

Power-box 180W

DC power source with hydrogen fuel cell

Portable & lightweight

Zero emission

Flexible positioning

(indoors & outdoors)

Quiet, long-term operation

(replacement of hydrogen pressure cylinders without interrupting the operation is possible)

Wide range of usage

(rescue and emergency services, field hospitals, army, lights, power for mobile radio stations etc.)

2 versions:

Power-box 180W Standard

9,9 kg, 650W short-term power,
5 to 55 °C operating temp.

Power-box 180W Extreme

14,3 kg, 400W short-term power,
-20 to 55 °C operating temp.



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Power-box 180W

DC power source with hydrogen fuel cell

Power-box 180W Standard and Extreme are portable DC power sources with a hydrogen fuel cell, designed and built by ÚJV Řež, a.s. in cooperation with the University of Chemistry and Technology in Prague. The fuel cell serves as a source of electricity and the fluctuations in consumption are compensated by the use of accumulators. The hydrogen pressure cylinder is located next to the unit.

The **Standard** unit is designed to power medical devices for transporting wounded people or organs in case of long distance transplants, as a backup source for field hospitals, to power communication and monitoring devices and for charging caravan and yacht batteries. The device is suitable for rescuers, speleologists, workers in the energy sector as well as telecommunication services.

The **Extreme** unit is designed for rescue and safety services in emergency situations where the public distribution network cannot be used. It is used to power command stations, mobile laboratories and field units that require more than one hour of power supply. The unit is also suitable for power and telecom companies, for operation in closed spaces, including underground and mine areas.

	Power-box 180W Standard	Power-box 180W Extreme
Long-term power	180 W	180 W
Short-term power	650 W (3 min)	400 W (5 min)
Peak power	1 kW (3 s)	700 W (3 s)
Rated output voltage	24 V	24 V
Outlets	4x USB, GSD4	4X USB, Threaded clamps
Operating temperature	5 – 55°C	-20 – 55°C
Fuel	H2 (99.95%)	H2 (99.95%)
Dimensions	500 x 395 x 215	607 x 475 x 275
Weight	9.9 kg	14.3 kg
IP cover (storage/operation)	IP54/IP52	IP67/IP63

Benefits of the system:

- **silent operation**
- **zero emission**
(waste product - water vapour)
- **lower weight than a battery or Diesel unit**
- **flexible positioning (outdoors, indoors)**
- **long-term system operation (possible replacement of hydrogen pressure cylinders without interrupting operation)**
- **suitable for appliances with variable consumption**
- **easy control, automatic operation**



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