# SYMPHONY

#### WATER MANAGEMENT SOFTWARE

DATA + ANALYTICS INTELLIGENCE AT YOUR FINGERTIPS



# WHAT SYSTEMIC RISK FLOWS THROUGH ALL BUILDINGS?

**ENTER** 

# WATER

All of the other systems in your building are getting smarter, but what about the management of your water systems?



You are managing your water system the best you can with the limited data you have available. Now it is time to dive deeper into your water conditions with Symphony to make a significant, long-term impact.

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# **SYMPHONY™ SOFTWARE**

Symphony<sup>™</sup> Software is the only third-party, cloud-based platform that provides comprehensive and transparent insights into your building's water system 24 hours a day. With the incorporation of real-time water management software, you can take proactive measures to mitigate time-consuming and costly water management issues.

#### **Benefits**



#### **Water Conservation**

Clients have reported millions of gallons of water savings



#### **Energy Conservation**

System efficiency up to 35%



#### Reduces Legionella Exposure

Mitigate building occupant risk, avoid million-dollar lawsuits and irreparable brand damage



#### **Asset Preservation**

Minimize capital depreciation by 5% or more



#### **Unforeseen Maintenance Prevention**

Data Centers report 15% of unplanned outages are due to water-related failures, costing an average of \$500,000



#### **Your Front Line In Water System Risk Mitigation**

Buildings are constructed for different purposes, but they **ALL** include water systems. And these systems carry risk. Facilities are equipped with modern building automation systems for lighting, elevators, HVAC, and security. But the water system management is still measured manually one to two times per month.

Engineers and public-health authorities are now pushing building operators to improve water-system maintenance. Left untreated or mismanaged, chillers, pipes, and air handlers run inefficiently, causing unscheduled downtime, or worse, threatening public health and safety

Symphony Software™ seamlessly pulls data points from your water treatment controller and your building management system to monitor the cause-and-effect relationship between water quality and heat exchange efficiency.





With Symphony's advanced analytical capabilities and custom algorithms, you can validate regulatory compliance, strengthen sustainability initiatives, and generate operational savings. Symphony is a tool for increasing efficiency and managing risk for overall health and safety concerns as well as premature equipment failure.

GG Symphony™ provides Novant Health with actionable data and drives accountability across our healthcare portfolio. We are bringing historically isolated data back to life and using it to produce better outcomes in our water risk management program. JJ

Matt Stiene
Vice President Construction and Engineering
Novant Health

# SYMPHONY™ VALUE ACROSS THE ENTERPRISE

#### **Enterprise Level**

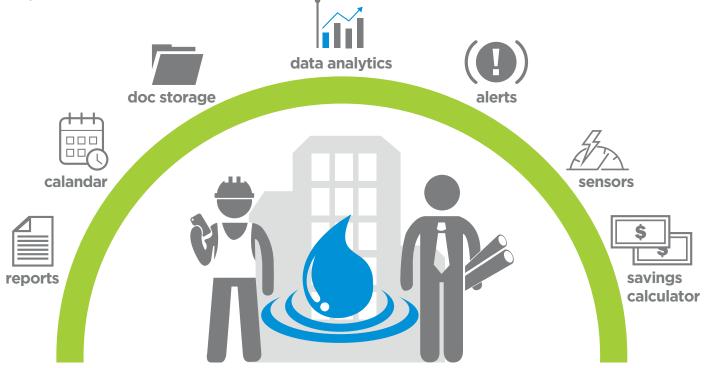
Symphony Software<sup>™</sup> helps leadership drive strategic initiatives forward across their portfolios. The sofware allows you to easily review benchmarks and system performance for enterprise optimization.

