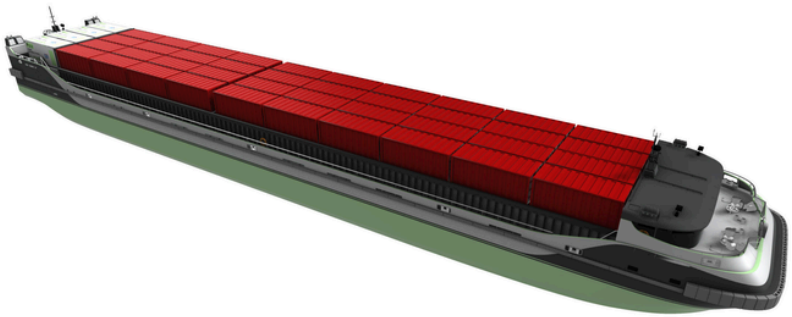
Full Electric Barge

PM120E



The PM120E is powered by four containerized battery packs, providing power to the entire vessel, and it can carry 120 TEU containers.

This vessel is suitable for inland river navigation with a range of 347 kilometers. It operates on a containerized battery "swap" mode, with four container batteries placed on the aft deck, allowing for onboard discharge and shore-side charging. The battery cells are lithium iron phosphate square batteries, managed by a Battery Management System (BMS) and accessible via 4G communication. Each container battery charges through two 500A DC chargers on the shore, with a charging time of approximately 5.25 hours (20%-80%SOC).

The vessel utilizes an advanced fully rotatable contra-rotating propeller system as its main propulsion system, suitable for shallow-water navigation, offering flexible operation and a small turning radius. It features top-mounted 300/350KW permanent magnet propulsion motors controlled by dual water-cooled DC-AC inverters. The DC-LINK direct current grid cabinet operates with dual DC busbars in

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DIMENSION

LOA (m)	80
Bridge H(m)	6.7
Beam (m)	12.6
Depth(m)	4.7
Draft (m)	3.0
Displacement (t)	2608

PERFORMANCE

Cruising Speed (knot)	7
Cruise Range(Km)	347
Crew (person)	8
Battery	4 ×1548kWh

PROPULSION SYSTEM

Full Electric Propulsion System

Standard Version:

Main propulsion power
2 x 300kW

Performance Version:

Main propulsion power
2 x 400kW

FEATURE

- Full Electric
- Battery Swapping Mode
- Flexible Operation
- Zero Emission