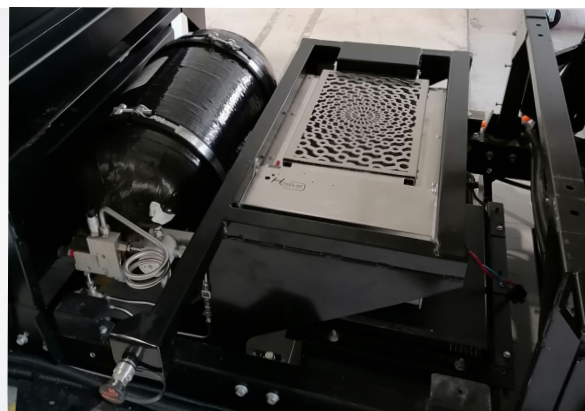


### Hydrogen tank and fuel cell system customized assembly driven by H2SYS control unit



#### General

H2SYS offers range extenders for vehicles and electric machines.

With the expansion of full electrification, H2 range extenders are simple solutions to upgrade battery range solutions.

The H2 range extender allows to:

- Reduce recharging times with fill-ups in a few minutes;
- Increase the effective range;
- Reduce embedded battery capacity;
- Increase the lifespan of battery pack.

The range extender consists of an Aircell® fuel cell coupled to a type III or type IV hydrogen tank with all its auxiliaries (tank head, pressure sensor, TPRD). Equipments are delivered in separated blocks. On request H2SYS can supply a standard or customized support frame.

#### Features

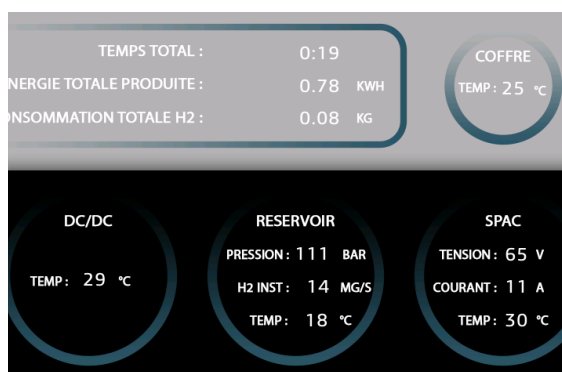
Compliant with european directives: EMC, Low Voltage, Machine

Integration in vehicle or electric machine

Customized output voltage ( from 24 to 100 Vdc)

H2SYS proprietary control unit

On request technical support for integration



## Technical data

### PERFORMANCES

Fuel Cell	1000 W / 3000 W
Total embedded hydrogen quantity	Standard H2 Tank : 1,8 kg (other quantity on request)
Additional autonomy	Depending on applications and usage profiles used as reference *
Starting time to full power	< 4 min

### OPERATION

Fuel cell technology	PEM
H2 specification	Minimum quality grade 3,5 (99,95%)
Hydrogen consumption	About 30NI/min - < 68g/kWh
Operating ambient T°C range	From 0°C to +40°C (Optional feature -5°C)

### TANK

Tank	Standard: Type III
Nominal pressure	350 bar (700 bar on request)
Volume of hydrogen tank	74 L
Filling time	< 10 min
Filling connection	SAEJ2600 compliant

### ELECTRONIC

Output voltage	Standard: 48V (24 - 120 on request)
Communication	CANbus

### INTEGRATION

Empty space for integration ( L x W x H)	1400*600*800 mm
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### CERTIFICATION AND EUROPEAN CONFORMITY

Fuel Cell	Stack : IEC 62282-2:2012 Low voltage - 2014/35/EU CEM - 2014/30/UE
Tank	EC 79/2009, R134, PED

\* Example: Double the range (from 100 to 200 km) for a light utility vehicle.



More information?



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