Hydrogen Fuel Cell 579593 (8803-00)



LabVolt Series

Datasheet



Table of Contents

| General Description | 3 |
|---------------------|---|
| Specifications | 3 |

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General Description

The Hydrogen Fuel Cell module is a fuel cell stack comprising a fuel cell controller, a hydrogen flow meter, a dc-to-dc converter (required to obtain a regulated dc output from the fuel cell stack), an air supply, and seven LED displays for visualizing all essential system parameters (e.g., current, voltage, temperature, fuel, air supply).

A USB port on the front panel enables use of the included data acquisition software to perform further analysis on the fuel cell stack. This software provides support for the experiments (visualization, data logging, fully automated experiments) in the manual.

Specifications

| Parameter | Value |
|--|--|
| Rated Output | 40 W |
| Maximum Output | 50 W |
| No-Load Voltage | 9 V |
| Current at Rated Output | 8 A |
| Hydrogen Consumption at Rated Output | 580 sml/min |
| Hydrogen Purity for Operation | A minimum of 4.0 (99.99%) |
| Permissible Hydrogen Pressure | 0.4 – 0.8 bar |
| Permissible Ambient Temperature during Operation | 5–35°C (41-95°F) |
| Communication Port | USB |
| Pressure Regulator | |
| Description | Two-stage, hydrogen |
| Inlet Pressure | Max. 19 bar |
| Outlet Pressure | 0.6 ± 0.1 bar |
| Accessories | |
| | Leak detection kit |
| | Safety connection leads |
| | Software |
| Physical Characteristics | |
| Dimensions (H x W x D) | 307 x 579 x 533 mm (12.1 x 22.8 x 21 in) |
| Net Weight | TBE |

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