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# AENEAS

## innovAtive ENErgy storage systems onboArd vesselS

## Deliverable D4.2

Hardware design and assembly of the module prototypes

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# Public Summary

This deliverable discusses the conceptual design of the ESS modules that are developed in the AENEAS project. Firstly, the module design requirements are covered, considering the constraints the load profiles place on the modules, as well as the constraints that test facilities place on the modules for testing later in the project. Secondly, upon concluding these system requirements and design constraints, the conceptual designs are discussed for the three use cases and the corresponding energy storage system concepts. For each use case, the conceptual designs focus on the electrical sizing based on the requirements and constraints, the consecutive thermal sizing, the mechanical packaging design, and the balance of plant considerations.