OptiCx™ Platform

The OptiCx™ System by Optimum Energy dramatically reduces the energy consumption of heating and cooling systems to help you lighten your energy footprint and shrink costs by up to 50% year after year. Our patented, modular optimization platform, the OptiCx Platform, delivers the operational modules and world-class customer support and engineering services for your organization. The platform seamlessly optimizes all aspects of your enterprise-grade HVAC system—chilled water plant, boiler plant and air-handling systems—and scales across your entire portfolio. You can optimize one system today, and tackle another tomorrow, confident that each operational module works synergistically with all others to yield savings impossible with a less holistic approach. As your organization and sustainability goals evolve, Optimum evolves with you.

OptiCx Platform Operational Modules

The OptiCx Platform is holistic, modular and extensible by nature—our operational modules optimize different aspects of an enterprise-grade HVAC system: chiller, boiler and airside. Our proprietary method of interdependently and relationally optimizing each HVAC sub-system as a coordinated whole ensures energy savings impossible to attain with a less-integrated approach. Based on your energy efficiency goals, you choose which operational modules to implement and when.

- **OptimumLOOP™** delivers continuous, reliable automated, system-level optimization of centrifugal chilled water plants. Its patented relational control algorithms calculate the most efficient operation of an entire chilled water system and automatically and continuously optimize plant performance in real time.

- **OptimumVAV™** provides automated, continuous, system-level optimization of direct digital controlled (DDC) variable air volume air handlers to provide building space temperature, flow and humidity requirements in the most effective manner.

- **OptimumHT™** safely optimizes boiler systems. Demand-based relational control algorithms continuously calculate the most efficient operation of boilers and pumps, dynamically optimizing performance in real time.

OptiCx Platform Benefits

- Significantly lowers operating expenses safely and reliably
- Sustainably reduces energy use by up to 50%
- Accurately measures, verifies and reports energy, carbon, water and cost savings
- Provides clear financial, operational and business insight and intelligence
- Delivers automated, continuous optimization based on real-time conditions
- Lets you easily track progress toward sustainability goals
- Delivers consistent results across industries, settings and control systems
- Efficiently scales across your entire real estate portfolio

Optimum Energy

Optimum Energy is a leading provider of energy management solutions designed to help organizations reduce energy consumption and costs. Our patented, modular optimization platform, the OptiCx Platform, delivers the operational modules and world-class customer support and engineering services for your organization. The platform seamlessly optimizes all aspects of your enterprise-grade HVAC system—chilled water plant, boiler plant and air-handling systems—and scales across your entire portfolio. You can optimize one system today, and tackle another tomorrow, confident that each operational module works synergistically with all others to yield savings impossible with a less holistic approach. As your organization and sustainability goals evolve, Optimum evolves with you.

Optimum Energy’s solutions are designed to help organizations reduce energy consumption and costs. Our patented, modular optimization platform, the OptiCx Platform, delivers the operational modules and world-class customer support and engineering services for your organization. The platform seamlessly optimizes all aspects of your enterprise-grade HVAC system—chilled water plant, boiler plant and air-handling systems—and scales across your entire portfolio. You can optimize one system today, and tackle another tomorrow, confident that each operational module works synergistically with all others to yield savings impossible with a less holistic approach. As your organization and sustainability goals evolve, Optimum evolves with you.
Platform Enhancements

A variety of platform enhancements are available for purchase as subscription add-ons. These enhancements monitor building and equipment performance to predict future building requirements, identify equipment issues and recommend optimal equipment combinations to meet those requirements. Examples include:

- **OptiCx Dynamic Sequencing**: Optimizes resource and system efficiency by learning over time how chillers perform and adapting in real-time to make recommendations for optimal chiller sequences that will achieve maximum savings.

- **OptiCx Predictive Free Cooling**: Maximizes savings and improves efficiency in systems operations by enabling accurate free cooling periods with real-time weather data.

- **OptiCx Chiller Diagnostics**: Reduces O&M expenses through prioritized recommendations and provides transparency into chiller system details by providing reports on chiller performance and maintenance issues.

**OptiCx Platform Subscription & Services**

Customers can access the ongoing benefits of the OptiCx Platform through two subscription levels. The Expert level provides data-driven HVAC optimization for chilled water plants, air-handling systems, and boiler plants. The Essentials level is an optional intermediate step that provides performance and energy management for these systems. Customers can start at the Essentials level and build a baseline for upgrading to the Expert level at a future point. Choose from either the Essentials or Expert subscription plan to meet your support and business needs:

**Expert**: Energy optimization and performance and energy management for heating and cooling systems. Includes access to optimization services, platform enhancements, web and mobile apps, and operational modules.

