The Open Hardware Smart Meter

that powers the smart energy revolution

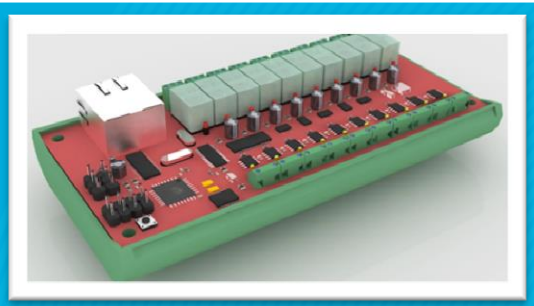
Smart Meters

There are lots of smart meters and a huge market:

- Measure whole household energy consumption, mostly for billing
- Lots of regulation and entrenched players
- Proprietary solutions and competing standards

These meters are made for public utility companies

Open Hardware Smart Meter



OpenStrom enables all other smart energy applications:

- Measure and control of 10 circuits
- Wifi connectivity
- **Open** design, interfaces, firmware & backend

Our meter is made for makers & integrators

Target Specs

Component	Characteristics
MCU	80 MHz 512k kB + 128 MB
Connectivity	LAN, Wifi ZigBee
Sensors	Voltage, current, mean active power, mean reactive power, voltage frequency, power factor, phase angle between voltage and current, mean apparent power 90 - 250 V AC 0 – 40A 7.4 kHz sampling
Relays (10x)	Switching up to 40A at 250V, max. 10kW
Form factor	DIN rail compatible housing (for mounting inside fuse box)

Operating temperature range: 0°C to 85°C (commercial)

Enabling Smart Energy Applications

Measurement

Power, current (active & reactive), voltage, power factor
with high sampling rates (kHz)

Monitoring / Energy Disaggregation

Which appliances are running? How can I optimize consumption?

Detection of issues / Energy states

Any equipment malfunctioning (like a blocked pump)?

Competitive Analysis

- **Home Automation** focus on appliances
- **Smart Meters** focus on total energy consumption (utility companies)
- **DIY** lacks required certifications and safety marks

OpenStrom provides a solution to combine these requirements with an open platform that wins on # of circuits, switching functionality, price and availability.

Founder & Team

Matthias Zeitler
15 years experience in enterprise software;
managing remote teams and international sourcing
corporate career & startup experience

Engineering team to build prototype:
Tony Tachev, 20 years experience as embedded engineer designing with microcontrollers
Franklin Francis, 5 years experience with firmware development and prototyping
plus identified candidates for software development

Easy Business Model

Sell hardware, start on Kickstarter then grow channels
Device for 10 power circuits at €100 to €150

License specialized algorithms
Energy disaggregation and faulty state detection