

BALLARD™

FCgen®-H2PM

UltraCap designed for, FCgen®-H2PM 1.7kW



The UltraCap makes battery-free bridging energy available for the FCgen®-H2PM 1.7kW fuel cell system and contributes to the high reliability of the fuel cell solution.

The UltraCaps complement the fuel cell system, and can sustain about one million discharge and recharge cycles.

The UltraCap unit is designed to ensure instant backup power to the DC line, from the time when the grid fails until the time when the fuel cell stacks are in full production, supplying the full power demand from the customer loads - maximum 1.7kW. The UltraCap unit consists of ultracapacitors and a charger, eliminating the need for external

batteries and rectifier. The UltraCap unit is mounted in a 19" rack and connected to the Fuel Cell Controller Unit with an AC line and a DC line. On the UltraCap Module there is a circuit breaker installed, which also can be used as an ON/OFF switch. The 4 Power Indicators (LED's) on the front panel of the UltraCap unit indicate if the ultracapacitors are charged.

Charger: The 500W bridge power charger charges the ultracapacitors to the specified voltage and maintains that voltage during standby mode. The charger is powered from the grid via the Fuel Cell Controller Unit.

Product Specifications

Specification	Value
UltraCap Unit (WxDxH)	445 x 602 x 112 mm (17.52" x 23.70" x 4.41")
UltraCap Weight	18 kg (40 lbs.)
Enclosure Material	Alu-Zink Coated Sheet Metal and Aluminum
Indoor Installation Environment	Pollution degree 2
Temperature Range	+5°C to +46°C (+41°F to +115°F) Indoor Temperature
Storage Temperature Range	-40°C to +70°C (-40°F to +158°F)
Relative Humidity	5%-95% Non-Condensing
Max. Voltage	58.5 Vdc
AC Power Input	110/230 VAC (90-264 VAC) 50/60Hz
Standby Power Consumption	25W (AC)
Max. Charging Power	500W (AC)
Capacitance	56 F
Certifications	CE