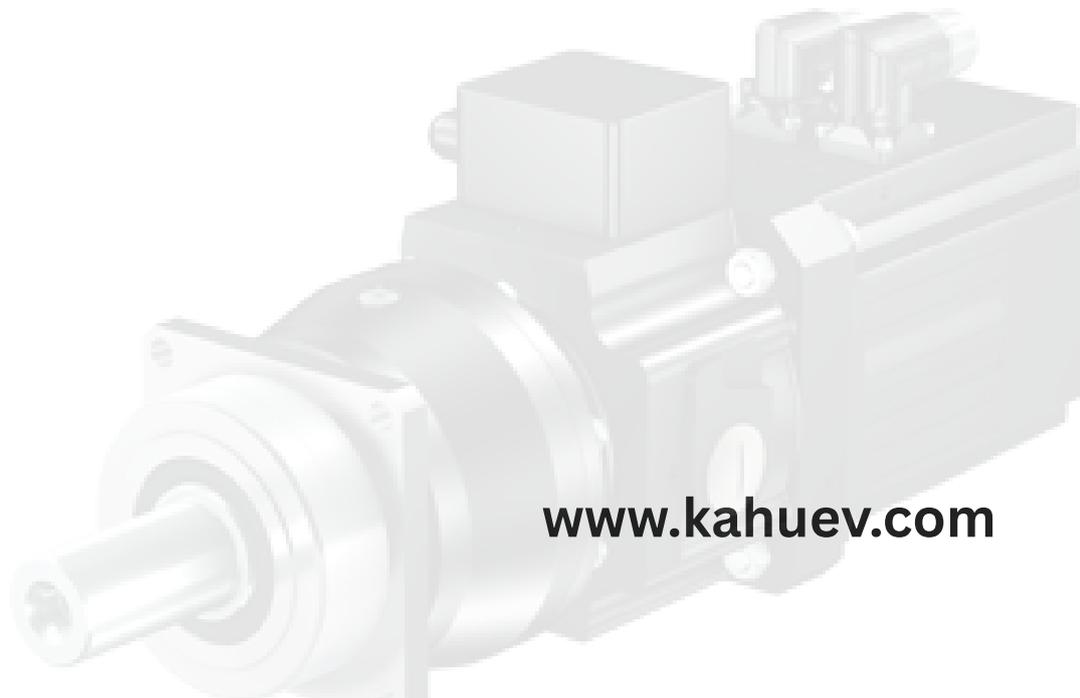




KAHU|EV

ePTO

Electric PTO Solutions



www.kahuev.com

Advanced eMobility Solutions

The Kahu EV ePTO platform is built using the software, hardware and technology solutions developed by Kahu EV and deployed on many products around the world for the past 15+ years.

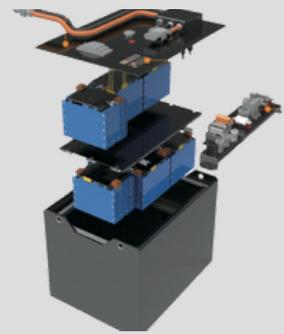
As the wider commercial vehicle industry continues the shift away from fluid fuels and hydraulics, electromobility solutions are proving their value by increasing efficiency, reducing cost, weight and maintenance burden all while bringing vehicle functionality into the modern software centric age.

Our ePTO solutions are highly customisable using the best of breed parts from around the world. Options are available in Low Voltage (24V-90V) and High Voltage (300-750V) with capacity from 3.22kWh to 360kWh.

A wide variety of electric motors from various manufactures are integrated with our Kahu EV EVNet™ peer-to-peer J1939 control system which can operate as pump or traction motor control, combining the whole Kahu EV suite of online telematics analysis, cloud management and API functionality.

Batteries

- High Durability Cells by CATL - 4000 Cycles (70% SOH)
- Low Voltage LFP Range (24V 3.2kWh - 90V 67kWh)
- High Voltage LFP & NMC Range (300V 20kWh - 750V 360kWh)
- Integrated Battery Management
- Automotive Grade Internal Components
- On-Board, Off-Board, Alternator & Solar Charging Available



Motors & Inverters

- Complete Range of Motors and Inverters
- Low Voltage 7.5kw - 100kW
- High Voltage 10kW-270kW
- Automotive Ratings for Ingress Protection



Automation Control & Vehicle Integration

- Human Machine Interfaces
- Hydraulic Alternatives
- High Power Servo Motors
- High Torque Linear Actuators
- Gear Reduction
- Remote & Wireless Control



Low Voltage Motor Options

Inverter Input voltage	Max speed rpm	Rated torque N.m	Rated power kW	Peak Power kW
24Vdc	6000	22	9.7	22.3
24Vdc	3000	46.1	9.8	21.4
24Vdc	2000	69.2	9.8	20.4
48Vdc	6000	21.4	10.7	23.4
48Vdc	4000	43.4	14.1	31.1
48Vdc	6000	38.7	17.6	48
48Vdc	4000	62.6	19	47.1
96Vdc	7000	20.8	12	27.6
96Vdc	8000	17.7	13.3	39.1
96Vdc	4000	43.1	14	31.7
96Vdc	7000	30.1	18.7	65.9
96Vdc	4000	60.8	20.1	48.1
96Vdc	6500	44	23.2	99

