





## ▶ PRODUCT SPECIFICATIONS

Rated Power [kW]	3.8	4.8	10.5	14.3	17.2 2	1.0
DC voltage (at 300A) <sup>1</sup>	12.8	16.0	35.0	48.0	57.4	70.2
Mass (with no coolant) [kg]	7.1	7.2	10.7	13	15	17
Stack core length [mm]	92	104	174	220	255	302
Stack core width [mm]	760	760	760	760	760	760
Stack core height [mm]	60	60	60	60	60	60

PEM (Proton Exchange Membrane) fuel cell stack			
Maximum current	300A		
Shock and vibration	Automotive <sup>2</sup>		
Fuel composition (pre-humidification)	> 95% H <sub>2</sub> <sup>3</sup>		
Oxidant composition (pre-humidification)	Compressed ambient (filtered to remove particulates)		
Storage temperature <sup>4</sup>	-40 to 60° C (-40 to 140° F)		
Start-up temperature	> 2° C (> 36° F)		
Fluid inlet temperature (operating)	2 to 68° C (36 to 154° F) <sup>1</sup>		
External ambient temperature (operating)	-25 to 75° C⁴ (-13 to 167° F)⁴		
	Maximum current Shock and vibration Fuel composition (pre-humidification) Oxidant composition (pre-humidification) Storage temperature Start-up temperature Fluid inlet temperature (operating) External ambient		

## Additional information available upon request.

- $1. \ \ Values \ achieved \ at \ Ballard-specified \ conditions \ at \ the \ beginning \ of \ operational \ life.$
- 2. Vibration 5g, meets USABC/SNL CRADA No. SC961447 USABC 10. Shock: 5g sections of IEC 60068-2-27 Ea and IEC 60068-2-29 Eb.
- 3. H<sub>2</sub> purity as per SAE specifications: J2719 with exceptions.
- $4. \ \ Allowable temperature following approved Ballard dry out procedure only, without dry out procedure + 2-60 {\circ} C.$

## FCvelocity-9SSL

Ballard Power Systems offers a proton exchange membrane (PEM) fuel cell stack based on our proven, fourth generation transportation stack technology.

Available now to customers with fuel cell stack integration capabilities, the FCvelocity–9SSL is designed to perform in rugged conditions and is scalable depending upon customer requirements. Stacks are available in power increments from approximately 4 to 21kilowatts.

The FCvelocity–9SSL provides stable electrical power to a system over a wide range of operating and environmental conditions. A liquid-cooled, hydrogen-fueled product, the FCvelocity–9SSL uses Ballard's standard fuel cell components.

Suitable for motive applications, the FCvelocity-9SSL features fast, dynamic response, robust and reliable operation and durable packaging.

The FCvelocity–9SSL establishes a new standard of performance by optimizing reliability, power density and compatibility with customer system requirements.

Please contact us for product availability and pricing.