**Essentials**: Performance and energy management for heating and cooling systems. Includes access to support and reporting services along with web and mobile apps.

Learn more about our subscription tiers.

**What Makes Optimum Technology Different?**

**Holistic, Systems-Level Optimization via Patented, Relational Control Algorithms**

The patented, relational control algorithms of the OptiCx Platform automatically optimize all variable-speed HVAC system components in relation to one another—in response to real-time building loads and changing ambient and occupancy conditions. Most conventional control methodologies, by contrast, optimize components individually and with respect to controlled setpoints—which results in savings, but not peak efficiency. Optimum’s demand-based, relational control algorithms holistically determine the most efficient operation of your systems, and continuously and automatically tune your buildings to minimize energy use systemwide.
Real-Time Dynamic Commissioning

Lower Total Cost of Operations (TCO) through a system that learns and adapts over time.

Proven Results Across Industries, Settings, Vendors & Systems

The OptiCx Platform optimizes more than 75 million commercial square feet in settings spanning Fortune 100 companies, government agencies, hospitals, massive data centers, university campuses, manufacturing and pharmaceutical sites. Regardless of organizational or equipment type—in the most complex and demanding environments—our next-generation technology holistically and consistently delivers repeatable savings of up to 50%.

Efficient Scalability Across Your Portfolio of Buildings

Our technology readily deploys and scales across your entire distributed portfolio of buildings with maximum efficiency.

What Makes Optimum Different?

Optimum Energy reliably yields savings of up to 50% for all major HVAC sub-systems—regardless of industry, control system (BAS), setting or complexity challenge. Our system integrates the most forward-thinking, holistic energy-optimization technology with the most robust and customer-centric service offering—before, during and after implementation. Our centralized, world-class engineering and support team are here to assist each and every customer in the unique journey toward sustainability over the long term. The result? We deliver more than optimization—we deliver successful outcomes.

The OptiCx Platform is a new operating paradigm that gives you unmatched savings—and complete confidence—in the most demanding settings. What’s your energy efficiency challenge?
Meticulous Measurement & Verification of Performance, Efficiency & Savings

The OptiCx Platform collects data from each part of the networked system and performs meticulous, real-time measurement and verification of energy use, efficiency and savings. This ensures facility systems and personnel can react to changes in weather or demand immediately, rather than after energy loss has occurred. It also ensures you can accurately verify and report on your savings.

IPMPV-B Compliance & Reporting

Our measurement and verification system complies with the International Performance Measurement and Verification Protocol (IPMVP)—Option B. This method measures and verifies the full impact of the optimization project and documents savings at both component and systems levels.

Real-Time Dynamic Commissioning™ (RTDC) for Sustainable Efficiency

The OptiCx Platform makes more than 1.5 billion operating decisions annually to ensure building systems achieve peak performance day after day and year after year. Our patented Real-Time Dynamic Commissioning (RTDC) technology actively fights performance drift; uniquely, detecting and addressing issues in real time. RTDC—continuous, automated commissioning of building systems—ensures the long-term success of your optimization investment.

Operational Flexibility: ON & OFF Optimization Modes

Because the OptiCx Platform runs as an advisory layer on top of your existing Building Automation System (BAS), it does not change your BAS in any way. This gives you maximum operational freedom and flexibility. You can turn optimization ON or OFF if for any reason you want to revert to your previous building system operations. In contrast to other optimization platforms, which are hard to disengage once implemented, our system makes it easy to engage or disengage as needed. Resume operation of your pre-optimized systems and sequences at any time. Having full control over your optimization mode with ON and OFF functionality minimizes risk and maximizes flexibility.

Unparalleled Performance & Energy Management with Intuitive Web & Mobile Apps

OptiCx Trend

Trend—primarily for energy managers—gives you anytime, anywhere access to your organization's performance and energy savings. Trend is available through:

- All major Web browsers
- iOS app on iTunes
- Android app on Google Play

Use Trend to:

- Continuously monitor energy, carbon and dollar savings in real time or historically.
- See precisely how efficiently your system is performing and how much energy it is using, any given moment, week, month or year.
- Configure or customize your app or Web experience for fast access to the unique trends and information you need.
- Verify performance against forecasted and pre-optimization levels.
- Ensure progress toward sustainability goals.
- Share status with others in one click.

1. Design
2. Implement
3. Optimize

The OptiCx Platform: The Heart of the Story

Optimization with the OptiCx Platform is the third step in your ongoing journey with the OptiCx System by Optimum Energy. The platform integrates operational modules, Web and mobile apps, self-learning technology and world-class support. We are here to support you at every step into peak efficiency over the long term. The OptiCx Platform is about more than energy optimization—it gives you peace of mind.