

volkszaehler  org

@justinotherguy

UnFUCK²⁰¹¹

was?

Smart Meter
im Selbstbau

UnFUCK²⁰¹¹

wozu?

Stromverbrauch
minimieren

Daten selbst behalten

UnFUCK²⁰¹¹

wie?

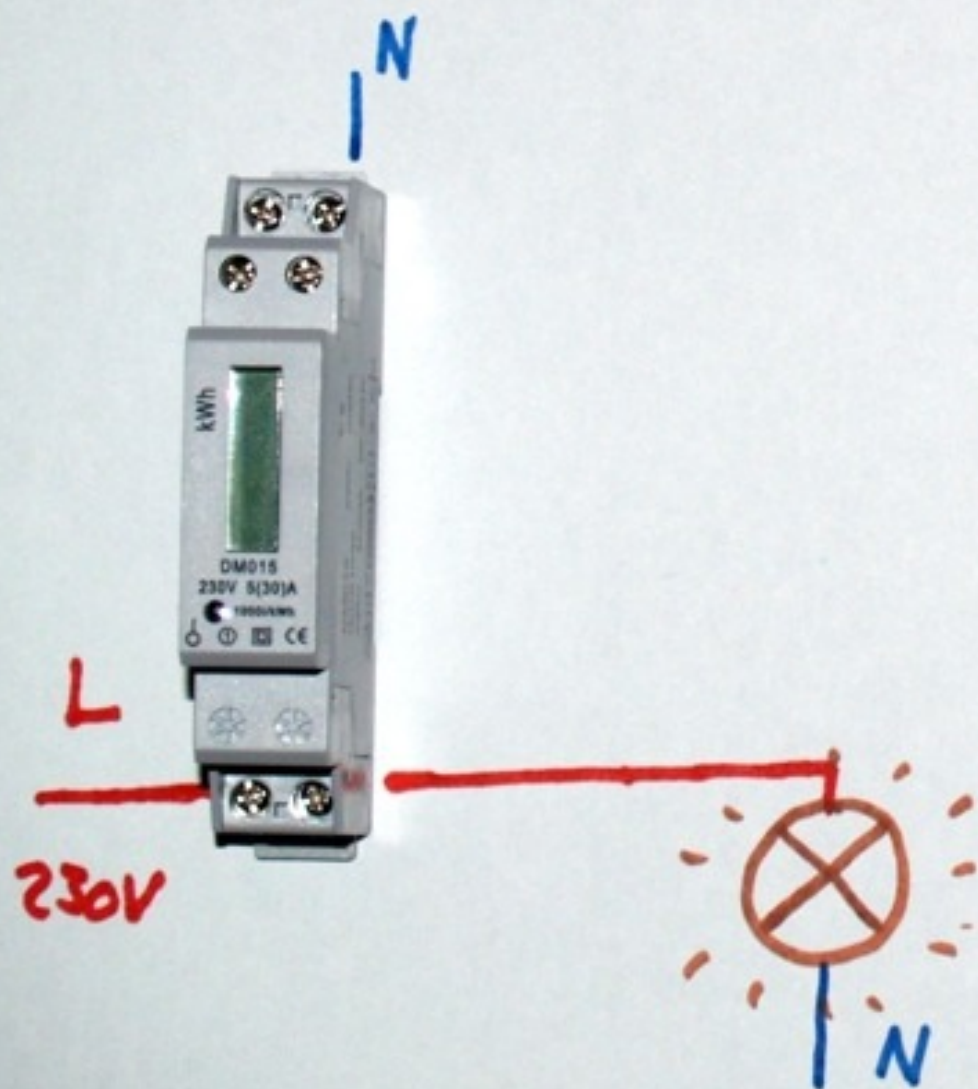
UnFUCK²⁰¹¹

wie?



UnFUCK^{20M}

wie?



