Fuel Cells · Power Systems

Proton Motor
Fuel Cell Stacks and Systems

Cleantech Competence

FACT SHEET

Stationary

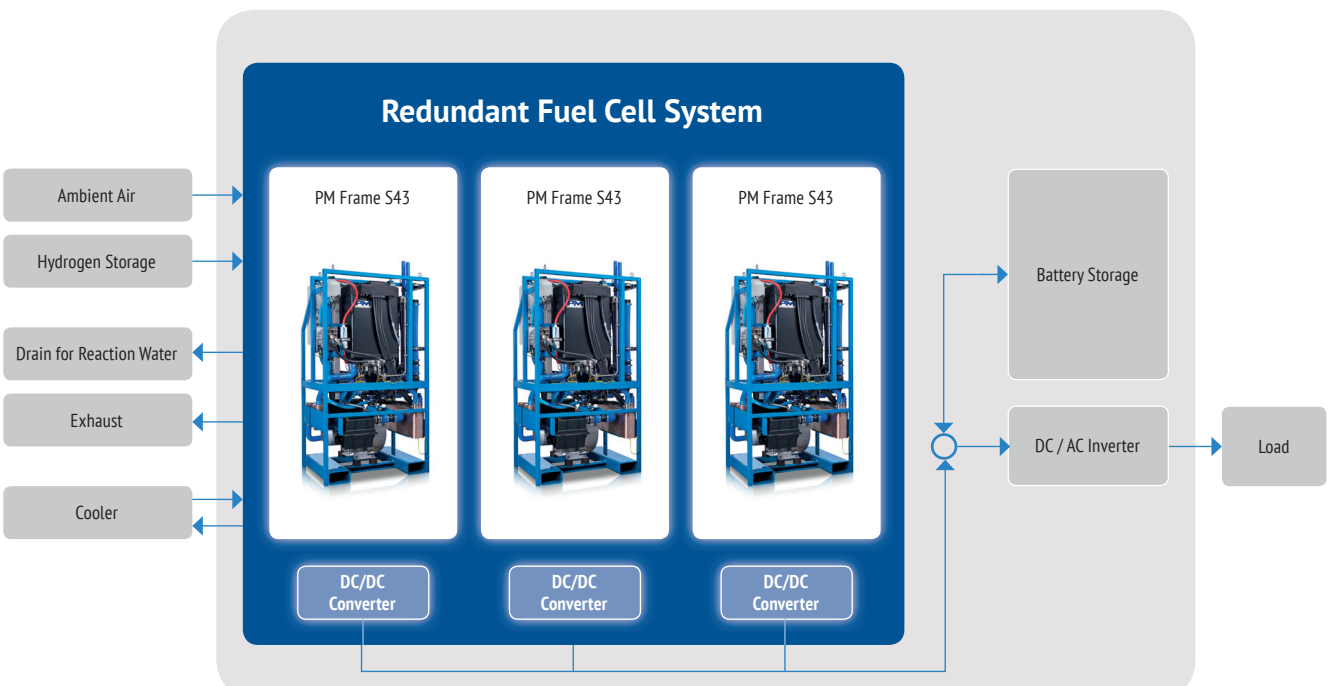
HyShelter 240
(Hydrogen tank not included)

HyShelter 240

Hybrid Turnkey Solution for Off-grid Power Supply

- Installed fuel cell system consists of 3 PM Frame S43
- Redundant fuel cell system, as each PM Frame can be controlled individually
- Fuel cell system for covering the base load and charging of battery system
- Installed battery system buffers load fluctuations and peaks
- Installation of the complete system on a truck trailer enables transport and location-independent operation

Block Diagram of HyShelter 240



KEY FACTS

Installed Fuel Cell Power*
max. 127.8 kW

Battery Storage
180kWh

Output
Peak Power 240 kVA /1s
Nominal Power 180 kVA
Voltage 230/400 VAC, 50Hz

Hydrogen Quality
ISO 14687:2019 (Type I, Grade D) /
SAE J 2719

Hydrogen Supply Pressure
6 – 8 bar_g

Hydrogen Consumption
Max. 8.3 kg/h

Ambient Temperature
-20°C to +40 °C

Operation Altitude without Power Derating
< 2000 m

Humidity
< 95 % r.H. (non condensing)

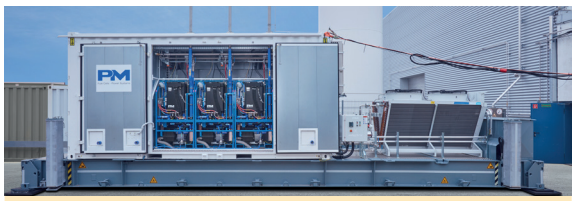
Dimensions (incl. exhaust pipes)
LxBxH 12.22 x 2.690 x 4.53 m

* BoL, before DC/DC, w/o BoP

Specifications are subject to change without notice. Specifications and descriptions in this document were in effect at the time of publication. Proton Motor Fuel Cell GmbH reserved the right to changes at any time

APPLICATION AREAS

- Seasonal Energy Storage
- Charging Stations
- Off-grid Power Supply
- Emergency Power Supply
- Grid Stabilization



REFERENCE

- **Customer:**
  Shell Deutschland Oil GmbH
- **Application:**
  Off-grid power supply for an energy autonomous and mobile hydrogen fuelling station
- **Location:**
  Dachau, Germany
- **Commissioning:**
  2022

Proton Motor Fuel Cell GmbH
Benzstraße 7
D-82178 Puchheim
Germany

Phone +49 (0) 89 1276265-11
Fax +49 (0) 89 1276265-99
email sales@proton-motor.de
Web www.proton-motor.de