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trak | uplift impulse

Maintenance free battery  
system for light and medium  
traction applications

# New impulses for your business

More performance, less energy consumption

100%  
maintenance  
free!

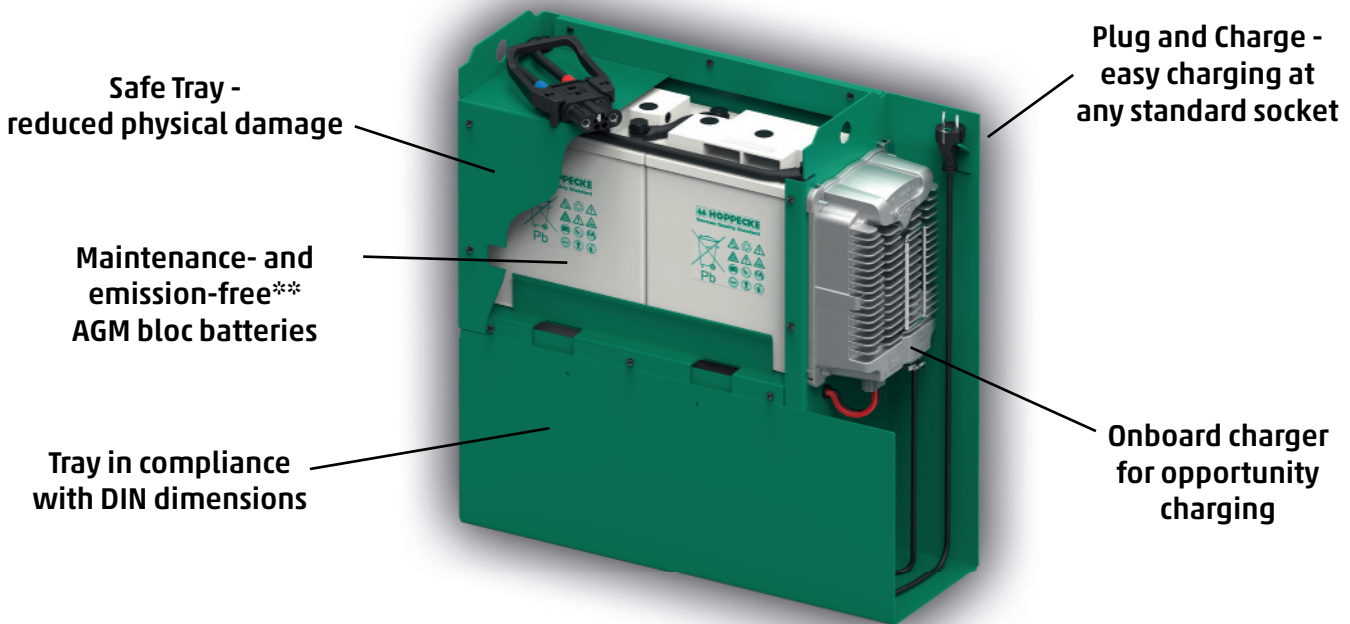
Modern logistics solutions and vehicle manufacturers always have increasing demands on every single component within the process chain - including the traction battery. Here, accelerated processes can ensure the highest possible efficiency in value-adding activities. This is achieved by efficient energy solutions optimally tailored to your requirements.

The new trak | uplift impulse - HOPPECKE's maintenance-free energy solution for the truck-mounted forklift and electric pallet truck sector takes this into account. In many details it offers decisive advantages over conventional lead-acid traction batteries.

At the heart of the trak | uplift impulse are four AGM block batteries connected in series. The carrier design meets the standard weights and dimensions of the classic flooded battery. The AGM technology ensures that the batteries are completely maintenance-free - there is no need to refill water.

Their high energy efficiency saves up to 16 % energy costs when used in conjunction with a HOPPECKE charger \*. This makes the trak | uplift impulse a safe investment in operational reliability and profitability.

The trak | uplift impulse+ offers even more flexibility thanks to the integrated charger.



## Applications

Ideal for your electrically powered small industrial vehicles such as

- ▶ Truck-mounted forklifts
- ▶ Pallet trucks
- ▶ Tugs
- ▶ Order picking forklifts
- ▶ Reach Trucks
- ▶ Floor care and cleaning machines



# Six reasons for more profitability

The advantages of **trak | uplift impulse** and **trak | uplift impulse+**

## 1. AGM technology

### High-current capability

Higher battery availability due to longer runtimes with dynamic and short-term high load requirements.

