The OptiCx platform 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 includes control software and world-class engineering services and support to meet your organization’s sustainability goals. 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.

- **OptimumEDGE®** is a turnkey solution that reduces energy costs by an average of 15-20% in chilled water systems with up to 3 chillers and a combined cooling capacity between 400 and 3,000 tons.

- **OptimumAIR®** 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.

- **OptimumHEAT®** 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
Comprehensive Energy Optimization: Chiller, Boiler & Airside
Nearly 51% of a building’s total energy draw comes from its HVAC system: approximately 35% from the chiller plant, 35% from the boiler plant and 25% from the air distribution system. So we optimize all of your systems—not just the chiller. By relationally optimizing each HVAC sub-system as a coordinated whole, we achieve energy savings impossible to attain with a less holistic approach.

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.

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.
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.

Optimum Technology’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.

**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.

**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.
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 Visualization Tools Provide 24/7 Access to Plant Performance Through Web & Mobile Apps

The OptiCx cloud-based performance and energy management platform is accessible anytime, anywhere via Web and mobile app (iOS and Android).

- Continuously monitor organizational energy, carbon and dollar savings in real time or historically.
- See precisely how efficiently your plant 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.

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**The OptiCx® Platform**

1. **Design**

2. **Implement**

3. **Optimize**

- **Optimization Services**
  - Reporting Services
  - Technical Support

- **Platform Enhancements**
  - Chiller Diagnostics
  - Predictive Free Cooling
  - Chiller Dynamic Sequencing

- **Visualization Tools**

- **Operational Modules**
  - OptimumLOOP®
  - OptimumEDGE®
  - OptimumAIR®
  - OptimumHEAT®

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