



48V DRIVE SYSTEM · PATENT PENDING

DROP-IN 48V POWER. FOR COMPACT MACHINES.

A geometry-driven battery power platform for compact professional machines.

48 V

SYSTEM VOLTAGE

1.5 kWh

LFP BATTERY PACK

1.5 kW

DRIVE MOTOR

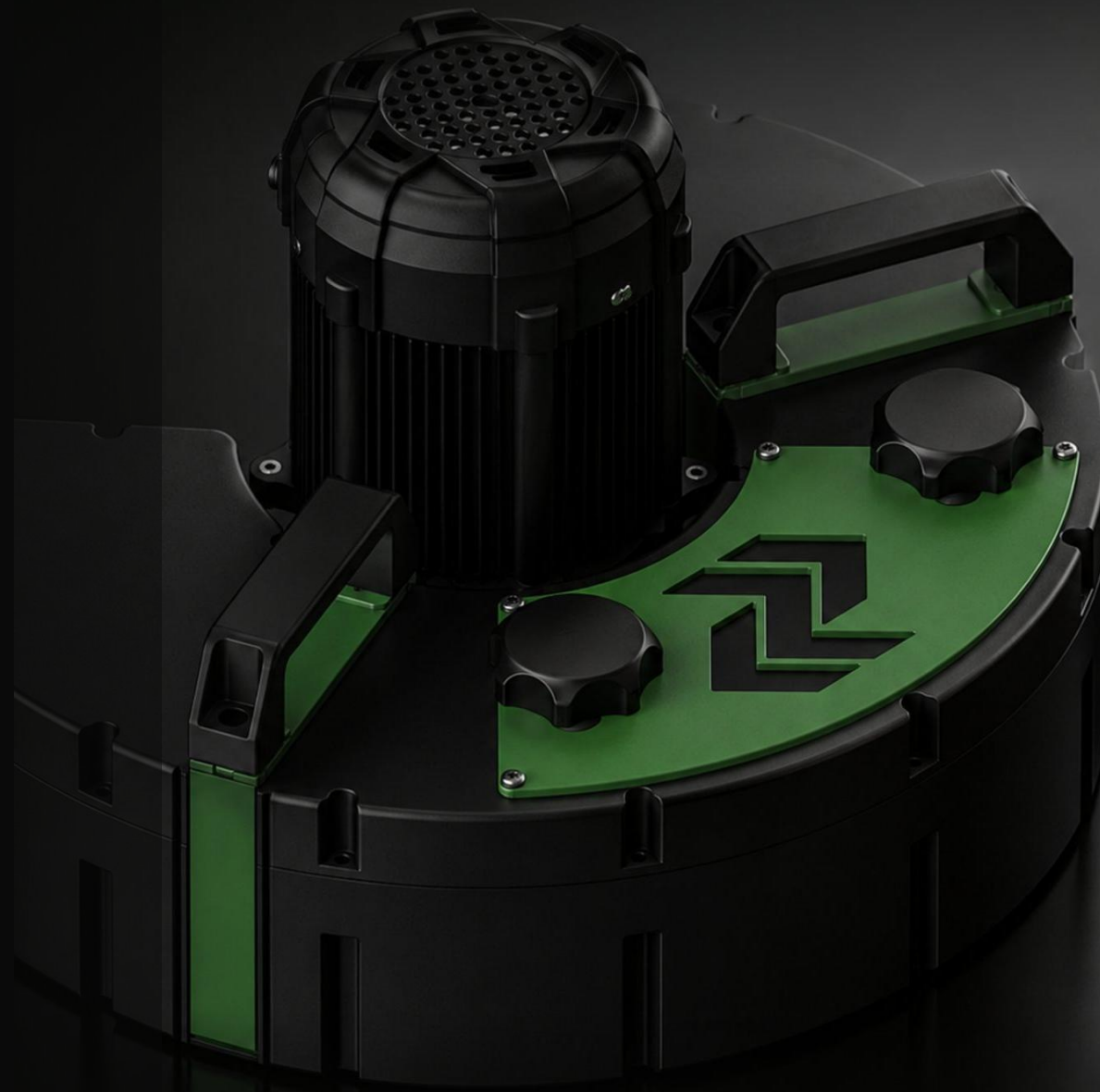
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WORKING PROTOTYPES

PACK ONLY · DRIVE SET · FULL SYSTEM ON ONE CAN BUS

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FOR MACHINE BUILDERS



Render of the preliminary design

SYSTEM SPECIFICATIONS.

KIWI BATTERY PACK

PATENT PENDING

VOLTAGE	48 V
CAPACITY	1.5 kWh
CHEMISTRY	LFP
SHAPE	around the drive motor
USE	fixed, or swappable on site
COMMUNICATION	CAN, linked to the controller
NEXT GENERATION	new BMS, in development

1.5 kW DRIVE MOTOR

TWO SPEED VERSIONS

RATED POWER	1.5 kW
PEAK POWER	2.4 kW (shaft)
SYSTEM VOLTAGE	48 V
PEAK EFFICIENCY	above 90 %
TYPE	PMSM with Hall sensors
PROTECTION	IP65 (excl. connector)
VERSIONS	1500 rpm and 3000 rpm

CONTROLLER

MATCHED TO THE MOTOR

CONTROL	sine-wave FOC
VOLTAGE	48 V (40 to 60 V)
COMMUNICATION	CAN, linked to the pack BMS
SPEED CONTROL	2 or 3 speed settings
SIZE AND WEIGHT	to be confirmed on samples

TWO SPEED VERSIONS, ONE INTERFACE

VERSION	RATED SPEED	RATED TORQUE	PEAK TORQUE
1500 rpm	1500 rpm	9.8 Nm	32 Nm
3000 rpm	3160 rpm	4.5 Nm	31 Nm

Same flange and shaft: one machine design takes either motor.

HYBRID MODULE AND DOCUMENTATION

Optional hybrid module, shown on a prototype and now in development for series use: the same machine can also run on mains power.

Drawings and 3D models are shared under NDA. Under NDA we can also arrange a working pack demonstration, in Dordrecht or supervised at your site.

FROM CONCEPT TO SERIAL PRODUCTION.

1 CONCEPT

We start from your goal: which machine, what it must deliver, and whether the platform fits.

2 ENGINEERING & DESIGN

Mechanical integration, drivetrain layout, CAN interface. Under a joint development agreement the pack can be adapted to your platform.

3 PROTOTYPING

Motor and controller sample sets for your build. Under NDA, a working pack demonstration in Dordrecht or supervised at your site.

4 TESTING & TUNING

We help get the system running on your prototype and tune it together until it performs.

5 PRODUCTION & SUPPLY

Series supply of packs, motors and controllers, with the technical documentation your certification process needs.



One of our two 48 V prototypes

CONTACT

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