UnFUCK^{20M}

ATmega-Board

AVR Net-IO

2 kB RAM

ethernet

⇒ HTTP-Client

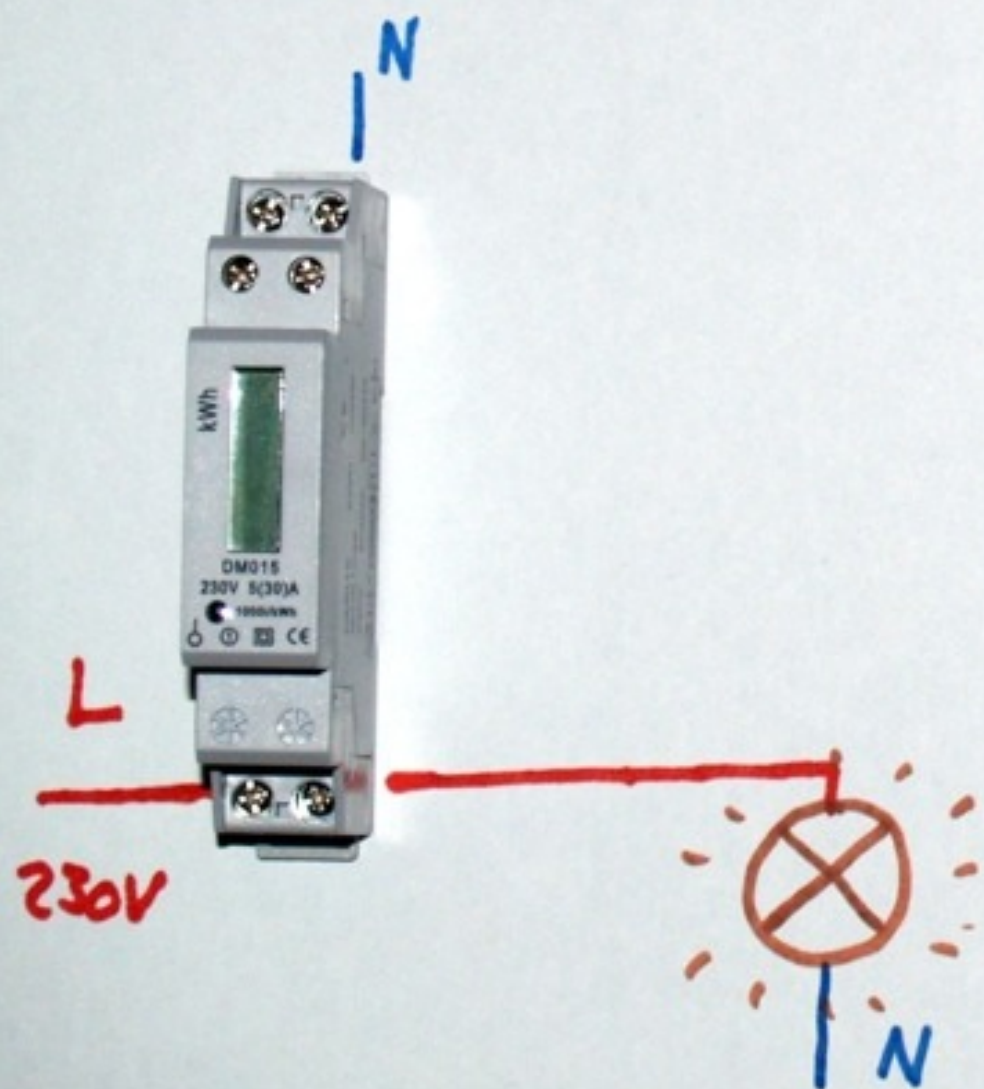
1-wire

(pollin.de)



