



## + PULSE 4 THE VERSATILE MINI VAN

Available in 2 versions (short or long), **PULSE 4** is a 100% electric mini van designed for the mail delivery business in urban or suburban areas.

This micro-utility vehicle is at the forefront of modernity and offers top performance in terms of comfort, safety, ecology and economics. It provides a real solution to the "last mile" issue.

Not only is **PULSE 4** practical and sturdy for everyday use, but it also offers unrivalled discretion thanks to its near-silent operation and zero emissions.

This vehicle has been designed ergonomically for user comfort and efficiency: closed cab, heating, storage compartments, no vibration from the engine, practical door height and loading level, seats with built-in headrest, etc.



Lastly, with a range of more than 260 km\*, **PULSE 4** largely covers the distances of long delivery rounds. Charging time is 8 hours\*\* with a domestic power supply.

\*according to ruling R 101 and depending on the version and type of use.  
\*\*depending on the version used.



## + LIGIER GROUP PIONEER ON THE MICRO-UTILITY MARKET

The "mail delivery" range of LIGIER Professionnal consists of micro-utility vehicles designed specifically for this sector.

These sophisticated vehicles (with a wide range of uses) meet the needs of professionals concerned about the working conditions of their employees and the environmental impact of their activities.

For François LIGIER, CEO of Ligier Group and grandson of the founder:

*"Technological innovation is the main development driver of Ligier Group. We are proud of having created and designed PULSE 3 and PULSE 4. Our range responds to changes currently taking place in the transport field, in terms of safety, energy efficiency and practicality."*

Ligier Group innovations are the result of a complete overhaul of its industrial facilities, which began over 10 years ago: massive investments in technologies and cutting-edge materials, expansion of the production site, new automated production line since 2010, etc.



### SAFETY ABOVE ALL

New models undergo crash tests with dummies.

Throughout the development process, engineers carried out virtual tests on a computer in order to develop all essential components to keep users safe on the road.

These technical simulations led to the design of an intelligent and complete safety concept to provide a maximum survival space in the event of a crash.

Ligier Group produces over 15,000 vehicles per year. With a solid sales network of distributor partners all over Europe, in 2014 Ligier Group posted consolidated turnover of 92 million euros.



MAIL  
DELIVERY



## + THE VEHICLES OF THE 21<sup>ST</sup> CENTURY ARE ALREADY HERE !



## + PULSE 3 THE ULTRA-STABLE 3-WHEEL PENDULUM SYSTEM

Developed in close partnership with postmen and women, occupational practitioners and ergonomists, the **PULSE 3** model designed for answers the specific requirements of mail and small parcel delivery.

As the rear part stays level around bends, perfect stability is guaranteed, both when driving and at a standstill.

Characteristics such as built-in reverse gear, optimised turning radius, hip-level loading threshold and an adjustable seat complete the range of standard equipment on this innovative vehicle and ensure comfort and safety for the user.

Thanks to its unflinching sturdiness and its compact size (2.09 X 0.83 m), it performs brilliantly in all situations a postman/woman comes across in urban and suburban areas.

This micro-utility can safely carry up to 55 kg of goods, in addition to 20 kg at the front, making it ideal for mail delivery!



Practical, easy to handle and simple to drive in all situations, **PULSE 3** is a 3-wheel 100% electric vehicle equipped with a pendulum system allowing the driving position to tilt by +/- 30° when turning.



MAIL DELIVERY



### Environment

- 0 CO2 emissions
- Lithium LiFePo4 battery with built-in monitoring system
- Autonomy in a rural cycle: 50 km (a delivery round)
- 7 to 14% battery regeneration thanks to the engine brake
- Battery charge via a standard plug (220v) in one night
- Low-energy lighting



### Safety

- 3 wheels equipped with a pendulum system allowing the driving position to tilt by +/- 30° in the turn: no falls
- Handling: quick to learn
- Braking stability: reduced braking distance
- Parking brake: wheel blocking and pendulum system blocking
- Optimised dimensions: fits through a standard door (83 cm wide)
- Sturdy materials and high-quality framework paint: resistance and durability



## PULSE 3 THE ULTRA-STABLE 3-WHEEL PENDULUM SYSTEM

### Profitability/pay-off

- 100% electric
- Stability and safety: lower accident rate
- No engine maintenance (asynchronous engine)
- Ergonomically designed for greater comfort: less absenteeism



### Comfortable/Practical

- Carries up to 75 kg (2 x more than a moped)
- Hip-level loading threshold
- Storage compartments under the seat
- Adjustable seat
- 12V socket for plugging in delivery round planner
- Pedestrian warning bell and vehicle warning horn
- Hazard lights

MAIL DELIVERY



### Maximum protection in the event of a crash

An oversized aluminium frame, retracted cab, and seatbelts which meet car industry standards. The user can work in safety.

### Optimum comfort and road handling

With its 4 independent wheels and separate rear hydraulic suspensions, handling is controlled on any road surface and regardless of the on-board load.

### Ecological and quiet

An electric engine and an innovative lithium battery: PULSE 4 is an example in terms of ecology and silent working. No sound pollution and no CO<sub>2</sub> emissions for better user comfort.

## PULSE 4 THE VERSATILE MINI VAN

NEW  
The long version of PULSE 4 (L3) provides up to 2.3 m<sup>3</sup> of working volume!

