

# TAB LITHIUM-ION BATTERIES-SYSTEMS



## ECOLOGY & PLANET

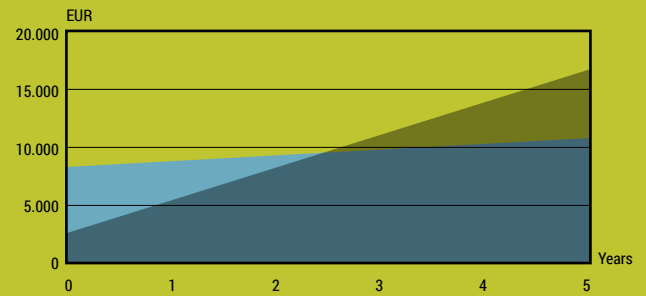
- TAB Lithium-ion batteries are designed for a sustainable future of our planet
- No liquid acids in case of accidents
- Smaller CO<sub>2</sub> footprint
- Better energy efficiency due to lower charging losses

## ADVANTAGES

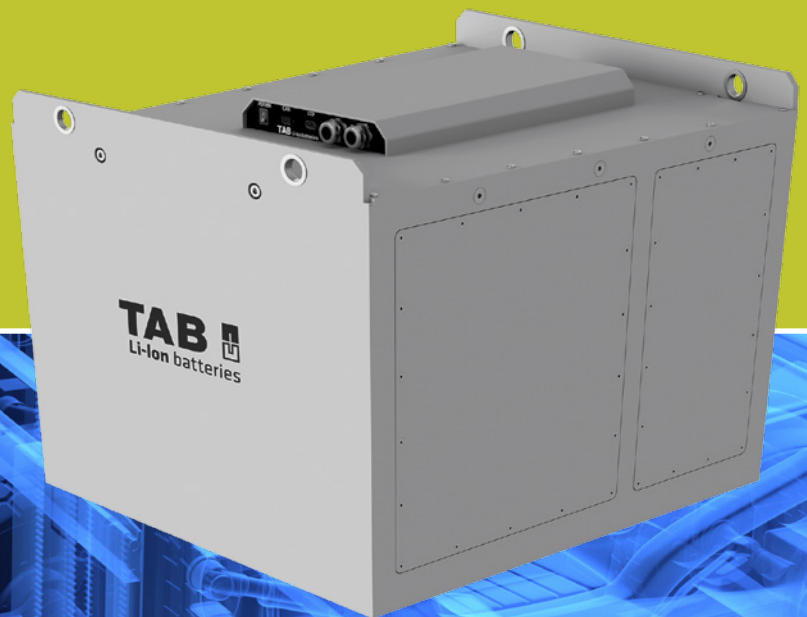
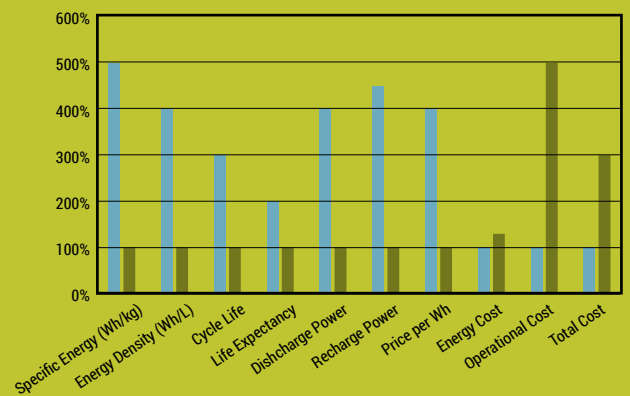
- No need for central charging station
- More flexibility to decentralized charging stations (in case with onboard charger)
- No explosion hazard and no odours due to gassing
- Longer operating terms and higher productivity due to fast and opportunity charging
- The TAB Li-Ion battery system is absolutely maintenance free
- No need for security distance to charging facilities - opens new possibilities when planning site layout

LITHIUM-ION  
LEAD-ACID

Lithium-ion vs. Lead-acid battery Total Cost



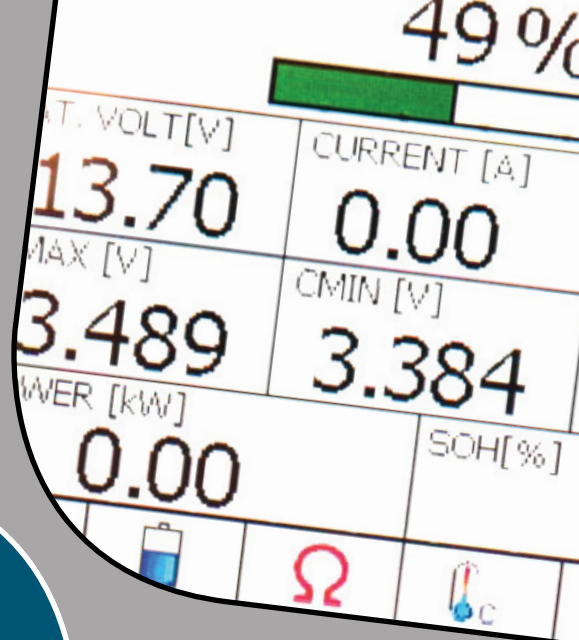
Lithium-ion vs. Lead-acid battery technology



**TAB**   
Li-Ion batteries

# TAB INTELLIGENT BATTERY MANAGEMENT WITH LCD-TFT MONITORING

- MOTORING
- CONTROL
- BALANCING
- PROGNOSTICS
- PROTECTION
- COMMUNICATION



## TAB SERVICE SOFTWARE

- Real time data logging
- Communication via Can Bus
- Show warning/error/alarm

## LONGER OPERATING TIMES

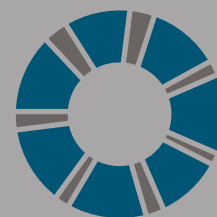
- Opportunity charging possible at any time
- High-efficiency chargers
- More capacity duo to better energy density

## ECONOMY

- 30% reduced total cost
- No need to invest in central battery rooms with ventilation and extraction systems
- Long life time
- Low self-discharge

## BATTERY SYSTEM SPECIFICATION

PRODUCT SOLUTION	Li-Ion
TEHNOLOGY	LiFePO4
VOLTAGE RANGE	12V-80V
CAPACITY RANGE	100Ah to 1000Ah
DESIGN LIFE ( Cycle DOD 80%)	2500+
OPERATION TEMPERATURE	-10/+55 °C
CHARGING TEMPERATURE	0/+40 °C
CHARGING TIME	2h-Fast Charging , 4h-Normal Charging
PROTECTION INDEX	IP54 (IP67 optional)
BATTERY DIMENSION	DIN, BS, Additional Weighted, Customized
BATTERY CHARGER	TAB Li-Ion Charger
BATTERY MANAGEMENT SYSTEM	Integrated TAB BMS, (Data Logger Optional)
COMMUNICATION	CAN, RS485, Customized
STANDARDS/CERTIFICATES	IEC 62133-2, IEC 62619, ISO 12405-2, ISO 9001, ...



**LITHIUM-ION BATTERY**  
 Operating time approx. 21-22 h  
 Fast/Opportunity charging time approx. 2-3 h



**LEAD-ACID BATTERY**  
 Operating time approx. 8 h  
 Charging time/rest periods approx. 8 h

# TAB

## Li-Ion batteries

TAB Tovarna Akumulatorskih Baterij d.d.  
 Polena 6, 2392 Mežica, Slovenia, info@tab.si, www.tab.si