

## Lithium-ion battery 24 V / 48 V / 80 V



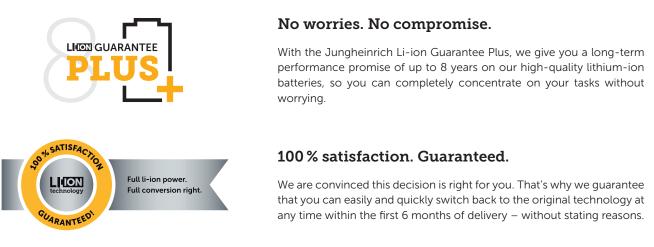


# Lithium-ion technology from Jungheinrich.

### Li-ion power gives you the decisive advantage required to win.

Our powerful and long-living lithium-ion batteries impress with their high performance, extremely fast charging times and resource-saving zero maintenance. Whether in 24/7 or multi-shift operation, when it comes to endurance, you always win with lithium-ion power made by Jungheinrich.

Trust in a unique comprehensive system consisting of truck, battery and charger, in which all system components harmonise perfectly. So fast and efficient charging is always guaranteed. A constant voltage curve and greater depth of discharge also ensure that sufficient energy is always available, even at low charge levels. Clever energy recovery during braking saves energy, while the integrated battery management system ensures maximum safety. Benefit from a battery that allows you to run your vehicles 24 hours a day – for maximum warehouse productivity at all times.



\* In accordance with our warranty terms - see website for details.

### Your benefits at a glance:

- In-house developed and produced complete system.
- Highest performance coupled with low consumption values.
- 24/7 vehicle availability for more endurance in the warehouse.
- Charging to 50% in up to 30 minutes and 100% in up to 80 minutes.
- Appreciable cost reduction due to zero maintenance.

# Your Jungheinrich li-ion power for maximum customer benefit.



### Efficiency

### Maximum performance with Best prepared for safe the moste efficient batteries.

As a pioneer in the field of lithiumion technology we have created a small energy miracle for you: Benefit from maximum energy efficiency, extremely short charging times and a very long service life.

### High energy efficiency:

- · Increased efficiency enables significant reduction in energy costs.
- Constant voltage curve for reliable high performance.

### Optimised loading processes:

- · High vehicle availability at all times guaranteed by short loading times.
- Intermediate and boost charging possibilities for maximum flexibility.
- Loaded up to 50 % in just 30 minutes and up to 100 % in 80 minutes.

### Particularly long service life:

- Three times longer life than conventional lead-acid batteries.
- Unchanged performance throughout the battery's life cycle.

### Zero Maintenance:

· Costs for battery care and maintenance are largely eliminated.



### Safety

# warehouse operations.

State-of-the-art lithium-ion technology for safe working processes: closed construction, ecologically harmless materials and integrated battery management make Jungheinrich lithium-ion batteries the safest energy option on the market.

#### Integrated battery management system:

- Continuous monitoring of energy management.
- Display of current charge status in the vehicle display incl. visualisation of recuperation.

### High safety:

- Use of lithium iron phosphate, the safest cell chemistry available.
- Closed design makes the battery less sensitive to outside influences.
- Transport and disposal by our trained customer service.

### Safe working processes:

- Gas-free battery technology.
- No systems required for timeconsuming battery replacement.



### Individuality

### Your solution as individual as your business.

Thanks to our broad-based vehicle and battery portfolio, we offer tailormade and needs-based solutions to enable you to achieve even better performance in your warehouse through winning efficiency enhancement.

#### Jungheinrich complete system:

- · Perfectly synchronised concept of battery, charger and vehicle.
- In-house research and development.

#### Holistic energy consulting:

- Actual-state analysis of all systems and processes.
- Derivation of energy profiles and charging concepts to optimise the individual overall energy balance.

#### Individual lithium-ion options:

- Buy: concentrated lithium-ion power with investment security.
- Rent: fully integrated rental solution consisting of charger and battery.
- Exchange: easy retrofitting capability for existing fleets.

# **Model overview**

Always the right choice.

Battery voltage capacity	Nominal capacity	Total charging time*	Vehicles
24 Volt	40–624 Ah	approx. 80 Min	<ul> <li>Electric pallet trucks</li> <li>Electric pallet stackers</li> <li>Low level order pickers</li> <li>Electric forklifts</li> <li>Medium/high level order pickers</li> </ul>
48 Volt	156–520 Ah	approx. 80 Min	<ul> <li>Tow tractors</li> <li>Reach trucks</li> <li>Electric forklifts</li> <li>Medium/high level order pickers</li> <li>Very narrow aisle trucks</li> </ul>
80 Volt	468–1.248 Ah	approx. 105 Min	<ul><li> Tow trucks</li><li> Electric forklifts</li><li> Very narrow aisle trucks</li></ul>

\* depending on battery capacity and charging technology.

The German production facilities in Norderstedt, Moosburg and Landsberg are certified.

> Jungheinrich trucks conform to the European Safety Requirements.

ISO 9001 ISO 14001