High Voltage Motor Options

Inverter Input voltage	Max speed rpm	Rated torque N.m	Rated power kW	Peak Power kW
640Vdc	8890	17.7	11.5	16.1
320Vdc	9500	27.6	18.5	25.9
640Vdc	9500	27.6	18.7	26.3
400Vdc	9000	37.6	23.6	32.8
640Vdc	8570	37.5	23.8	33.1
320Vdc	8000	36.9	21.2	32.9
640Vdc	8000	36	26	40.9
320Vdc	8000	78.6	53.5	82.3
480Vdc	8000	79.1	52.2	81
640Vdc	8000	78.3	54.1	84.3
320Vdc	8000	115	84.1	136.5
480Vdc	8000	118	80	125.6
640Vdc	7950	306	170	278

This data represents a sample of available configurations - Batteries are built to order and matched to system requirements - Contact us for more information

LV LFP Battery Options

Voltage (V)	Ah	kWh	Dimensions	Mass (kg)	Discharge (A)	30s Discharge (A)
48	105	5.376	585*330*250	54	105	315
48	160	8.192	800*320*232	82	160	315
48	302	15.56	770*455*400	143	302	906
48	346	17.83	647*455*560	179	346	1038
48	400	20.61	827*507*400	180	400	1200
48	456	23.49	780*455*560	252	456	1368
48	536	27.61	795*495*560	264	536	1608
48	604	31.12	775*443*680	318	604	1812
48	400	20.61	847*231*680	235	400	1200
48	456	23.49	1115*255*680	257	456	1368
48	536	27.61	1145*281*680	269	536	1608
48	692	35.65	647*815*560	353	692	2076

HV LFP Battery Options

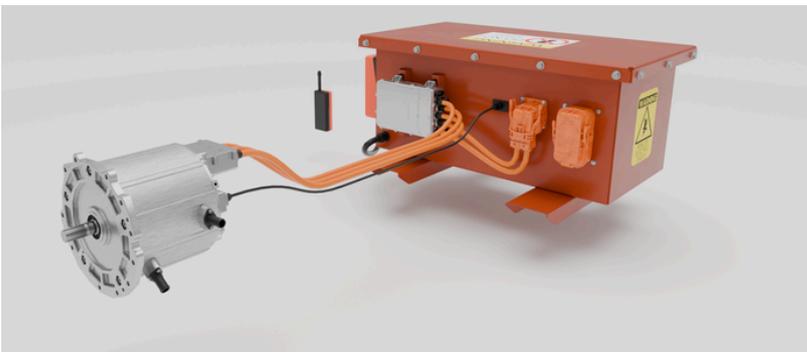
Voltage (V)	Ah	kWh	Dimensions	Mass (kg)	Discharge (A)	30s Discharge (A)
300	125	38.64	955*704*490	395	125	250
300	160	46.368	955*704*560	470	150	300
300	228	70.479	1285*618*560	700	228	456
350	173	60.162	1273*623*560	540	173	346
400	173	70.19	950*623*850	679	173	346
400	228	92.504	959*1006*560	1240	228	456
550	228	123.339	1978*623*560	1095	228	456
550	456	246.678	1808*1362*560	2287	456	912
580	604	350.078	2118*1192*850	2750	500	1000
600	302	183.791	1571*192*560	1850	250	600
620	456	281.917	1598*820*680(x2)	2630	456	912
620	684	422.876	2342*64*290(x6)	3920	500	1000

This data represents common configurations - Batteries are built to order and matched to system requirements - Contact us for more information



NMC Battery Options

NMC Batteries are up to 30% lighter and 40% smaller than LFP and are custom made to each application. Incorporating controllers and power distribution into one unit for a fast and tidy install with easy maintenance.



Complete Package Strategy

Kahu EV provides complete, turn-key electromobility systems. We can handle the entire project, from design to deployment, ensuring alignment with your strategic goals and expected outcomes.

Safety critical applications may require compliance to ISO 26262 functional safety processes (ASIL) with designed redundancy which we can incorporate into a joint development process. This holistic approach updates your documentation, modernises your vehicle's functionality, reduces your operational burden, and de-risks your electrification journey.

Electromobility Solutions



Kahu EV has successfully engineered and proven a revolutionary electric drive kit designed to power the mixing drum on concrete trucks, replacing traditional diesel-powered hydraulic systems. This innovative solution demonstrates that high-performance industrial work can be powered cleanly and efficiently by electricity.

Drawing on 15+ years experience in rugged industrial environments, our eBowl kit has been production-optimised for the unique challenges of the readymix industry. It is a robust, fit-for-purpose system designed for reliability and ease of adoption and maintenance.

The eBowl electric PTO is a self-contained, simple bolt-on unit featuring a high-torque electric motor, gearbox, and battery system. It delivers immediate and significant benefits, including reductions in fuel consumption, emissions, and on-site noise. By eliminating the need to run the truck's main engine, it also reduces idle time and engine wear, providing more power for driving and lowering overall maintenance costs.

Operators benefit from advanced wireless controls with safety interlocks, timers, and pause functionality, all supported by simplified, robust wiring. The system removes the risk of hydraulic fluid spills and eliminates parasitic loads, increasing overall efficiency and power available from the diesel motor.

This technology offers a low-risk, high-reward pathway to modernise your fleet, cut operating costs, and familiarise your operations with electric vehicle technology. It is a proven step towards a more sustainable, efficient, and quieter future for the transport industry.

Key Benefits:

- Diesel Savings: Reduce fuel use by up to 30%.
- Zero Emissions & Noise on Site: Ideal for sensitive urban and indoor environments.
- Eliminate Parasitic Load: Frees up engine power for driving, reducing wear.
- Remove Hydraulic Risks: No potential for costly or environmentally damaging fluid spills.
- Advanced Wireless Control: Robust controls with enhanced safety and timer functionality.
- Reduce Idle Time: Dramatically lowers engine hours and associated maintenance.

