

THE ADDITION OF FUEL CELL TECHNOLOGY INCREASES RANGE FROM 110 KM (68 MILES) TO 250 KM (155 MILES) AND ELIMINATES THE NEED TO RECHARGE THE BATTERY PACK FROM A FIXED ELECTRICAL OUTLET.

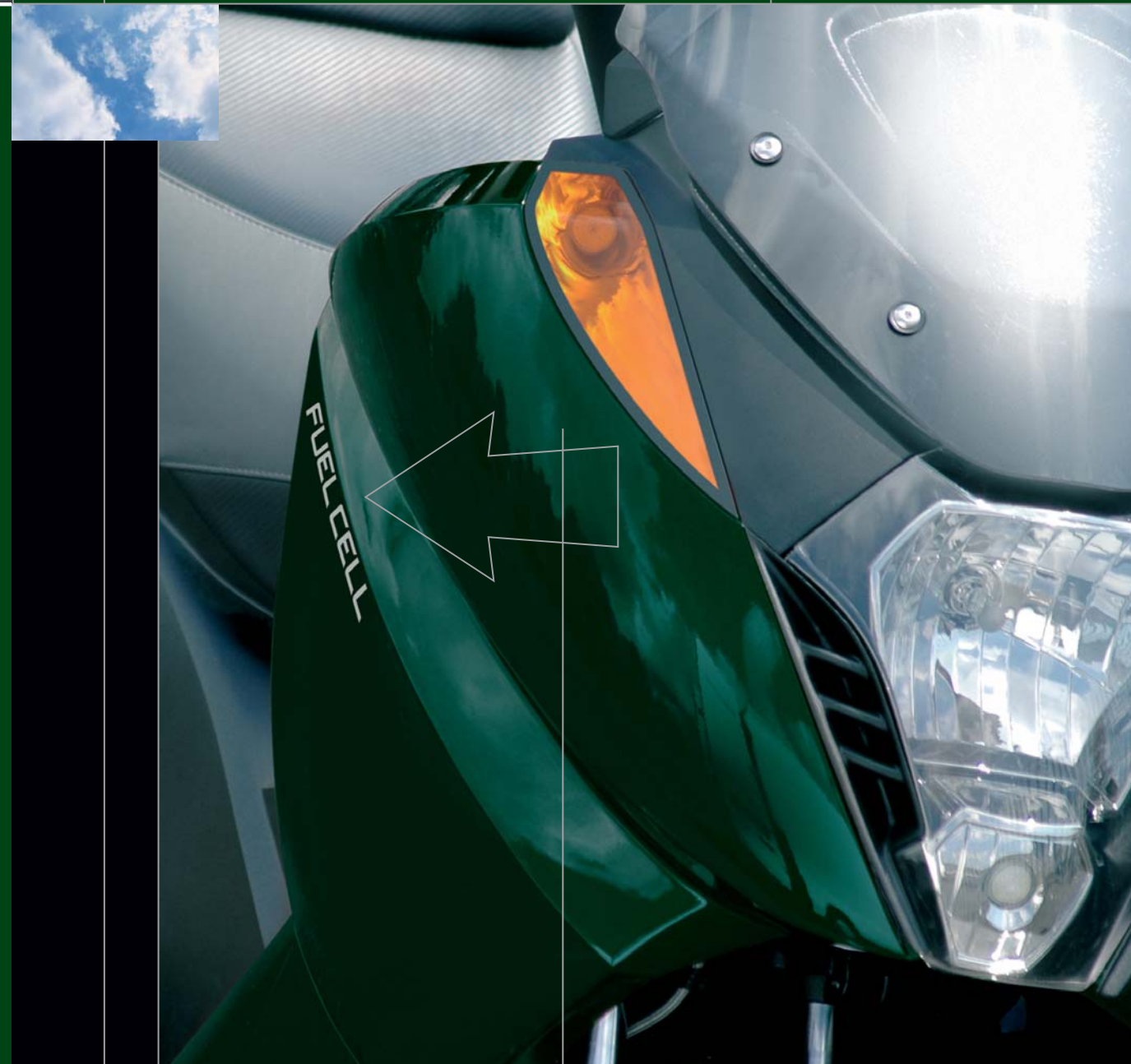


FUEL CELL HYBRID



VECTRIX FUEL CELL HYBRID SPECIFICATIONS

FUEL CELL	Fuel Cell Type	Fully integrated onboard Protonex NGen™ fuel cell
	Fuel Source	Hydrogen or Reformed Methanol
	Fuel Cell Output (net)	500 Watts
PERFORMANCE	Max Speed	100 km/h (62 mph)
	Acceleration	0-80 km/h (50 mph) - 6.8 seconds
	Range	250 km (155 miles) @ 40 km/h (25 mph)
	Braking	Patented multi-function throttle (DAaRT™) provides regenerative braking and slow-speed reverse
		Front and rear Brembo disc brakes
BATTERY	Battery Type	Nickel Metal Hydride (NiMH)
	Rated Battery Capacity	20 Ah, 2.5 kW-h
	Rated Battery Voltage	125V DC
	Recharge Options	On-board 500 Watt Fuel Cell or 110V-220V (50/60 Hz) outlet
	Recharge Time (80% charge)	5 hours (fuel Cell) or 2 hours (110V)
	Battery Discharge Cycles	1,700 (80% discharge)
	Estimate Battery Life	10 years or 80,000 km (50,000 miles)
MOTOR & GEARBOX	Motor Type	Brushless, DC, radial air-gap motor
	Peak Power	20 kW peak power at 3000 rpm
	Max Current	275 Amps
	Max Torque	65 Nm
	Gearbox	Integrated rear-wheel mounted planetary gear drive
ELECTRONICS	Controller	DSP & IGBT based all-digital electronic control and motor drive system
	Instrumentation	Dual LCDs display speed, odometer, battery charge, estimate range and system status
DIMENSIONS	Weight	198 kg (436 lbs)
	Wheelbase	1525 mm (60")
	Seat Height	770 mm (30.5")
	Wheels	Front - 120/70-14" Rear - 140/60-13"
	Storage Capacity	Under-seat storage for a full-faced helmet Glove compartment below dash
OTHER	Frame	Lightweight aluminium frame
	Warranty	48 months
	Emissions	Zero



MAXIMUM RANGE. FLEXIBLE CHARGING.

