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Company Name	Product	Market Entry Date	Price	Picture	Where Demonstrated	Comments
Acumentrics	Super Cell					They are exploring various applications such as: Portable and stationary SOFC for the Broadband, Commercial, Residential, Remote, and Auxiliary Vehicle markets
Anuvu Incorporated						Signed Memorandum of Understanding with Celerity, Inc. of Milpitas, CA to provide manufacturing and associated management services for Anuvu Fuel Cell Products.
Astris Energi, Inc.	Model E3	In development				
Avista Labs (now ReliOn)	SR-12 500W PEM Fuel Cell	Available – can be shipped w/in 2 weeks of site's assessment	\$5,000 - \$8,000		Has undergone thousands of real world testing.	The SR-12 is a popular fuel cell for engineering and technical school use. All Avista Labs fuel cells are excellent study vehicles for chemical, mechanical, materials and electrical engineering students. In addition, many utilities and power engineering businesses find the SR-12 a perfect platform for understanding fuel cell technology and identifying application opportunities for the future.
Avista Labs (now ReliOn)	Independence 100	Available (Introduced in 2002)				Designed for remote signaling, signs and monitoring devices. The product has both power supply and battery charging modes. The Independence 100 can improve the reliability and quality of backup power provided during limited duration outages by reducing dependence on batteries, generator sets, and other technologies that pose environmental hazards.
Avista Labs (now ReliOn)	Independence 500	Available (Introduced in 2002)				Designed for battery charging applications. The product will affordably add hours of backup run time as well as extend battery life. It can be mounted in a standard 19-inch rack.
Avista Labs (now ReliOn)	Independence 1000	Available (Introduced in 2001)				Designed to provide power in a variety of backup power situations, especially as a replacement for battery stacks needed to provide power for extended periods of time, and as an alternative back up power source where internal combustion generators are not practical. It can be mounted in a standard 19 inch rack
AXANE	PEMFCs	In development			This igloo demonstrates an AXANE fuel cell system (2002)	AXANE is located in France, in Sassenage. They have the mission to develop on a global scale complete systems that produce energy from fuel cells powered by hydrogen
Ball Aerospace & Technologies Corp.	Snorkler	Available for Purchase	Contact Ball Aerospace			Mindless Power Source: extremely rugged
Ball Aerospace & Technologies Corp.	PPS-100	Available for Purchase	Contact Ball Aerospace		Works in any orientation/position. Can with stand 3 ft. drop onto concrete.	Mindless Power Source: extremely rugged The Portable Power System-100 setup for charging rechargeable batteries will supply 900 Wh of energy with the 2.3 Kg tank shown. (1 Kg, 1 KWh, 1 liter hydrogen sources being developed.)

Ball Aerospace & Technologies Corp.	PPS-50	Available for Purchase	Contact Ball Aerospace		Works in any orientation/position. Can with stand 3 ft. drop onto concrete.	Mindless Power Source: extremely rugged A portable power system with 1.8 kWh of H2 energy (16.5 pounds) replaces 26.5 pounds of batteries
Ball Aerospace & Technologies Corp.	PPS-30					Mindless Power Source: extremely rugged
Ball Aerospace & Technologies Corp.	DMFC-60				Achieved 1760 Whr/kg (methanol) in 8/2001	
Ball Aerospace & Technologies Corp.	DMFC-20	2002 prototype				2200 to 2600 Wh/kg (methanol) expected with this project.
Ballard Power Systems	Nexa™ Power Module	Available (2001)	N/A		The Nexa™ power module – Ballard's first commercial fuel cell product for backup and intermittent portable applications. The Nexa™ power module generates up to 1200 watts of unregulated DC power. The unit is engineered as a component subsystem, ready for integration into business and consumer products designed by original equipment manufacturers.	For additional information about current products and business activities, please visit www.ballard.com . Ballard Power Systems Inc. reserves the right to change specifications or to discontinue products at any time. 7/2002 – Ballard had produced almost 600 units with the primary customer being Coleman Powermate.
Coleman	Coleman Powermate AirGen™	Available for industrial uses Residential: Soon to Come	\$5,995.00 (-\$7,495.00 for residential)		Industrial version: H2 supplied by external compressed H2 tanks Residential/backup version: H2 supplied by internal hydride canisters	Can be used in doors. It took Coleman two years to create a distribution system and to satisfy regulators (a Department of Transportation ruling is the cause for the delay), but the company is confident a \$100 refill could be delivered anywhere in the United States within two days.
Energy Conversion Devices, Inc.						
Energy Visions, Inc.					Demonstrated in March 2002 to the military	
Forschungszentrum Jülich GmbH	DMFCs	In development				In 2001, their 500 W prototype achieved 120 W/L energy density and almost 50 mW/cm2 power density
Fuel Cell Resources, Inc.	PS1000	Available				
Fuel Cell Resources, Inc.	PS 2000	Available				
Fuel Cell Resources, Inc.	PS3000	Available				
Fuel Cell Resources, Inc.	PS5000	Available				

