10kWp off-grid floating solar power plant

Oostende Port









INTRODUCTION

- The 10kWp (130 m2) floating solar project was built as key part of the <u>DualPorts</u> EU-funded initiative and included 10 companies from 7 countries
- System is designed for 44 m/s wind speed and 2 m waves
- Installation day: 14th of January 2022

PROJECT BENEFITS

- Saving land space
- Clean energy
- Grid dependence reduction
- System movement analysing and correlation with energy production

FLOATING SYSTEM

- Special for near shore locations
- HelioRec[™] wind and wave-resistant floating solar technology with "Hydro-Lock" stability feature
- Flexible and robust connectors
- Passive cooling system
- 24 floaters and 40 footpaths based on circular economy approach
- GreenPipe cable protectors Snap Hardlock™ and Snap Panzar™

PV EQUIPMENT

- 24 solar panels Jinko Cheetah HC72M/400W
 Mono Perc Half Cell Module
- Inverter Victron MultiPlus-II 24/5kVa/230V
- 4 MPPTs for each string
- Battery MG LFP 25.6V/280Ah/7.2kWh HV
- DC cables/UV Resistant EN 50618/Water presence: AD8 submerged
- Remote control and automation

MOORING LINES

- 4 anchor blocks/ 2 tons each
- 10 mm DIN 766 stainless steel chain
- 10 mm and 15 mm polypropylene ropes

MONITORING SYSTEM

- System movement assessment with 4 accelerometers ZET 7152-N
- Offline recorder and interface converter
- Data gathering and analysing with ML





