

NOMINEE

World Technology Awards
for innovations in the field of
Environment - Corporate

OPTIMAL
TECHNOLOGIES

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Exactly what does it mean to be **GREEN**, anyway?

In a world where the accessibility of traditional, finite energy sources are held sway by ever-changing world politics; where opinions on global warming and renewable energy sources rule the day, energy efficiency—and the ways and means of securing it—have become a worldwide obsession.

For the past seven years, **Optimal Technologies** has been rewriting the book on energy efficiency, squeezing every last kilowatt of power from energy grids across North America, while earning the respect and accolades from industry leaders in the energy and environmental sector. Its cutting-edge solutions have set the new bar not only for efficiency, but also the ability

to create the world's first true "SmartGrids".

Millions of lines of code, hundreds of thousands of man hours, one goal—to be the leader in energy system optimization. It hasn't been easy, and with ongoing research, it still isn't. What's it worth for the people at Optimal? It's a great way for us to show our true colors.

It's not easy
BEING GREEN.
being green.
(WE JUST MAKE IT LOOK LIKE IT IS.)

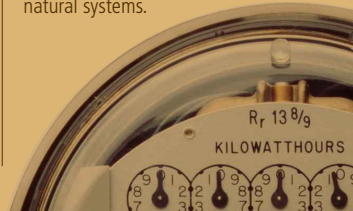
Optimal Technologies provides end-to-end optimization solutions to the electric power industry, with measurable benefits for both power suppliers and power users.

With its ground-breaking technologies, Optimal helps deliver a more efficient, eco-friendly, and reliable

energy system while empowering consumers with better knowledge and control to manage and utilize energy more intelligently.

Optimal's integrated systems provide significant health and environmental benefits such as reduced greenhouse gas emissions and improved air

quality, while conserving depletable fossil fuels, fresh water, and natural systems.



AEMPFAST

ANALYSIS. OPTIMIZATION.
MANAGEMENT.

AEMPFAST is an advanced set of software tools that intelligently optimizes, analyzes, and manages generation, transmission and distribution assets, as well as demand-side distributed energy resources (small local generators and managed load).

For Electric Power Supply, AEMPFAST

- Provides a power grid system tune-up, resulting in a more efficient system, and reducing fuel use and air emissions. AEMPFAST typically allows a 5–10% increase in deliverable power over the existing system without the addition of new generation or wires.
- Allows fuller use of existing grid resources and avoids the need for costly system expansions that have adverse environmental and land use effects.
- Reduces emissions via new least-emissions grid planning and operating methods, including

detailed strategies for maintaining grid performance while reducing reliance upon fossil fuel generation.

- Provides intelligent integration of wind, solar, geothermal, and other renewable and distributed resources into the system. AEMPFAST improves the quality, accuracy, and value of detailed planning and feasibility studies.

- Improves the cost-effective deployment of energy efficiency and demand response strategies and equipment. AEMPFAST makes every location more valuable and ranks specific locations within the transmission and distribution (T&D) system at which the greatest overall improvements and performance will be found.

- Facilitates the measurement and implementation of emissions credits and green trading programs and incentives to fight global warming.

SUREFAST

EFFICIENCY. CONTROL. POWER.

SUREFAST is a unique, intelligent building automation and energy management system which provides building owners and operators as well as home owners unprecedented levels of measurement, analysis, management, control, and automation.

The result?
Reduced costs,
reduced risk,
increased operating
efficiencies, and lifestyle
enhancement.

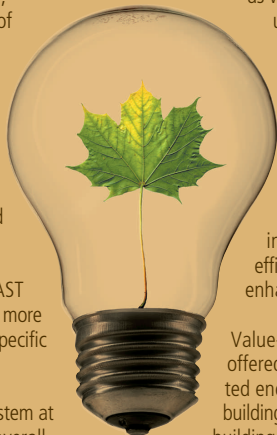
Value-added services offered include sophisticated energy management, building asset management, building security and surveillance, premise automation, fire monitoring, broadband anywhere without structured wiring, entertainment services delivery, and more.

Services are provided via an easy to use, single, integrated platform that

is low-cost and easy to install (no new-wires) in new or older buildings and homes.

For Electric Power Use, SUREFAST

- Empowers consumers to use power more intelligently and efficiently while automating customized conservation measures.
- Provides a venue for utilities to offer customers win-win, automated demand response programs to reduce power usage during critical peak times.
- Delivers reduced demand to utilities at key grid locations during peak power usage, mitigating the need for additional generation.
- Provides utilities with instant feedback for risk reduction.



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It's not easy being green