

Breakthrough in Residential Solar Monitoring & Smart Home Energy Management

Get the Most Out of Your Solar Power Investment

EcoDog's FIDO Home Energy Watchdog system provides unprecedented visibility to solar performance with an easy-to-use console that shows savings (or earnings) at a glance, monitors loads for maximum return on investment (ROI), tracks energy generation over time in KWHr and **actual dollars** and compares consumption versus generation.

Keeping an Eye Out for Savings and Peace of Mind

Along with solar optimization, ECoDog offers a comprehensive view electric consumption throughout the home that gives homeowners power over their energy use with an added measure of security as a bonus.

FIDO makes it easy to make sense of electric bills: letting users know the cost of running major appliances or how much the kids add to the monthly bill when they don't turn off their video games! With simple tips and graphic charts, FIDO turns kilowatt hours into monthly savings.

Product Features

Real-Time Monitoring and Net Metering - Show real-time usage and generation with excellent accuracy and resolution

GridSmart™ Messages - personalized system status updates and energy-saving advice based on individual use.

Security Alerts - record when appliances, lighting or electronics are running excessively or at unexpected times.

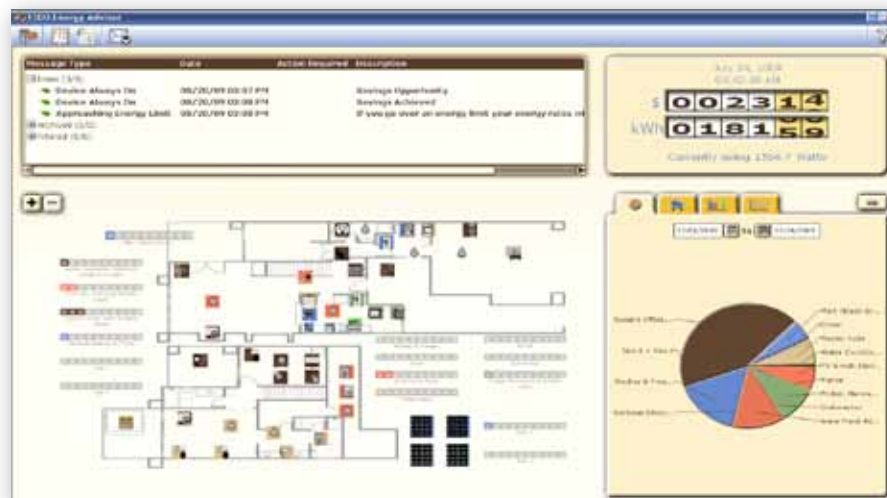
Lock-Down Privacy - keeps your detailed energy usage patterns secure on your computer - no need to share with utilities or 3rd parties.

Remote Access - e-mail or SMS alerts users to unusual electrical use.

Outlet Control - for individual electrical outlets (coming soon)

Universal Meter Compatibility - provides comprehensive monitoring that provides intelligence from traditional utility meters.

Makes Smart Meters Smarter - enables dramatic savings as utilities roll out new generation of Smart Meters with complex time-of-use billing schemes.



with

FIDO™

your home energy watchdog

Our Solution

EcoDog's FIDO Home Energy Watchdog oversees energy generation and use throughout the home, on a room-by-room basis.

The software interface, which runs on a home PC, combines this data with current pricing information from the utility. Using patent-pending algorithms, the software displays recommendations of ways in which homeowners can optimize their solar installations, reduce their electric bills and track their ROI.

Users can identify specifically where they are using the most electricity and proactively make cost-saving changes. For example, one homeowner observed that a basement dehumidifier was consuming excessive energy. Replacing the device with a newer EnergyStar model **reduced their utility bill by nearly \$90 per month.**

When used in conjunction with controllable switches and appliances, the system can carry out recommendations automatically for even greater savings and reduction in peak loads to maximize solar power use.



FIDO™ Home Energy Watchdog Specifications



Breaker Monitor

Current Measurement

Average Error:

< ±0.50%, ±10 mA

Max Error:

< ±2.50%, ±100 mA

Voltage Measurement

Average Error: < ±0.01%, ±10 mV AC

Max Error: < ±0.10%, ±100 mV AC

Measurement Ratings (per Breaker Monitor)

Circuits	Current	Voltage
16 single-pole, or up to 8 dual-pole	50 Amps Max	105-130 VAC
	50 Amps Max	210-240 VAC

Real Time Clock

Accuracy: 10 ppm @ 20°C, 20 ppm Max

Backup Time: 3 days typical, 10 days max

Input Power

Voltage: 105-130 VAC

Power: < 1.5 mW typical, 2.5 mW Max

Parasitic: Current on Measured Circuits: 0.001 Watts per Watt measured

Non-Volatile Memory Capacity

Typical: 45 Days

Max: 100 Days

Physical

Dimensions: 8.5" H x 6.3" D x 4.3" D

Weight: 1.6 lbs

Environmental

Operating Temp: -40°C to +85°C

Storage Temp: -55°C to +125°C

Power Line Carrier Communications

Emissions: Designed to be compliant with FCC, Industry Canada, Japan MPT and CENELEC EN50065-1 specification for low-voltage signaling

Bit Rate: 5.4kbps raw bit rate

Communication

Technique: Dual Frequency BPSK with DSP-enhanced receiver

Carrier

Frequencies: 132 kHz primary, 115 KHz secondary (CENELEC C-Band)

Enclosure Type: 3R – Rainproof

Max Ratings: 240 VAC, 60 A

Agency: UL Listed

FIDO Network Adapter

Input Power

Voltage: 105-130 VAC

Current: < 0.5 mW Typical, 1.5 mW Max

Connection: IEC320 inlet; 6' line cord with NEMA standard 5-15P plug



Computer Interface

Serial: EIA RS-232

USB: 1.0, 2.0 (with supplied adapter)

Physical

Dimensions: 6" H x 2.8" D x 2.2" D

Weight: 1.1 lbs

Environment

Operating Temp: -40°C to +85°C

Storage Temp: -55°C to +125°C

Power Line Carrier Communications

Devices

Supported: 64 Max (1024 total circuits)

Emissions: Designed to be compliant with FCC, Industry Canada, Japan MPT and CENELEC EN50065-1 specification for low-voltage signaling

Bit Rate: 5.4kbps raw bit rate

Communication

Technique: Dual Frequency BPSK with DSP-enhanced receiver

Carrier

Frequencies: 132 kHz primary, 115 KHz secondary (CENELEC C-Band)

FIDO Energy Advisor Software

System Requirements

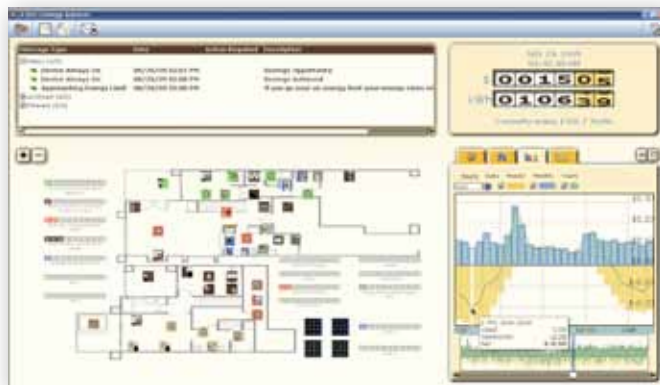
PC: Intel-Compatible PC or Mac running Windows XP, Windows Vista, Windows 7

RAM: 128 MB minimum, 256 MB recommended

Disk Space: 20 MB free

Communications: 1 free RS-232 or USB port

NO Monthly Fee • NO Subscription • NO Contract



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