### Opportunity charging

Maximum vehicle availability and optimum use of downtimes, especially in multi-shift operation

## 2. Sealed block design

### 100 % maintenance-free

Saves operating and personnel costs and minimizes the risk of maintenance mistakes.

### Emission-free \*\*

More safety for employees. Suitable for use in clean rooms and the food industry.

## 3. Compact, modular tray construction

### Compliance with DIN dimensions

Easy integration of the trays into vehicles, re-use of the tray and many components at the end of the battery lifetime.

## 4. Increased product and user safety

### Easier handling

Thanks to the Safe Tray solution and integrated drive-off protection \*\*\*, physical damage is minimized, and a longer component service life is achieved.

\* HOPPECKE charger with AGM charging characteristic required

\*\* Minimal gassing possible

\*\*\* Only for impulse+

\*\*\*\* At 80 % DoD and 30 °C

## 5. Onboard charger \*\*\*

### Plug and Charge

More flexibility as well as cost and time savings due to the possibility of charging at any standard 230 V socket.

### Decentralized charging

For maximum mobility with minimized investment costs: No battery exchanges, additional chargers or charging stations necessary.

## 6. HOPPECKE charging characteristic

### Optimized charging

Reduction of energy costs during the charging phase by up to 16 %.

### Increased service life

In combination with a HOPPECKE charger, up to 1000 nominal cycles can be reached. \*\*\*\*



## Areas of application

- ▶ Light and medium traction applications
- ▶ Dynamic and short-term high load requirements
- ▶ Clean room applications
- ▶ Food industry
- ▶ Logistics companies with multiple shift operation



# trak | uplift impulse



## 01 battery system

technology
system voltage
system capacity
optional configuration
system dimensions (LxWxH)
system weight
pol screw
cell connector
max. discharge current
max. discharge depth
suitable for opportunity charging
suitable for rapid charging
energy efficiency ratio $\eta_{Wh}$ (DIN EN 16796-1)
battery operating temperature
ventilation
charging interval during storage
recuperation
application

impulse 220Ah	impulse (+) 170Ah
maintenance-free, sealed lead-acid battery	maintenance-free, sealed lead-acid battery
24 V	24 V
220 Ah	170 Ah
-	onboard charger
624 mm x 212 mm x 627 mm / DIN 43535 B	
201 kg	201 kg (with charger: 205 kg)
M8x22, plastic coating, with measuring points	
cable connectors $\varnothing$ 35 mm <sup>2</sup> , 110 and 700 mm	
1527 A – 3 min ( $U_{end}=1,60$ V/C)	
80% C <sub>5</sub>	
yes	
yes	
up to 85%	
-20°C to + 45°C	
DIN EN 62485-3	
3 months (at 20°C)	
U < 2,40 V/cell: no current limitation required U > 2,40 V/cell: max. allowed current 1A/100Ah	
<ul style="list-style-type: none"> <li>light and medium duty applications</li> <li>dynamic and short-term high load requirements</li> <li>clean room applications</li> <li>food industry</li> <li>logistics companies with multiple shift operation</li> </ul>	

## 02 block batteries

bloc design
bloc voltage
bloc capacity
bloc dimensions (LxWxH)
weight +/- 5%
lifetime in cycles
protection class

block battery based on absorbent glass mat technology (AGM)	
6 V	6 V
220 Ah	170 Ah
308 mm x 170 mm x 275 mm	242 mm x 170 mm x 275 mm
41 kg	32 kg
up to 1000 cycles at 80% DOD	
IP25 to DIN 40050, touch protected	

## 03 onboard charger

performance
output voltage nominal
output voltage range
efficiency
max. charging current

