

FACT SHEET

Rail



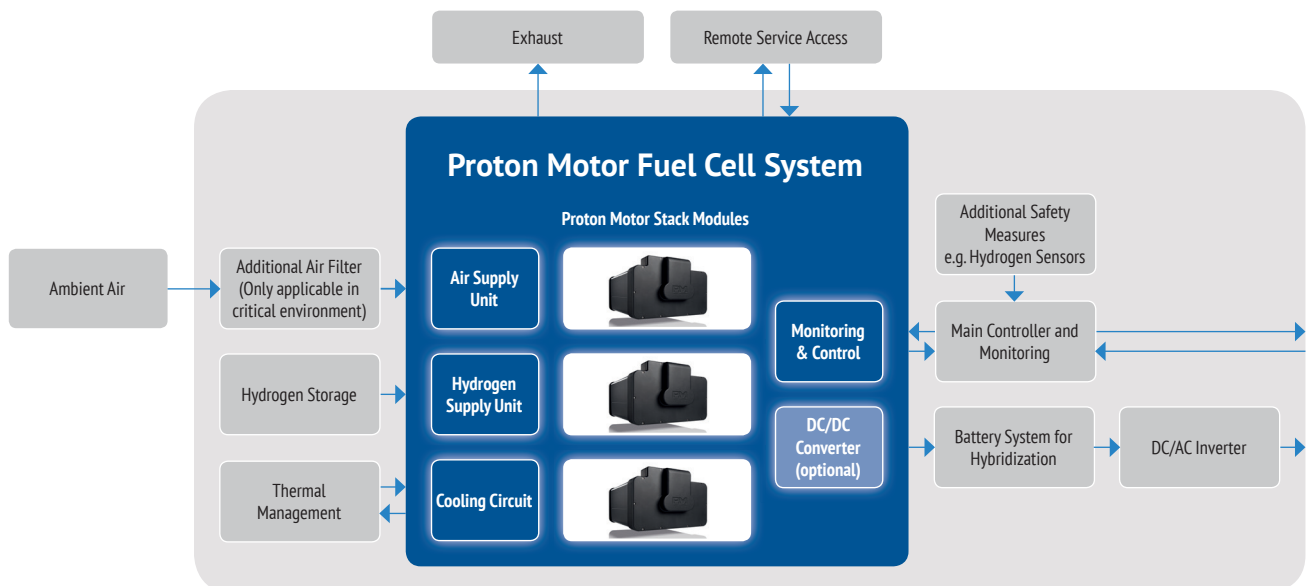
HyRail - Packaging example

HyRail

Customizable fuel cell kit for customer-specific installation

- Modular Fuel Cell System
- Fuel Cell System with single or multiple PM400 Stack Modules
- Adaption to customer specific installation possible
- Fuel cell control unit included
- Integration & commissioning support
- Service & maintenance support
- Training as certified service partners

Electrical Powertrain with Fuel Cell System



KEY FACTS



Realizable Power Levels*
(max. fuel cell power installed)
up to 213 kW



Optional Voltage Adaption with DC/DC-Converter
up to 770 VDC (adjustable)



Hydrogen Quality
ISO 14687-2 / SAE J2719



Hydrogen Supply Pressure
3.0 - 7.5 bar_g



Operation and Storage Temperature
-30 to +45 °C



Operation Altitude without Power Derating
< 2000 m

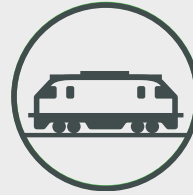


Humidity
< 95 % r.H. (non condensing)

* Begin of Life

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



Locomotive



Railcar



Railway Service And Special Vehicles

BENEFITS

- Zero emissions
- Long lifetime due to graphite bipolar plates
- Silent operation
- Maintenance concept with fuel cell substitute
- Refurbishment of fuel cell stack possible
- Developed and manufactured in Germany
- European supply chain

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