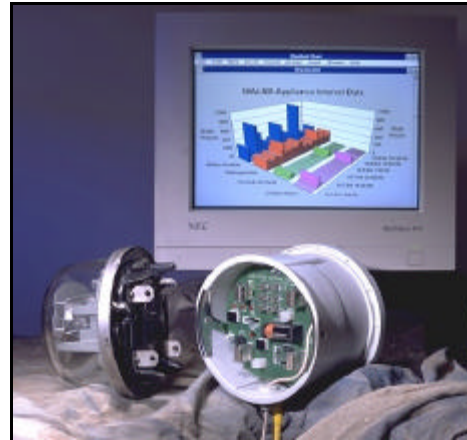


A Versatile Meter Base “Plug-In” Recorder

- ✓ ***Safely Record At The Meter Without External Boxes Or Wires.***
- ✓ ***Quickly And Easily Installed.***
- ✓ ***Records Power Consumption And Power Quality. Resolve High Bill And PQ Complaints.***
- ✓ ***Easily Upgrade To Recording Individual Appliance Power Consumption (Patented Technology).***



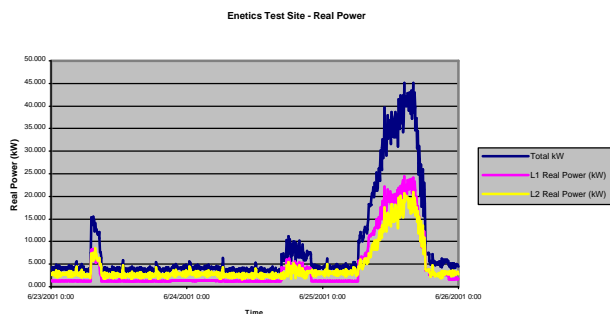
The LD-1302 is a Form 2S residential meter adapter recorder designed to simply plug into a meter base to simultaneously record power quality and power consumption (1% accuracy). The unit has captive internal CT's making installation and current measurement easy.



upgrade to Enetics' unique SPEED™ technology which will record which individual appliances turned ON and OFF with time stamp and individual power consumption. This not only demonstrates to the customer that your revenue meter is correct but where the high power consumption is coming from.

Power Consumption

The unit records KW, KWH, Power Factor and all key power parameters with 1% accuracy and time stamp (Internet synchronized by modem). Customer high bill complaints are easily resolved. You can even easily



Power Consumption Interval Data

Power Quality

More and more residences have become vulnerable to power quality problems because of home offices and so many appliances using sensitive electronics. The LD-1302 records voltage, current, one cycle swell and sag events, total harmonic distortion (THD%) and even individual harmonics for trending. Easy to use software generates charts and reports in Excel® eliminating software compatibility problems. At a glance, sags or loose neutrals can be identified. And you still have the Excel® data to manipulate to do other calculations if necessary.

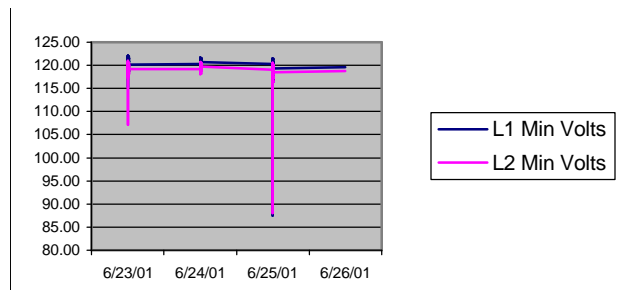


Chart Of Minimum Voltages Shows Sags

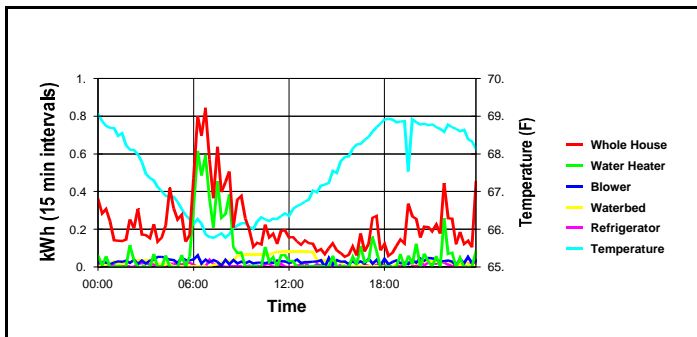
Software

All data is stored in a standard SQL database. Charts and Reports are generated in Microsoft Excel® with canned macros avoiding compatibility problems. The data is always available in Excel® format for any analysis not covered by our canned macros and inquiries for special reports are invited. In addition, Enetics will make available the database format and the macro code in the event you wish to generate your own information.

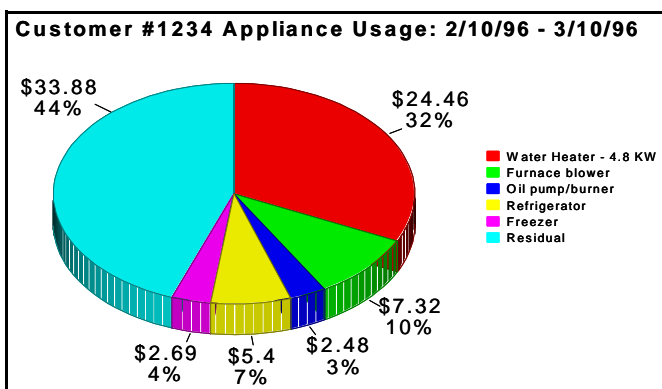
Setting up the recorder is a simple form fill-in procedure.

SPEED™ Technology

The LD-1302 is easily upgraded to incorporate Enetics' unique and proprietary SPEED™ technology (previously known as NIALMS). In this mode, with only single point measurement (the meter), the recorder records not only whole house power consumption but also when individual appliances within the home turned on and off and how much power each consumed.



Average Weekday Consumption



Distribution of Energy Consumption

Critical energy consumption information is obtained with a single point measurement at significantly reduced time and expense. This information can be used for:

- Resolving High Bill Complaints.
- Rate Structure Formulation.
- DSM Program Verification.
- Load Research.
- Offering Many Unique Customer Services.

Specifications

Form: 2S

Channels:

Voltage 2
Current 2

Range:

Voltage 120/240
Current Form 2S (200A)

Memory

Non-volatile 2MB.

Sample Rate/Response Time:

32 samples/cycle
(128 samples/cycle every 7 sec for harmonic analysis)

Accuracy:

Voltage $\pm 0.2\%$ reading + 0.1% FS
Current $\pm 0.2\%$ reading + 0.2% FS
Power $\pm 0.5\%$ reading + 0.01% FS
Power Factor $\pm 1\%$
THD $\pm 1\%$

Response Time/Recording Interval

Response Time: 1 cycle
Recording Interval: 15 sec to 1 hour (Wraparound)
Typical Data Storage Time:

15 Min Interv/16 Parameters: 200 Days min
15 Min Interv/83 Parameters: 65 Days min

Software calculates recording time.

Harmonics: Up to 15th

Communications:

Internal Modem Data Rate: 2.4 kbps
Serial Port: 19.2 kbps

Power: 120/240vac, 60Hz

Environmental/Physical:

Operating Temp Range: -20 °C to +70 °C
Size: Weight: 3 lbs (1.4 kg)

(Specifications Subject To Change Without Notice)

9/1/01