

Re: Automatic power metering – existing products and new functions

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- *From:* Mike Monett <no@xxxxxxxx>
 - *Date:* Thu, 02 Jun 2005 00:26:56 -0400
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Noen wrote:

- >
- > My problem relates to automatic power metering (by electric power
- > supplier to private homes) using existing off-the-shelf products. I am
- > currently looking at enhancing existing automatic metering systems
- > (e.g. with "residential gateway" solutions supplied by Echelon or
- > Ericsson) with added functionality and better data security. The
- > problem is interfacing the new equipment with existing equipment,
- > because the existing equipment are of different makes and models, and
- > the installation is done by technicians with very limited engineering
- > skills.
- >
- > Further, considering additional future needs (which have not been
- > thought of yet), the way to go seems to be the design of an interface
- > module that can handle all existing equipment and any new equipment to
- > make the design of new equipment independent of varying existing
- > equipment (only the interface protocol needs to be considered).

If you are considering designing your own interface, here's some ideas base on a simple laser pointer shining on a conventional watthour meter disk:

Watt Watcher

<http://www.cedarnet.org/smartware/Hardware/WattWatcher/>

Electric meter reader

<http://www.seanadams.com/pge/>

UK Electricity usage monitor

<http://offog.org/code/electricity.html>

Here's another concept that will keep over-unity optimists happy:

"The Energy Conservation Circuit is a patented circuit that provides economic savings when applied to existing electrical circuitry supplied by alternating current. The device allows the magnetic field to be altered in such a way which significantly reduces the power consumption necessary to operate a given load,

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whereby the more the load the greater the savings."

"Savings up to 22% have been measured at peak operating times."

http://www.affs.org/html/the_energy_trimmer.html

Mike Monett

• **References:**

- ◆ **Automatic power metering – existing products and new functions**

◇ From: Noen

- Prev by Date: **Re: purpose of TL081 in this circuit? – LowRippleHVsupply2.jpg (0/1)**
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