Fuel Cell Resources, Inc.	PS7000	Available				
Fuel Cell Systems, Inc.	Mk2 module	Testing phase				
Fuel Cell Technologies LTD	Portable APU	Planned future program				High-efficiency diesel/gas fuelled auxiliary power unit for transportation industry
Giner, Inc	Direct Methanol Fuel Cell					Very Compact Design; (>10cells/inch) Lightweight; Inexpensive, Rugged, Molded Graphite, Cell Separators; Seals to High Pressure (>100 psig) Liquid Feed System Results in a Simplified Fuel Cell System Without Extensive Fuel Processing or Separate Thermal Management Systems.
Giner, Inc	Regenerative Fuel Cell					Highly Efficient Bifunctional Oxygen Electrode System. RFC Performance for a Dedicated FC/EC Bifunctional System
Giner, Inc	Reformate-Air Fuel Cell					
Greenvolt Power Corp.	PM-60 Emergency Fuel Cell Module	Available	US\$95.00			To provide portable or emergency lighting and comes complete with a flood/spot light which attached to the unit. The power cord attaching the light to the fuel cell is long enough so that the fuel cell can be placed outside a car or tent while the light is inside. The unit is powerful enough to run two lights, with a power line splitter.
Greenvolt Power Corp.	PM-120 Portable Fuel Cell Module	Available	US\$120.00			Designed to supply power to any appliance that can be plugged into the cigarette lighter socket of a standard car. Laptop computers, cell phones, satellite phones, portable television sets, fans, spot lights, flood lights, fluorescent lights, emergency flashing lights or any other device using 12 volts DC.
Greenvolt Power Inc.	PM-135	Available	US\$168.00			Specifically designed to charge automotive batteries under emergency conditions. It charges an automobile 95 Ah 12 volt battery from a 50% depth of discharge condition to full charge condition in approximately 7.5 hours.
Hydrogenics Corp.	HyTEF Series Generators	In development				Operates within an outside temp. Of -50 to 40 degrees C
Hydrogenics Corp.	HyPORT Power Generator	In Testing			2/26/02 – they fulfilled its contract with Canada's Depart. Of National Defense with delivery and demon. Of a prototype portable fuel cell power generator (HyPORT). They were also demo.'d to the US Army Tank-automotive and Armaments Command (TACOM) unit.	Operates with outside temperatures of 0 to 40 degrees C. They are currently under contract with TACOM to deliver a fuel cell powered auxiliary power system in military light armored vehicles.

Hydrogenics Corp.	HyPORT C Power Generator	In Testing				
IdaTech	FCS 1200	Soon to be available			Uses Ballard's Nexa™ module	Uses IdaTech's FPM 20 fuel processor. One touch start up for ease of operation.
IdaTech	iGen™	Available on pre-commercial basis to qualified customer			Uses Ballard's Nexa™ module	250 watt output, uses PEM, no warranty at present
Jadoo Power	N-Gen	Click and buy: www.jadoodpower.com				Warranty: 2 years plus optional third year
Jadoo Power	XRT	Click and buy: www.jadoodpower.com				Warranty: 2 years plus optional third year
Jadoo Power	Fillpoint	Click and buy: www.jadoodpower.com				Warranty: 2 years plus optional third year
Jadoo Power	FillOne	Click and buy: www.jadoodpower.com				Warranty: 2 years plus optional third year
Jadoo Power	N-Stor130	Click and buy: www.jadoodpower.com				Warranty: 2 years plus optional third year
Jadoo Power	N-Stor360	Click and buy: www.jadoodpower.com				Warranty: 2 years plus optional third year
Lynntech, Inc.		In development			Works on all types of fuel cells	This stack won an Army SBIR Phase II quality award in 2001
Manhattan Scientifics, Inc.	NovArs Mid-Range Fuel Cell					
Medis Technologies	Medis Power Pack	Precommercial product available to qualified customers				Warranty: TBD
MTI MicroFuel Cells	Mobion 30M	Field testing 2007				Provides warranty
MTI MicroFuel Cells	Mobion 1M	Field testing 2007				Provides warranty
Nuvera	PowerFlow PFS-009	Today				Provides warranty
Nuvera	PowerFlow PFS-005	today				Provides warranty
Nuvera	1 kW hydrogen system	In testing – prototype available 2002		 1 kW Hydrogen Power Module		Nuvera is developing 1 kW power modules that offer an alternative choice for energy needs in places where there are no existing power grids and where reliability, fuel flexibility, and noise reduction are highly desirable. Such power modules are suitable for manufacturers of recreational products (RVs), yachts, power hand tools, telecom backup systems, remote power generation systems, industrial equipment, home backup systems, portable military field units, and remote sensing equipment.

Palcan	PEM fuel cell stack					
Phocos	Hybrid Fuel Cell System (FC1000)	In Testing				The FC1000 Hybrid Fuel Cell - Solar Demonstration System is based on a 1 kW PEM Fuel Cell Power Module. Advantage compared to a diesel system is the low-noise, emission-free operation. The System control unit controls the battery charging from solar, from the fuel cell and protects the battery from excessive discharge. The control unit provides sophisticated data logging and remote access. Control parameters can be widely adapted. A typical configuration of such a system is appropriate for loads that have a constant energy consumption all over the year and need to have a guaranteed power supply, like in telecom or traffic control systems.
Protonex Technology Corp.		20 W betas available today			Have demonstrated 20W and 350W to date	Uses new manufacturing methods to produce encapsulated cassettes, self-adjusting seals. This makes for a very simple, robust and cheap fuel cell.
Schatz Energy Research Center (SERC)	Portable Fuel Cell Generator	Testing	\$10,000 (made in lab)			

Notice: For additional information or comments on Fuel Cells 2000's charts, contact Jennifer Gangi at: jennifer@fuelcells.org.