Electrum

Hydrogen-powered PEM fuel cell system for integration into a 19" rack

- scalable, flexible power output
- > remote monitoring and maintenance capability
- easy integration into existing rack systems
- optionally available with heat utilization



	Electrum 24	Electrum 24 WA
nominal voltage	24 V DC*	24 V DC*
electr. current	40 A (nominal)	40 A (nominal)
electr. power	1,000 W	1,000 W
thermal power		500 Watt @ 45 °C supply line
operating temperature	5 - 35 °C	5 - 35 °C
efficiency	45 %	> 45 %, depends on heat utilization
media	hydrogen 3.0 (dry), ambient air	hydrogen 3.0 (dry), ambient air
nom. H2 consumption	ca. 19 sl per min	ca. 19 sl per min
H2 inlet pressure	1.8 - 3.0 bar g	1.8 - 3.0 bar g
heat dissipation	ambient air	additional cooling via fluid possible
dimensions (WxHxL)	482 (19") x 222.25 (5 HE) x 500 mm	482 (19") x 222.25 (5 HE) x 500 mm
weight (empty)	~12 kg	~15 kg
response time	15 S	15 S
article no.	50000	51000

Electrum is a highly integrated, hydrogen-powered PEM fuel cell system specifically designed for seamless integration into 19" racks. As a reliable and efficient solution, it is ideally suited for stationary applications such as home energy systems and emergency power supply.

The system is based on PEM fuel cell stacks from balticFuelCells and delivers an electrical nominal output of 1.000 W. Thanks to its compact, robust housing, Electrum can be flexibly integrated into existing 19" infrastructures. An integrated DC-DC converter allows adaptation to various customer requirements (e.g. compatibility with different battery technologies). Utilization of process heat is also possible, along with custom adaptations — ensuring maximum control and flexibility tailored to specific application needs.

^{*} other voltage available on request



PEM Fuel Cell System

The PEM fuel cell acts as a highly efficient energy converter: hydrogen is directly converted into electrical energy, with heat and water as by-products. By optionally utilizing the generated heat in your application, the overall efficiency can be further increased – for an even more sustainable and cost-effective energy supply.



Service/Remote Monitoring

Customized services for your Electrum system: From seamless integration into your application and commissioning to ongoing operational monitoring — our experienced team of experts supports you at every stage.



Scalable to your power needs

Electrum is specifically designed for high flexibility: combining multiple Electrum modules allows to increase total electrical output as required — for applications demanding high power and enhanced fail-safe reliability.