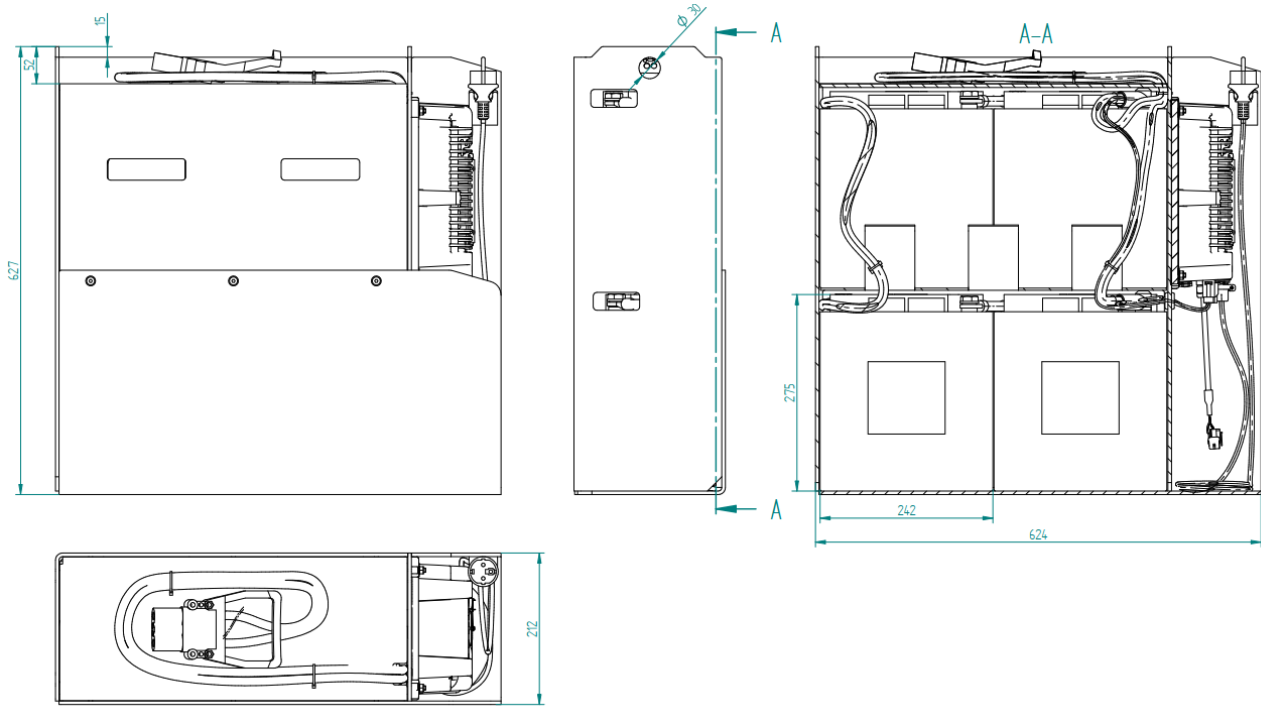
750 W
24 V
19,4 to 34V
94 %
30 A

operation temperature
protection class
dimensions
weight
mains voltage range

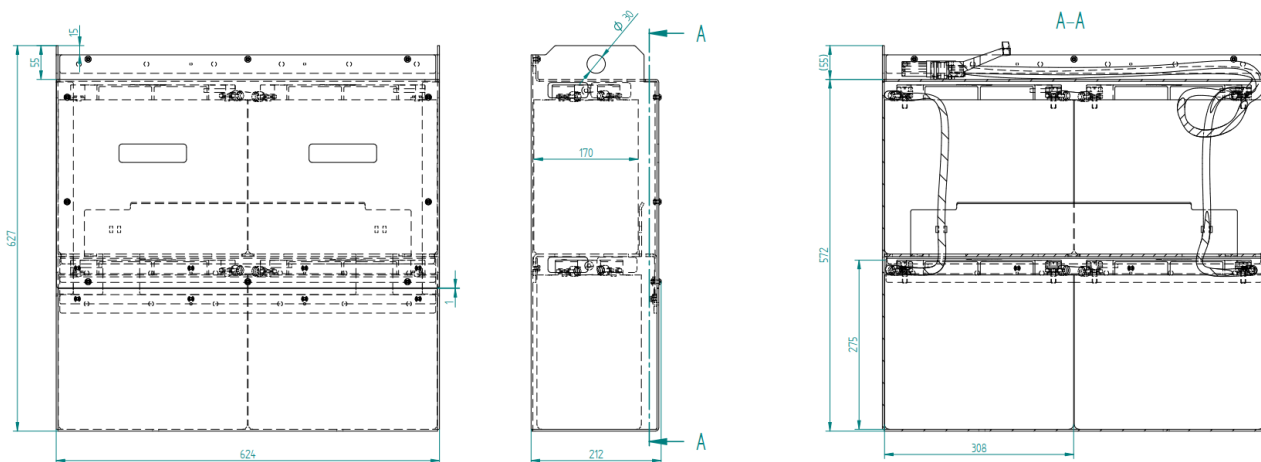
-40°C to 65°C
IP 66
230 mm x 153,5 mm x 85 mm
4 kg
100 to 240V (50/60Hz)

# 04 technical drawing

## 170 Ah-System



## 220 Ah-System



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