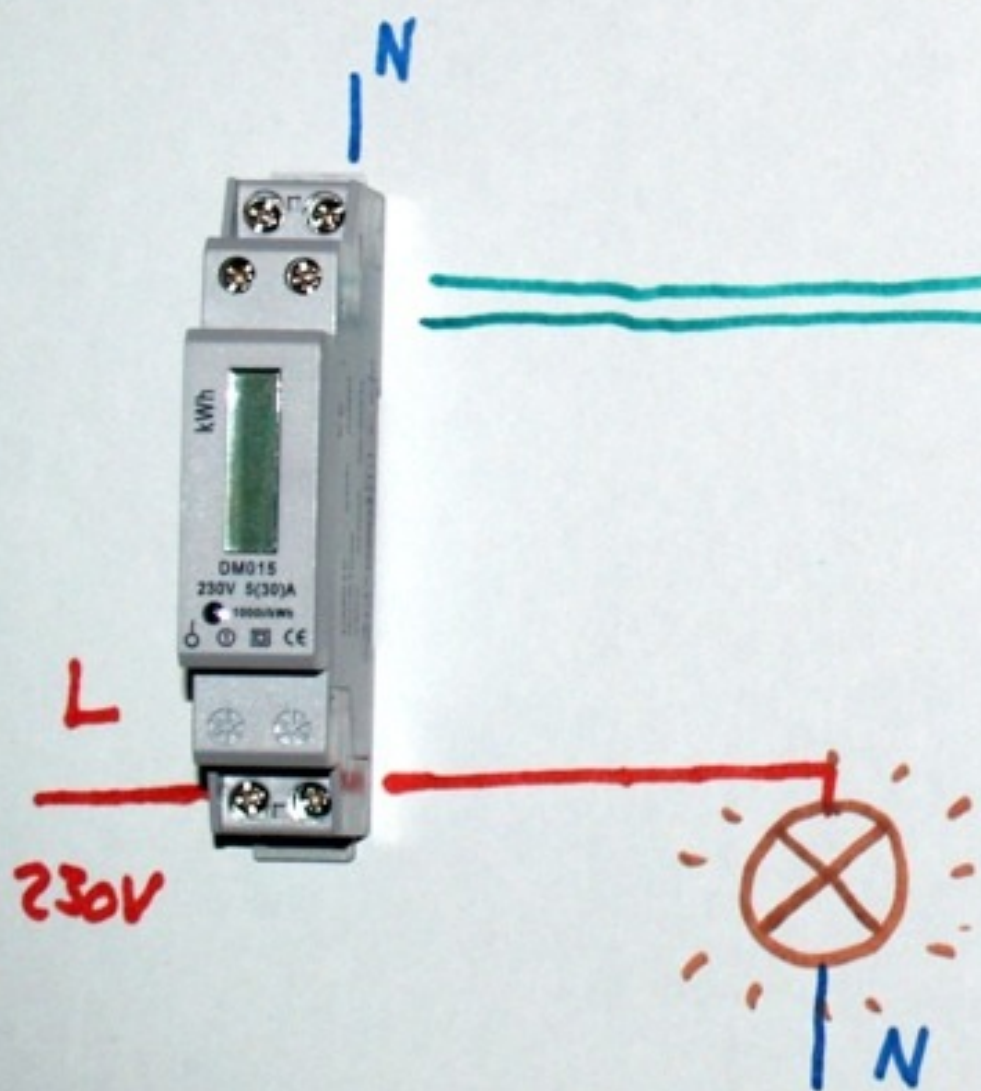
UnFUCK²⁰¹¹

wie?



