

Good Earth Energy Conservation *Firefly*[®]





- **Efficient. Less Cost. Proven.**
- **100% electric utility vehicle**
- **Zero Emissions Vehicle (ZEV)**
- **Speeds up to 45 mph**
- **Range - 60+ miles per charge**
- **Modular design can be customized to meet different applications.**

INTRODUCING THE FIREFLY. IT DOES MUCH MORE FOR MUCH LESS.

The Firefly is a zero-emission, high-performance, low-cost, low-maintenance, affordable electric vehicle created specifically to meet the needs of the essential services market, including parking enforcement, security, delivery, and maintenance vehicles.

The Firefly offers a practical and safe solution to navigation of tight spaces with its short turning radius, sliding door design, and full visibility for the driver. The Firefly's design and functionality can be customized to meet the unique needs of the customer.

The Firefly is ideal for many essential services applications such as:

- Parking Enforcement
- Security
- Postal Delivery
- Government
- Gated Community
- Package Delivery
- Military
- Shopping Mall
- Maintenance
- Airport Services
- Warehouses
- Universities



Battery Technology

The Firefly utilizes the newest battery technology (Lithium Iron Phosphate) for improved energy-efficiency, reliability, and an expected lifespan of more than 4 years.

Longer Range

The Firefly has a 60-100 mile range per charge — better than any electric vehicle in its class, with performance speeds up to 45 mph.

Our Commitment to the Environment

We are committed to ending dependence on foreign oil and preserving our natural resources by producing zero-emission vehicles.

Customizable

The Firefly can be customized with a right, left, or middle driving position, a compartmentalized bed, and specialized lighting attachments such as directional light bars.



< Superior Handling

The Firefly's wheelbase, low center of gravity, and lateral acceleration system allows the driver to handle the road with ease.



< Modular Bed

The modular bed design is built with versatility in mind. Design it to fit your needs: flat bed, lockable storage, sectional bed, van box, dump bed, and refuse bed.



< On-Board Digital Acquisition System (DAS)

Allows fleet operators to collect a range of statistical parameters, helping them manage their fleet of Firefly vehicles. This is a great tool that helps map your service cycles before any issues develop.



< Firefly Gauge Pod

The Firefly Gauge Pod, which moves with the steering wheel, is ergonomically designed for the driver's easy access and visibility to all gauges, knobs, and switches needed to operate the Firefly safely.



< Interior Ergonomics

The Firefly offers a spacious, roomy cab, featuring cloth bucket seats with manual adjustments for fore and aft movement. The wide 26" 'shallow swing' doors allow easy in/out access.



< Standard Features

Standard features include a padded arm rest with storage and drink holders. A cab heater and defroster are also standard.

Firefly® Specifications

Motor

80 Volt, 50 HP (37 KW) nominal permanent magnet

Battery Pack

72 Volt nominal LiFePO4

Transmission

Computer-controlled Integrated Drive System (IDS)

Exterior Dimensions

Overall cab height	68 in	(173 cm)
Overall length	148 in	(376 cm)
Overall width	60 in	(152 cm)
Ground clearance (at side)	5 in	(13 cm)
Outside turning radius	138 in	(351 cm)
Wheelbase	96 in	(244 cm)
Track	44 in	(112 cm)
Cargo bed	46 x 44 x 17 in	(Approx.) (117 x 112 x 43 cm)

Speed & Range

Electronically governed at 40 mph

Normal operation yields 60 miles per charge.

Electrical System

Charging - On-board 80-240 VAC SAE J1772 charger with less than 12 hr charge time (under normal use)

Lights - Two halogen headlights and LED stop, tail, turn signals, and dome light, DOT approved

Starting/Operation - HOLD mode provides a safety interlock requiring the driver to press the brake to switch to FORWARD/REVERSE operation.

Gauges - Column-mounted Integrated Display Unit displays speed, odometer, hour meter, state of battery pack, warning and operator messages, and on-board Data Acquisition System (DAS) parameters

Wiring - Additional harness pre-wired for cab-mounted light masts
Electronic Controlled Drive - Variable-rate electronic drive system to optimize speed and range

Lateral Acceleration Sensor - 3-axis accelerometer and steering position sensor for maximum stability

DAS - The Firefly® is equipped with data logging to enhance the ability to track day-to-day operations of the vehicle. Nearly every parameter is logged to profile characteristics such as Speed vs. Range and Charge vs. Time. Data can be downloaded via removable storage for quick analysis.

Steering

Tilt-column steering wheel with center horn button

Braking

Hydraulic disc brakes on all 3 wheels

Dual circuit master cylinder

Mechanical parking brake

Suspension

Front - Proprietary load distributing system with anti-dive control

Rear - Heavy-duty leaf springs equipped with tuned shocks for maximum load control

Climate Control

Heating - Electronic 72V, 700 watt heater/defroster

Tires

175/65-14 Kumho Eco Solus HM KR22 low-rolling resistance all-season radials

Seat

Single passenger bucket seat, optional dual buckets or a 2 passenger bench-style seat

Features

3-wheel vehicle with integrated safety cage, textured ABS UV-protected body panels, and lockable, covered pickup bed
"Shallow Swing" door system to maintain narrow vehicle profile with 26 in (66 cm) extra-wide openings. Traditional vertically sliding windows

Extra-low step-in height of less than 10 in (25 cm) to maximize operator comfort and minimize fatigue

Steel front and rear spring-mounted bumpers

3-point seat belt system

High-visibility, tinted, haze/scratch/impact-resistant polycarbonate windows with outside and inside mirrors

2-speed windshield wiper system

Switchable dome light and backlit controls for nighttime use

Floor mat and integrated, adjustable sun visor

Integrated console with cupholders

Document holder and recessed dashboard for accessories.

12V DC accessory ports for phone, radios, etc.

Weight Capacity

Vehicle Weight - 1750 pounds

GVWR - 2800 pounds

Rated Capacity - 1050 pounds (incl. driver)

Color

White ABS plastic w/UV protection standard - other colors optional.
Steel frame is black powder coat.

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