

Methanol Power System

H₃ 30k Rack



- 30 kW power output
- Scalable system
- Liquid or aircooled operation
- Configurable LV/HV or inverted power output
- Simple installation and autonomous operation

Methanol systems. This scalable Reformed Methanol Fuel Cell rack can deliver LV/HV output and the embedded charge controller enables regulated DC power for various applications. The RMFC features catalytic startup enabling fast startup and minimum power consumption in standby and during the startup process. A separate panel for overall safety and operation is available for the system.

Methanol fueled. High temperature PEM with an integrated methanol reformer for onsite hydrogen generation enables high power density and high fuel energy density. The fuel is a methanol mix fuel readily available through several global suppliers. The integration of fuel cell and reformer enables a highly energy efficient system due to reuse of fuel cell waste heat for the reformation process.

Multiple applications. The Methanol power system has multiple applications both off- or on-grid including application in critical backup power or temporary power for marine applications. Other markets include Wireless Base Stations, Secure Communications Networks and auxiliary power units.

Specifications

Electrical characteristics

Parameter	
Modules	6
Power output, electrical [kW]	30
Voltage output [V_{DC}]	350-750
Turn down [%]	0-100%

Operational characteristics

Fuel mix	60% vol methanol /40% vol deionized water
Fuel consumption ¹ [L/kWh]	24-27
Power supply [V], [kW]	230V, 9kW
Power output, heat [W]	10
Ambient temperature [°C]	-20 to 50
Installation temperature [°C]	0 to 40

Connection characteristics

Communications	CAN/LAN
Fuel connection [mm]	Ø14
Coolant in/out [mm]	Ø22
Venting [mm]	Ø80 (Ø130 in air-cooled operation)
Exhaust [mm]	Ø100 (Ø300 in air-cooled operation)

Mechanical characteristics

Height - [mm]	2200
Width [mm]	700
Depth [mm]	1000
Weight [Kg] ²	795

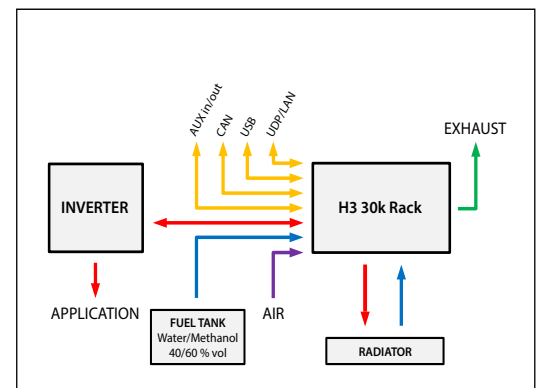
¹ Fuel consumption for 6 FC modules @ 20°C

² Incl. FC modules and all internal BOP components

Serenergy also offers support in form of application engineering and a complete system design to ensure performance and simplicity is maintained throughout the product development process.

Please contact us at sales@serenergy.com for more information, pricing and availability.

Serenergy A/S reserves the right to change specifications and descriptions without notice.



H3 30k rack - system diagram