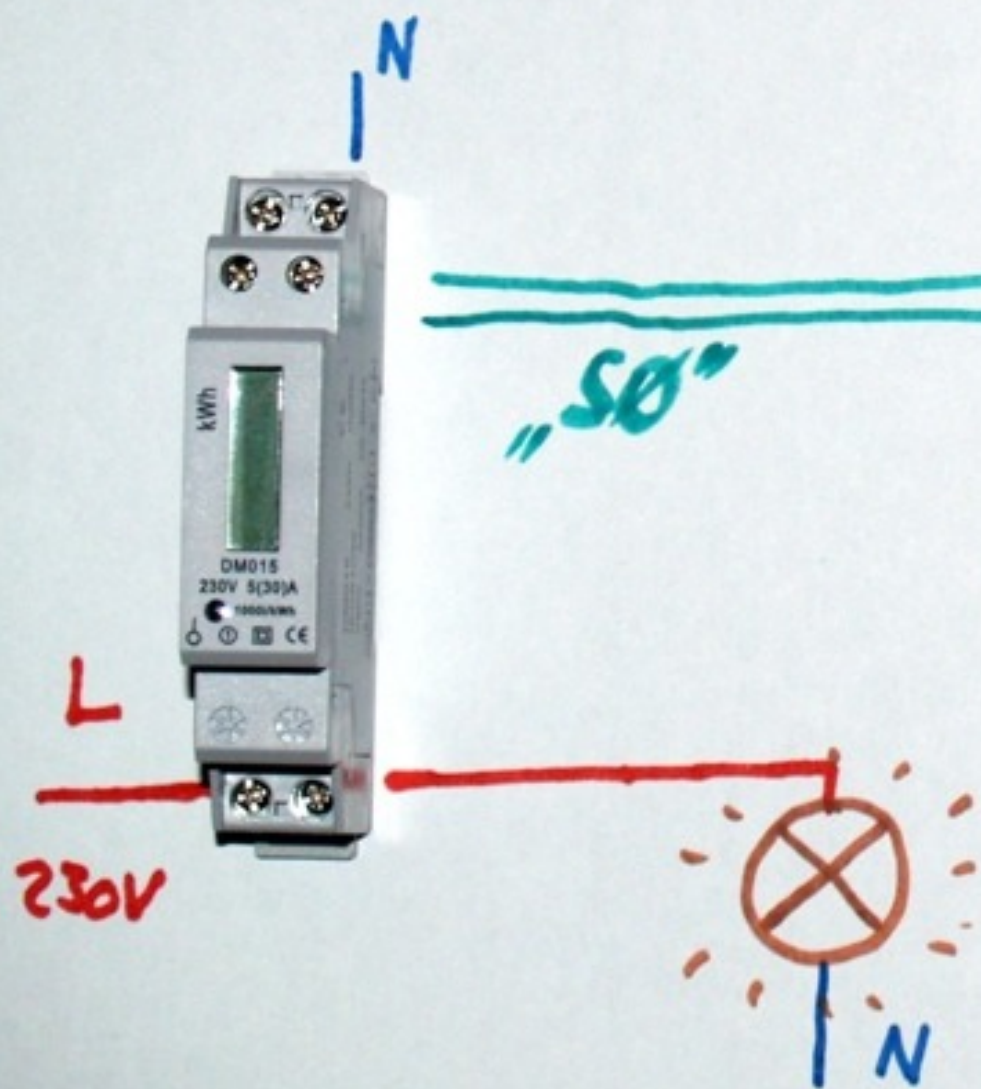
UnFUCK²⁰¹¹

wie?



UnFUCK^{20M}

wie?



