

# + SPECIFICATIONS

## Powertrain

Max Power	100kW
Fuel Cell Type	PEM EKPO NM5 Evo
Fuel Cell Power	60kW
Embedded H2 Mass	1,5kg @ 70MPa or 0,820kg @ 35MPa
Battery Cell Type	Li-Ion
Battery Power	40kW
Battery System Capacity	Up to 800Wh
Battery System C-Rate	Up to 50C
Battery System Voltage	240V
E-motor Type	Permanent magnet synchronous
E-motor max torque	230Nm
E motor mass	12,5kg (10kW/kg power density)



## Electronics

VCU	MARELLI VCU320
BMS	TEXYS Group
Communication bus	CAN
Instrumentation & Software	TEXYS Group / H2 Motronics

## Sub-assembly and dimensions

Frame and swing arm	Designed & manufactured by FASTER Tubular welded
Front Brake	Double Disc Ø300 th.5.5mm
Rear Brake	Single Disc, Ø250mm + Regenerative electric brake

## Performances

Approx. power (in kW)	100
Total weight (in kg)	225
Power to weight ratio (kW/kg)	0,44
Range in race use (in km)	45





# + THE GENESIS

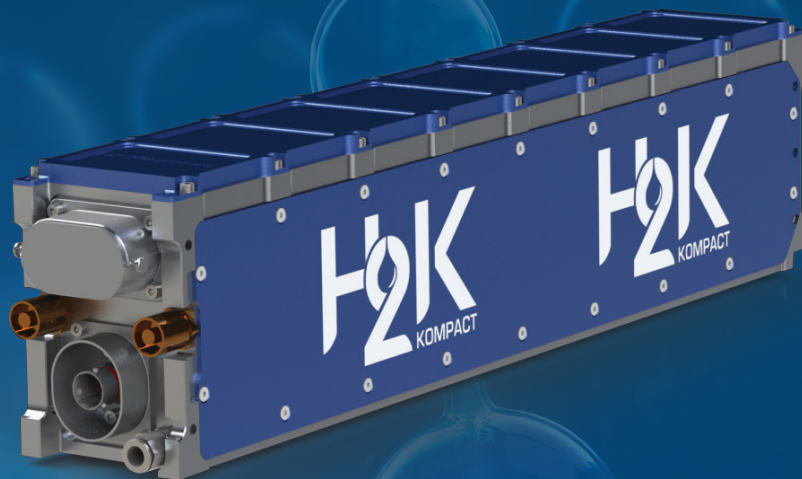
The idea from this H2K project came from discussions between Philippe Leuwers, CEO of TEXYS Group, and Michel Augizeau, Founder of TECMAS, an internationally renowned bike racing team. They both have the will to transform their passion for racing motorbikes into progress. Their inspiration will bring innovation to light mobility.

This project is named H2K, for H2 Kompact, illustrating the key objectives of this concept: the development of a highly compact fuel cell hydrogen powertrain, with the best possible efficiency.

H2 MOTRONICS expresses the will to demonstrate its capacity in technical and innovative project management, in developing H2K, a proof of concept with a modern powertrain. The extreme constraints of a racing motorcycle will showcase both compactness and performance requirements.



# + H2 MOTRONICS BATTERY MODULE



## Pack specifications

Cell type	Lithium ion
Number of cells	25

## Electrical data

Capacity	174Wh
Nominal Voltage	60V
Max voltage	70V
Min voltage	50V

## Operating specifications

Operating temperature	0 to 55°C
Max current	200A 10s (charge or discharge within 10 seconds)

## Mechanical data

Dimensions (L x W x H) mm	481,5 x 78,8 x 112,4
Dry weight	6,8kg ±150g