

Chainless drive system for bicycle applications

# FREE DRIVE<sup>®</sup> SYSTEM

Cycling new experienced



# HEINZMANN FREE DRIVE® SYSTEM

Is the result of a successful cooperation between the companies HEINZMANN and Schaeffler.

HEINZMANN, a renowned manufacturer of wheel hub drives, acts as a system integrator of the newly developed Schaeffler, Pedal Alternator „Free Drive“.

This is a cyclone gearbox in combination with an alternator, which transfers the generated pedal energy directly into the motor. The chainless drive offers a unique pedal feeling as you have always known it.

All other necessary bicycle components, such as battery, display and control units are configured by HEINZMANN for individual bicycle concepts. No matter whether pedelec, cargo bike or urban vehicle, the customer receives integration which fits exactly into his vehicle.

A step further in the direction of emission reduction and efficiency increase.

Cycling newly experienced.

## FEATURES

### Chainless drive

- ▶ With patented pedal feeling
- ▶ Wear- and maintenance-free drive

### System

- ▶ New design freedom
- ▶ Increased driving safety
- ▶ Open system (batteries)
- ▶ Compliant with DIN EN 15194

### Alternator

- ▶ Cyclone gearbox, ratio 1:29
- ▶ 9 gears manual
- ▶ CVT automatic

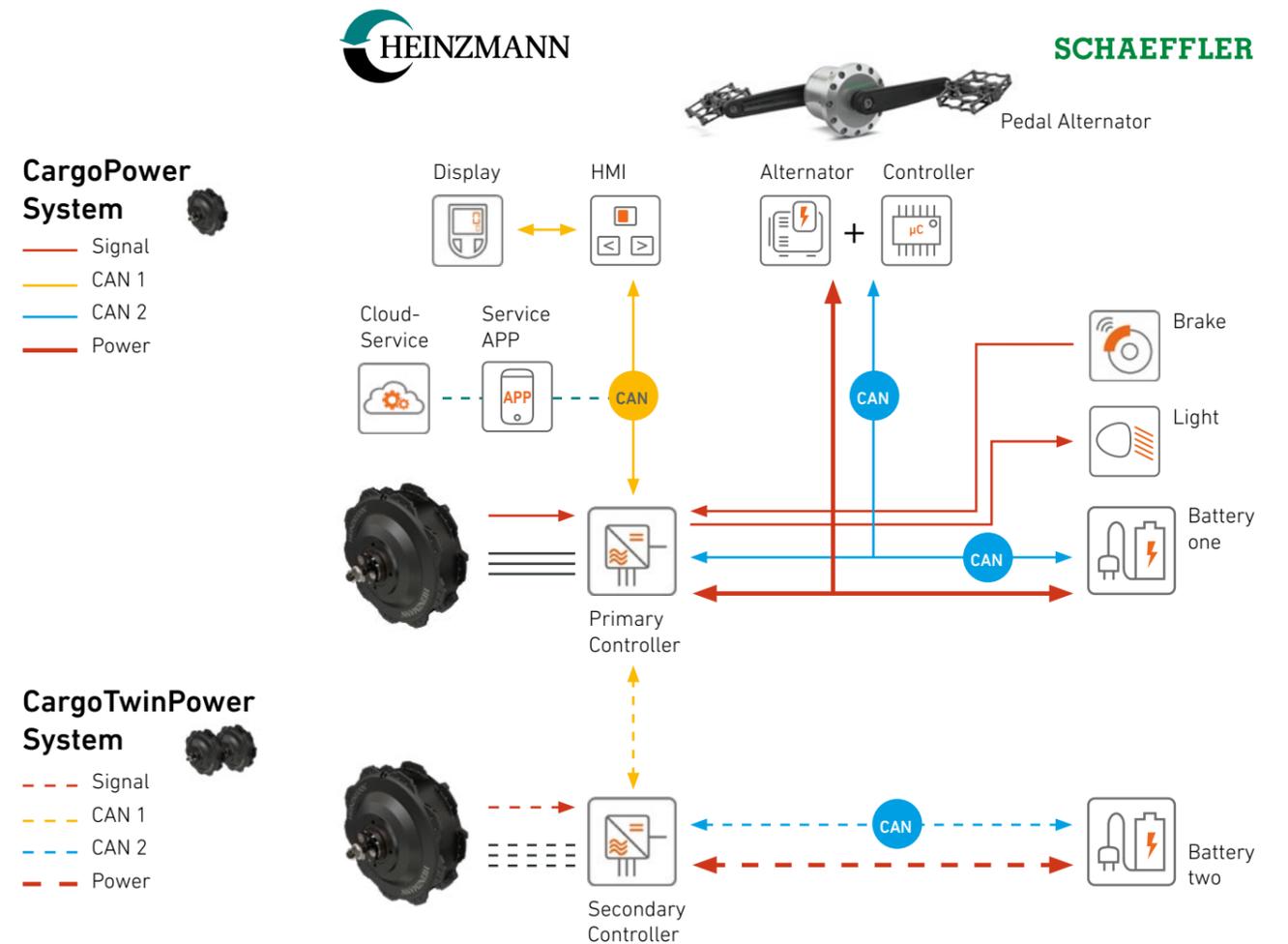
### System power

- ▶ System power 1200 W
- ▶ Peak torque 200 Nm
- ▶ Patent pending

### Cloud-Service Framework

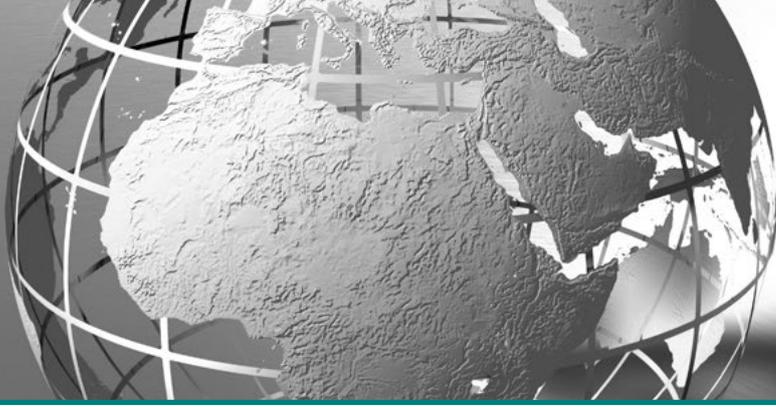
- ▶ Customer app for Android, iOS and Windows
- ▶ Fast support through automatic fault memory analysis and cloud-based ticket system
- ▶ Freely configurable OTA software updates

## HEINZMANN FREE DRIVE® SYSTEM OPTIONS



## HEINZMANN FREE DRIVE® SYSTEM APPLICATIONS





## HEINZMANN Group

HEINZMANN is a globally active family business founded in 1897 with its headquarters in Schönau (Germany), in the Black Forest.

Today, in the field of engine management HEINZMANN is one of the leading suppliers of components and systems for industrial combustion engines, generators and turbines. As a specialist and development partner, HEINZMANN is committed to developing exactly the right solution for increasing efficiency and reducing emissions.

In the Electric Drives division, HEINZMANN also demonstrates innovative strength and development expertise in engine technologies of the future. The company has established itself as a reliable partner and system provider for electric drive systems.

Our collaborative interaction with more than 40 globally active subsidiaries and sales companies characterizes the spirit within the HEINZMANN group of companies and makes us a reliable partner.

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