UnFUCK^{20m}

LAMP-System

IOmega iConnect

256 MB RAM

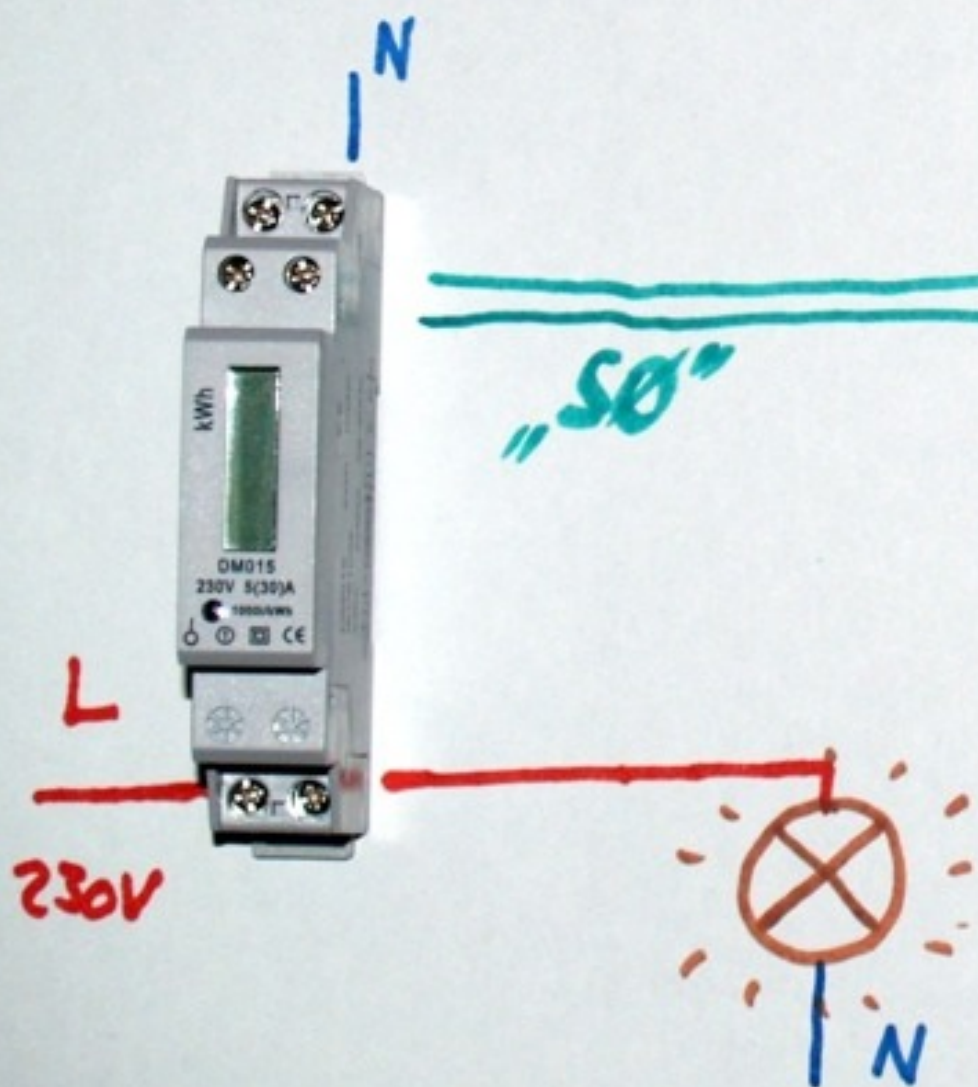
USB, eSATA

GE, VLAN



UnFUCK²⁰¹¹

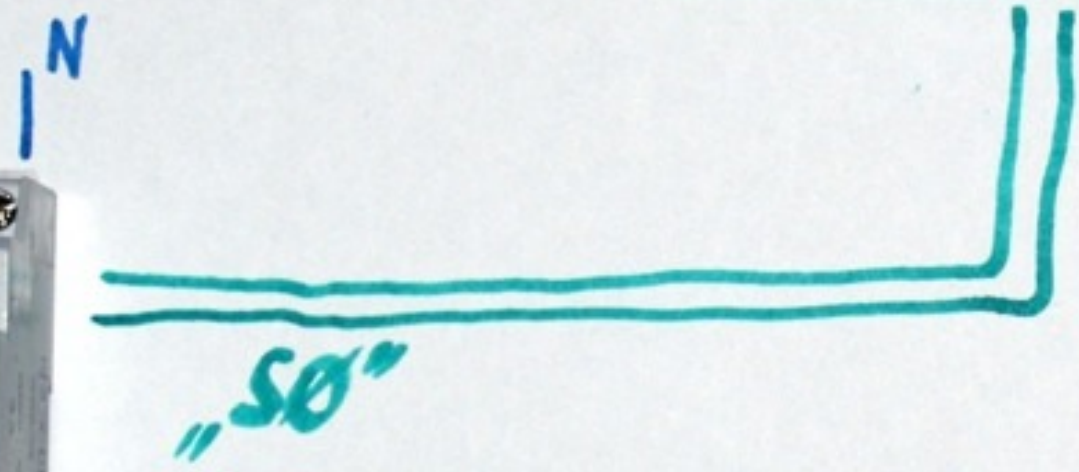
wie?



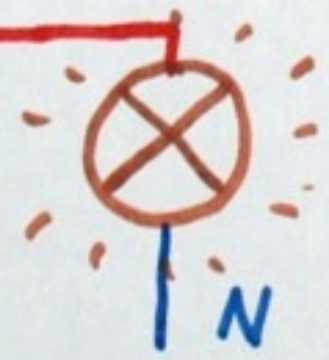
UnFUCK^{20mA}

wie?

