

Operating Time Extension of an Existing UPS

Reference

Extension of the backup time of an existing UPS for a remote radio transmitter repeater station.

The system is based on the Heliocentris Nexa® 1200 fuel cell module. An integrated, highly-efficient DC/DC converter, specially developed for the Nexa® 1200, operates as a battery charger and extends the backup time of the batteries of an existing UPS depending on the hydrogen supply.

All components are integrated in a 19" rack which is installed in an existing container. The corresponding gas supply is located outside the container in an outdoor gas cylinder enclosure newly developed by Heliocentris. The cabinet can accommodate two 50 liter compressed gas cylinders.

The integrated gas warning system and the cooling system guarantee a safe operation without supervision. Voltages, currents, temperatures and humidity are recorded in an industrial PC and transmitted through a data interface to a remote monitoring point.



Technical Data

Backup time	approx. 20 h
Fuel cell system	Nexa® 1200
Rated output	1.2 kW
Rated voltage	24 VDC
Fuel	Hydrogen 5.0
Hydrogen capacity	1.6 kg
Hydrogen fill pressure	200 bar
Battery capacity	60 Ah

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Heliocentris Energiesysteme GmbH

Clean Energy Solutions
Rudower Chaussee 29
12489 Berlin, Germany
Tel. + 49 (0) 30 340 601 777
Fax + 49 (0) 30 340 601 599
energy@heliocentris.com
www.heliocentris.com