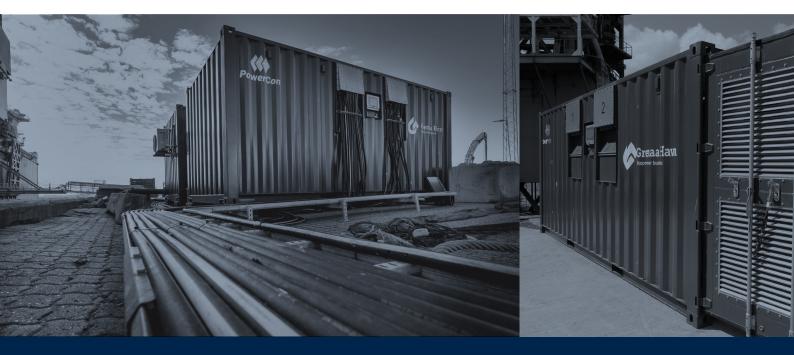
ONSHORE POWER SUPPLY 2MVA DUAL



Shore Power or Onshore Power Supply (OPS) is the supply of electricity for ships at berth, so the ship's internal auxiliary engines can be switched off. The use of shore power replaces the use of fossil fuels and will lead to a significant reduction in local and global air emissions.

Port of Grenaa aims to reduce polution and contribute to a cleaner environment. PowerCon's 2 MVA low voltage OPS are built according to IEC 80005 and are integrated into a standard flexible and movable 20-foot shipping container.

The system contains all necessary equipment to connect 1 or 2 vessels to a land-based grid connection and includes the measurement and display of electricity consumption via web-based remote access.

The OPS system is operated via a touch screen on the front of the container.

The system has two separate vessel outputs were the voltage and frequency can be set individually. For each output 3 phase cables can be connected. For each vessel it is possible to supply up to 1,000kVa at 230-690V, alternatively the OPS system can supply one large vessel with up to 2,000kVa at 230-690V.

CONNECTION OF VESSELS

All with automatic synchronization or simply enter the required frequency, phase sequence and voltage on the display. No need for any manual changeovers or switching operations.

AUTOMATIC SYNCHRONIZATION BETWEEN OPS AND VESSELS VIA THREE OPTIONS

1) The vessels synchronize towards the OPS system

- 2) The OPS system synchronizes towards the vessel, via droop control
- Black start of the vessel were the OPS system outputs the desired voltage and frequency

DATA FOR THE VESSEL CONNECTIONS

- Voltage supply at 60Hz: 230V to 690V.
- Voltage supply at 50Hz: 230V to 690V.

The connections to the vessels are made directly with cables.



DENMARK'S MOST CENTRAL DEEP WATER PORT



The Port of Grenaa is one of the biggest commercial and industrial ports in Denmark, centrally located and with plenty of space for development.

Strong focus on core segments and excellent network connections make the Port of Grenaa the foundation on which to realise the potential of your business.

Have a dialogue with the Port of Grenaa we have the space, the network and