LAN



L
230V



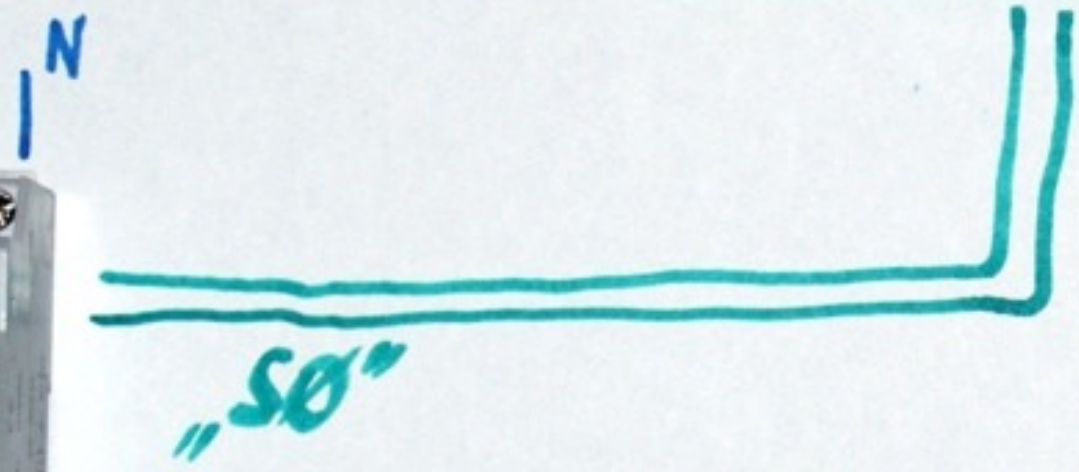
LAN



UnFUCK^{20M}

wie?

LAN



L
230V



~3,5W

LAN



UnFUCK^{20M}

wie?

LAN



~1W

N



"50"

LAN



~3,5W

L
230V



UnFUCK^{20M}

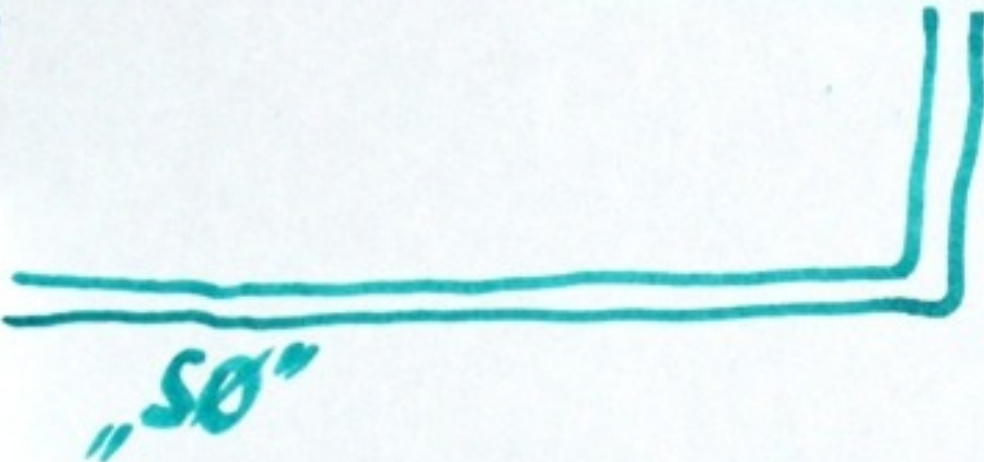
wie?

LAN



~1W

N



"50"

