

## AIRCELL<sup>®</sup>

### Hydrogen Air Cooled Fuel Cell Systems



1000 ACS - Front side



## Applications



TELECOM, BACK-UP  
& OFF-GRID POWER

INDUSTRY & OEM

EVENTS & OUTDOOR  
ACTIVITIES

MOBILITY PROJECTS

## Introduction

H2SYS is a fuel cell engineering company focused on the development of PEM Fuel Cell Systems for OEM (Original Equipment Manufacturer).

Our technical team works with proven and cost effective stack suppliers. We design the complete system to produce safely DC power with hydrogen and oxygen.

AIRCELL is a wide range of available power with four different products.

All our Fuel Cell Systems have been designed for reliability and optimum electric efficiency. They can be provided with a Canbus or Modbus interface to be monitored through a PC-interface.

## Features & Benefits

- ✓ Modular and scalable
- ✓ Long lasting performance
- ✓ High efficiency
- ✓ Communication interface
- ✓ Complete system ready to use
- ✓ Self Powered
- ✓ Optional:
  - Cells voltage monitoring system
  - Supervision and recording PC interface

[www.h2sys.fr](http://www.h2sys.fr)

# Specific technical data

AIRCELL Model Performances	650 ACS	1000 ACS	2100 ACS	3200 ACS
Nominal power (W)	650	1000	2100	3200
Maximal power (W)	830	1250	2470	3680
Output voltage (V)	12,6 - 18	19,6 - 28	39,2 - 56	56 - 80
Minimum / Nominal Current (A)	5 - 60			
Sizes (mm): L x l x h <sup>1</sup>	392 x 214 x 330	436 x 158 x 330	441 x 122 x 550	445 x 122 x 634
Mass (kg)	10	13	20	24

<sup>1</sup> Sizes and mass of the system may vary without any prior notice.

Hydrogen				
Hydrogen specification	Minimum quality grade 3,5 (99,95%) <sup>2</sup>			
Hydrogen inlet pressure	2 - 10 barg			
Fuel consumption (g/kWh)	66 g/kWh			
Nominal fuel consumption (NI/min)	6 NI/min	10 NI/min	20 NI/min	30 NI/min

<sup>2</sup> According to quality characteristics of Type 1, Grade E and Category 3 hydrogen fuel specified in BS ISO 14687-3:2014.

Operation	
System power supply	12 or 24 Vdc (@start 200W)
Starting procedure	Start/Stop button or CANbus message (optional: user interface)
Start	Less than 5 s
Communication protocol	CANbus - ISO 11989
Running ambient temperature range	+ 5 °C to + 45°C <sup>3</sup>
Collectable data	Voltage - Current - H <sub>2</sub> consumption - Electric efficiency - Temperature
Optional features	Modbus protocol - RTU pr TCP/IP Measuring of Cells Voltage s with FCVM board

<sup>3</sup> Larger temperature range on demand. Contact us for details.

Certification	
Designed under CE directives	2014/35/EU 2014/30/EU 2006/42/EC