THE FUTURE IN MOTION



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THE VECTRIX FUEL CELL HYBRID MAXI-SCOOTER OUTPERFORMS TRADITIONAL GASOLINE-POWERED SCOOTERS:

ATTRIBUTES	VECTRIX HYBRID	GAS SCOOTER
ACCELERATION	EXCELLENT	GOOD
OPERATING COSTS	VERY LOW	HIGH
MAINTENANCE	MINIMAL	HIGH
EMISSIONS	ZERO	HIGH
NOISE	QUIET	NOISY
GOVT. SUBSIDIES	YES	NO
TECHNOLOGY	SUNRISE	SUNSET
GROWTH POTENTIAL	HIGH	MEDIUM



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 VECTRIX IS COMMITTED TO DELIVERING VEHICLES THAT ARE CLEAN, AFFORDABLE, AND FUN TO DRIVE. WE INVITE YOU TO COME ALONG FOR THE RIDE.

THE NEXT PHASE IN THE VECTRIX REVOLUTION

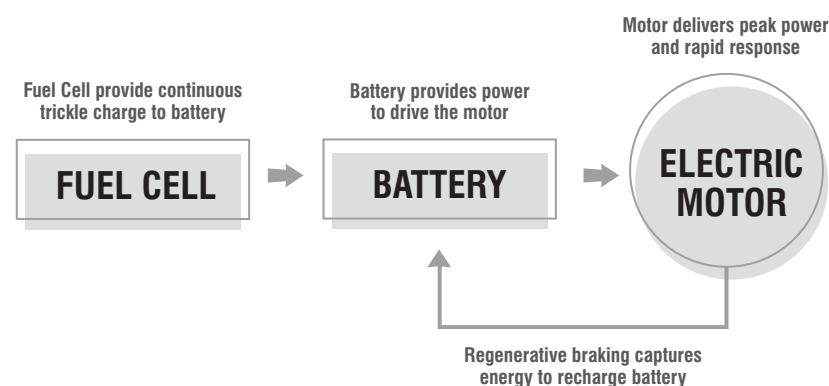
Introducing the revolutionary Vectrix fuel cell hybrid maxi-scooter—the perfect solution for urban commuters looking for greater range and charging flexibility. It's easy to use, environmentally friendly, and affordable to own. The fuel cell hybrid maxi-scooter, co-developed by Vectrix and Parker Hannifin, integrates an onboard fuel cell with our electric maxi-scooter. Range is 250 km (155 miles) and the batteries do not need to be charged at a fixed electrical outlet.

The fuel cell technology adds convenience without sacrificing performance. The fuel cell hybrid maxi-scooter boasts a top speed of 100 km/h (62 mph) and rapid acceleration from 0–80 km/h (50 mph) in under 7 seconds.

FUEL CELL TECHNOLOGY: HOW IT WORKS

The fuel cell hybrid maxi-scooter features a fully-integrated 500-watt Protonex NGen™ fuel cell system that continuously charges the battery pack, which in turn provides power to drive the motor. The fuel cell shuts off automatically when the battery pack is fully charged.

The hybrid configuration uses the best aspects of battery and fuel cell technologies. The battery pack provides the quick bursts of energy for accelerating or climbing steep hills, while the fuel cell provides a constant trickle charge to help extend range and keep the batteries topped up. The patented throttle-activated regenerative braking system (DAaRT™) further extends the range by directing energy back into the battery during braking.



FEATURES AND BENEFITS:

- **Extended Range** – The fuel cell continuously charges the battery for increased range. Based on the European Commission Urban Drive Cycle (NEDC 98-69) the fuel cell hybrid maxi-scooter is expected to achieve a range of 250 km (155 miles).
- **Flexible Charging and Refueling** – The fuel cell hybrid maxi-scooter can be charged from any standard 110/220V power outlet or from the onboard fuel cell. Refueling options include reformed methanol, which will be readily available and will facilitate fast refueling.
- **Outstanding Performance** – The batteries deliver peak power and energy, resulting in a top speed of 100 km/h (62 mph) and rapid acceleration from 0-80 km/h (50 mph) in 6.8 seconds.
- **Long Battery Life** – Deep discharge cycles, which shorten the life of batteries, are significantly reduced as the fuel cell continuously tops up the battery pack.
- **Extended Fuel Cell Life** – The fuel cell will last longer as it operates at a constant output.
- **Stop and Go with One Hand** – Simply twist the throttle for instant acceleration, and twist it forward to slow down smoothly and safely. During braking, the patented regenerative braking system (DAaRT™) redirects energy back into the battery pack, which helps to extend the range by up to 12%. The multi-function throttle also operates a slow-speed reverse function.
- **Minimal Maintenance** – Many of the key components are sealed and maintenance-free. For peace of mind, Vectrix will provide a 48-month warranty on the fuel cell hybrid maxi-scooter.
- **Environmentally Friendly** – The Vectrix fuel cell hybrid maxi-scooter is virtually emission-free and is much quieter than gasoline scooters and motorcycles.
- **Affordable** – Government rebates, local subsidies and exemptions from road tax, property tax, registration fees, and inner-city congestion charges further reduce the cost of ownership.