LAN



LAMP

~3,5W

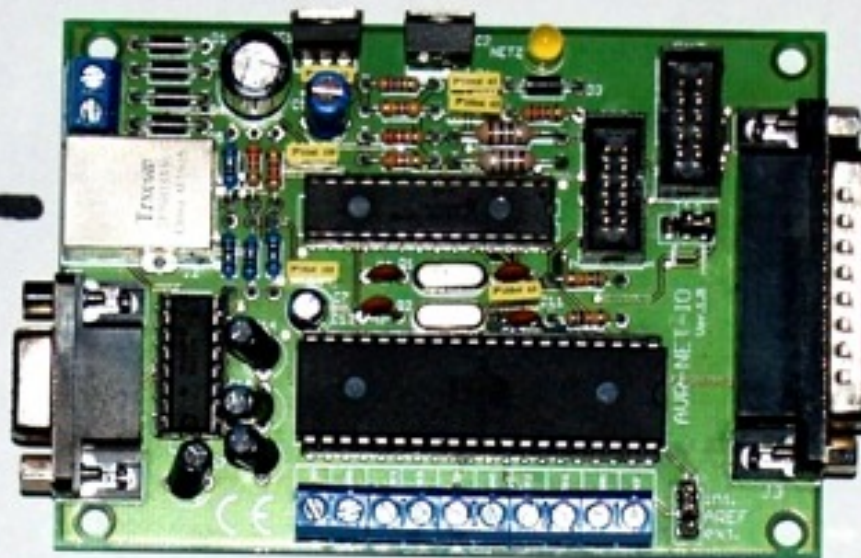


L
230V

UnFUCK^{20M}

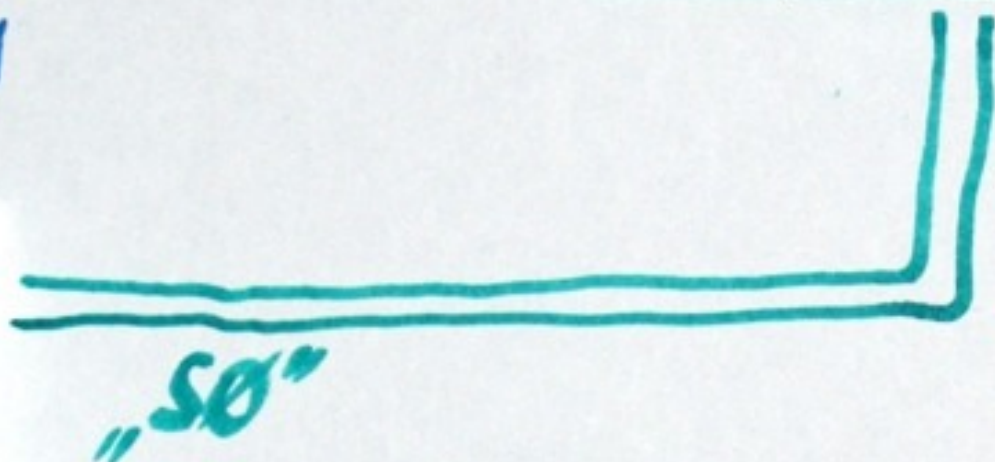
wie?

LAN



~1W
ATmega

N



"50"

LAN



LAMP
~3,5W



N

L
230V



UnFUCK 20M

Demo

gefällig?

UnFUCK^{20M}

Aufbau:

Messen

Verarbeiten

Speichern

Auswerten

Un FUCK 2011

Aufbau:

Messen

• Hutschieneenzähler

Verarbeiten

Speichern

Auswerten

Un FÜCK 2011

Aufbau:

Messen

· Hutschienenzähler

Verarbeiten

· ATmega-Board

Speichern

Auswerten

Un FUCK²⁰¹¹

Aufbau:

Messen

• Hutschieneenzähler

Verarbeiten

• ATmega-Board

Speichern

• LAMP-System

Auswerten

Un FUCK 2011

Aufbau:

Messen · Hutschieneenzähler

Verarbeiten · ATmega-Board

Speichern · LAMP-System

Auswerten · Browser

Un FÜCK 2011

weiter?

UnFuck²⁰⁰⁰

weiter? Messen:

Stromwandler

eHZ / EDL

Wasser

Temperatur

UnFlick²⁰⁰⁰

Weiter? Verarbeiten:

Fluxo USB

Udos Hutschienen controller

UnFUCK²⁰¹¹

DANKED!

stv0g

Udo1

JayD

WiiiImaa
gonium

@justinotherguy

UnFUCK²⁰¹¹

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@justinotherguy

UnFUCK²⁰¹¹

elektro:camp(<<2011.05>>)

what?

a hacker's meetup on
smart metering
home automation
renewable energy

when?

Friday 27 May
Saturday 28 May

where?

Hochschule der Medien
Stuttgart
Germany

info/register:
www.elektro-camp.de

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my**SmartGrid**



be there or be ☐