

JOKE

# WHAT I WOULD LIKE TO TEST

19.11.2013

There are so many other inventions in disciplines that I know from hear-say only. When being asked what I would like test, I would point to the [ZeHus Bike+ unit](#), a self contained rear wheel with regeneration during braking and constant movement and electric assistance during acceleration.

The hardware of a Bike+ bike consists of a conventional, single speed bike where the rear wheel is replaced by the integrated hub and the rear brake is replaced by a regenerative braking effect. The hub contains the electric motor (brushless, power 250 W, voltage 24V nominal), the battery pack (Li-ion, 8 elements in series, 160Wh), and the ECU (comprising two microcontrollers, a tri-axial accelerometer for slope estimation, a CAN-Bus line, a Bluetooth module). The pedaling speed sensor is integrated into the freewheel mechanism. The HMI is realized via a smartphone App, allowing the cyclist to easily monitor energy flows, instant power from himself and from the motor and set some basic parameters of the system.

There are so many other recent bicycle inventions like the [Gernwein H2 bike](#) oder the [loop-wheel](#) while I think, the most promising invention will cure some human deficiency: metabolic efficiency is definitely higher at constant speed than during an acceleration and it remains to be tested how this is working in daily commuting.