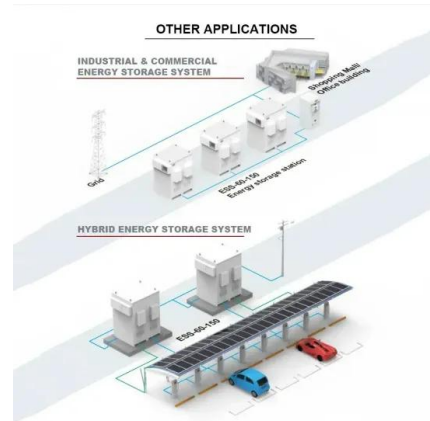


## Market Segments , Maritime , Rail , Renewable Energy , Echandia

Echandia brings expertise from the maritime industry in safety factors, including fire-fighting, testing, gas detection and thermal management. Renewable Energy and peak-shaving. Echandia supplies high-reliability LTO battery solutions to maritime ...

## Zero-emission energy solutions for heavy-duty industry , Echandia

Echandia is a world-leading provider of zero-emission energy systems for heavy-duty industry. We deliver the world's most advanced LTO battery modules for the maritime and rail markets. The company has also developed a state-of-the-art fuel-cell solution, alongside Canadian company Redrock Power.



## Echandia wins order to supply Öresundslinjen with maritime battery

"This order once again demonstrates the recognition of Echandia's battery systems within the maritime market, particularly in Denmark. Following the successful deployment of harbour buses in Copenhagen in 2020 and securing the contract for Molslinjen's RoPax ferries for Als and Samsö in 2022, it is evident that Danish shipowners are

## Bureau Veritas grants type approval for Echandia battery system

Echandia's LTO battery system has been type approved by Bureau Veritas. The Swedish battery and fuel cell systems company's solution was proved to meet the most stringent international performance and safety requirements, and customer requirements for service life and reliability, relating to 10 years of heavy operation without interruption





## Echandia Deliver LTO Battery Systems for Dutch Electric and ...

The choice fell on Echandia's LTO battery system as it optimizes weight and safety and is also economically most attractive. LTO is today the safest battery option to be used in a maritime environment without the risk of overheating and potential fires. Our proprietary E-LTO system does not require any additional measures such as water

## Echandia Power

The Echandia Power battery system is an air-cooled, lithium-ion battery system, certified for maritime heavy-duty usage. With its lightweight rack construction and high performance, Echandia Power is ideally suited for hybridization applications where high power is required under shorter periods of time, typically five minutes or under per cycle.



## LTO-Batteries for heavy duty applications

When dimensioning an energy storage solution, the aim should be to dimension and install the most compact system possible, that fulfills the energy requirement of what the vessel is supposed to do or the function the battery has. This involves an understanding of the operational profile and consequently the duty cycle on the battery system.

## Echandia wins order to supply Öresundslinjen with maritime battery

Echandia, the leading Swedish maritime battery system supplier, has received an order from Öresundslinjen for the conversion of M/S Hamlet from fossil fuel dependency to full electrical operation. The battery system is scheduled for delivery in the first half of 2025.



## Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://ssab-proiect.eu>