



CoPow LITHIUM BATTERY SYSTEM 80V(83.2V)

BATTERY AND CHARGER

Safety

Beyond safety functions on cell- and battery level, the batteries are permanently observed by the integrated Battery Management System.

Reliability

The CoPow Lithium system is CE conform. One major part to get the aligned CE conformity is the Battery Management System, which serves as reliable connector unit and regulates the charging currents to prevent cell-overcharging. Meet CE, UN38.3. MSDS, ect certifications.

Performance

The whole system consisting of battery, vehicle and charger is coordinated among each other. It leads to an unique application customized system performance.

Productivity

Using the Lithium technology of CoPow, operators can improve their productivity effectively. Due to easy charging solutions, idle times of the vehicles can be used effectively by charging intermediately.

FEATURES

Intermediate charging

- Multi-shift availability
- No place-specific charging
- No charging room needed

Fast charging

- Shorter charging times
- " Charge & Use " at any time
- Economic use of each break



Longer battery life-time

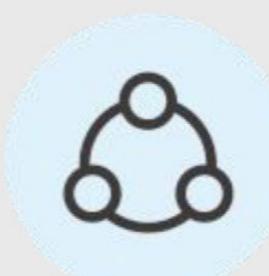
- 4000+full charging cycles with at least 80 % DOD residual capacity
- Afterwards: Several thousand full charging cycles still possible
- Combined with higher battery efficiency and higher usable battery capacity

Safe battery technology

- Self-monitoring by autonomous battery management system
- Safety functions on cell- and battery level
- Safe control of the vehicle in any battery status

Higher efficiency compared to lead acid

- Up to 20 % higher electrical efficiency
- Less energy losses
- Less development inside battery



Emission-free battery

- No evolving battery gases (hydrogen) and acid
- No need of extraction unit
- Does not contain toxic substances like Cd, Pb or Hg

No battery change necessary for most 2-shift applications

- No second battery necessary
- Higher vehicle availability
- Cost & time savings
- No need for battery change and charging room

No battery-maintenance needed

- No water-refilling, battery cleanup etc.
- No battery control necessary
- No need of electrolyte circulation

TECHNICAL DATA LITHIUM BATTERY SYSTEM 80V(83.2V)

	80V / 420 AH	80V / 525 AH	80V / 630 AH
Nominal voltage (V)	83.2	83.2	83.2
Nominal capacity (Ah)	420	525	630
Electric quantity (kWh)	34.9	43.7	52.4
Dimensions	customized on demand		
Weight (Kg)	500	550	680
Operating voltage (V)	71.5~94.9	71.5~94.9	71.5~94.9
Charging voltage (V)	94.9	94.9	94.9
Recommended charge current (A)	≤200	≤200	≤200
Rated operating current (A)	200	200	200
Max operating current (A)	400	500	500
Charging temperature (°C)	0~55		
Discharging temperature (°C)	-20~55		
Storage temperature (°C)	0~45		
Chemical system	LiFePO4		
Warranty	warranty for 5 years or 10,000 hours of service		
Available trucks	Linde: E25/E30/E35L series; Toyota: 7FB30/7FBMF40-50 series; Baoli: KBE25G1/30G1 series		

Note: Other specifications can be customized according to customer needs. Standard functions: Leakage detection, remote monitoring; Optional functions: recharge shot, fire extinguishing system, heating system.

Lithium battery counterweights can be customized according to customer needs.



CHARGER PARAMETER 80V(83.2V)

80V Charger	
Input mode	three-phase four-wire system
Output rated voltage	80 V
Output current	200 A
Rated input voltage	380 VAC
Rated input frequency	50-60 Hz
Output voltage range	40-100 VDC
Input voltage range	260-520 VAC
Communication	CAN

Note: The rated input voltage can be adjusted and customized according to the standards of each country.

COOPERATIVE PARTNER



NICHIYU
ELECTRIC FORKLIFT

KION
GROUP



Linde
Material Handling

