



OUTPUT

CONVERSION

BATTERY

CHARGING

AC european plug
230V AC

VENTILATOR

cigarette plug
12V DC

USB port
5V DC

PHONE
display

remote control
inverter

AC current
sensor

INVERTER (Victron 24/800)
AC european plug
230V DC
700W
10mm2 cables
18.4 - 34.0 V DC

DC/DC CONVERTER
cigarette plug
12V DC
5mm2 cables
20 - 30V DC

USB port
5V
cigarette plug
12V DC

OPEN ENERGY
MONITOR
WIFI
display output
energy sensing
input

BUS BAR
M6 cable shoes

switch on for use

DC current
sensor

DC current
sensor

C32

Battery plug
SBX / SA 350

BATTERY (LIT/D24-150)

M8 cable shoes
10mm2 cables
25.6V DC
50A

DC CONNECTION

connector
WEIPU SP21

GRID CHARGER
10mm2 cable
28.8V DC
AC plug male
230V AC

REGULATOR
(solar with MPPT)
5mm2 cable
28.8V DC
10mm2 cable
>30V DC

REGULATOR
5mm2 cable
28.8V DC
5mm2 cable
>30V DC

GRID

PV SYSTEM

ONE BIKE
+GENERATOR



Vélo M2
Basic energy module wire diagram

The Vélo M2 energy module can be powered by different renewable energy sources in direct current. One of the sources is human power through pedal generation. The regulation is done by DC/DC converters that are controlling the current flow to the output. The central controller manages the power flow taking into account the state of charge of the battery and the power consumption.

At the time of writing, the regulator and the central controller are in a conceptual stage and need further development. Experts in power electronics and in data communication are invited to collaborate on the realisation of these components.