- Executive business reviews to drive cost control and meet sustainability objectives
- Centralized dashboard of portfolio's system performance and risk
- Streamlined processes and documentation across the entire enterprise

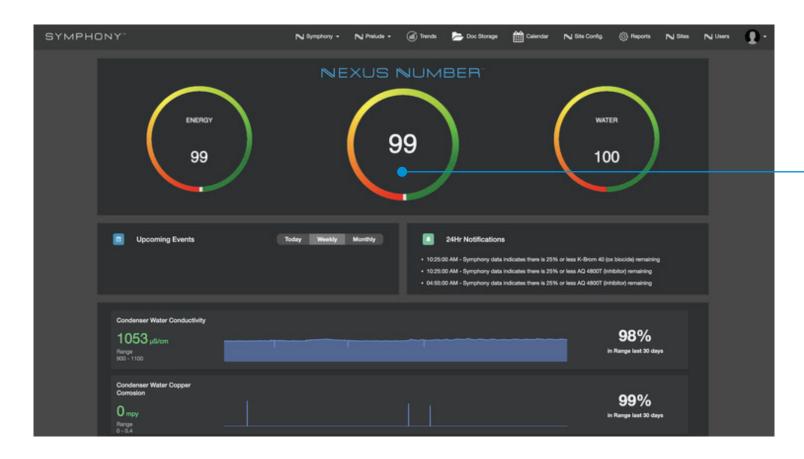
#### **Site Level**

Symphony Software<sup>™</sup> empowers facility managers and site teams to improve day-to-day operations and minimize manual labor mistakes. Remote access eliminates time-intensive water check-ins required to optimize system functionality.

- 24/7 alerting platform with recommendations
- Storage repository for management and compliance documents
- Vendor reporting and accountability



# STANDARD OF CARE DASHBOARD



## **Overall System Health**

Symphony<sup>™</sup> depicts your system's risks and generates a single, patented benchmark, known as the **Nexus Number**<sup>™</sup>. ▶

The Nexus Number™ provides an at-a-glance look at your overall system health with the option to dive into the finite detail if needed, giving you immediate knowledge of the ever-changing conditions of your building. The data supports swift and intelligent decision-making processes which can save money and improve outcomes.

#### **Performance Metrics and Actionable Alerts**

**Key performance indicators (KPIs)** with acceptable ranges are set up with you and your water treater which allows our software to alert you immediately if a precursor to a major issue is trending out of range. The **alert emails** contain information on how to address the concern being reported. No need to waste time reviewing graphs, the alert allows you to make efficient and data-driven decisions to address the issue immediately.



#### **Event Management**

It is important to verify routine service and maintenance are being scheduled and completed. Symphony provides calendar managment to store all of your upcoming service visits. In addition, the software has a centralized document repository to store all of your service reports as well as other compliance documentation in one place. Your workforce is already trying to do more with less. Let Symphony's repository automatically store the documentation you need for water management compliance. The easily accessible, up-to-date information saves your team time and provides assurance the documents are accurate.



19.8 percent of business time - the equivalent of one day per working week - is wasted by employees searching for information to do their job effectively.

- Interact Source

# **REAL-TIME MONITORING**

#### **ENABLES BUSINESS IMPROVEMENTS**

## **Minimize Occupant Risk**

With real-time monitoring of key data points which document the state of your water system, you can quickly address the precursors to waterborne pathogen development, like *Legionella*. This helps control bacterial growth and maintain an efficient reliable system significantly minimizing risk to your building occupants.

- Provide early-stage growth detection with biofilm monitoring
- Monitor chemical effectiveness against established protocols
- Provide regulatory documentation portal

#### **Mitigate Operational Expenditures**

Symphony continuously monitors your operational risk and alerts you when key factors are out of range. This ensures your system is not over or under-treated which results in corrosion, scaling, biofilm, and pathogen development. An optimized system reduces your energy consumption and provides water savings.

- Improve overall standard of care through optimized, tighter control
- Measure water usage against use targets
- Identify water quality fluctuations and resolution strategies



# **REAL-TIME MONITORING**

#### **ENABLES BUSINESS IMPROVEMENTS**

#### **Preserve Capital Assets**

The most robust design can be undermined by human error. Minimize the probability of critical asset failure and maximize the lifecycle of your capital expenditures through the continuous monitoring and benchmarking of your water systems. Being proactive in monitoring your water assets allows you to avoid unforeseen maintenance costs and premature equipment failure.

- Preserve life cycle of mechanical assets
- Predictive analytics reduce equipment malfunctions and downtime
- Transition from scheduled maintenance to on demand maintenance

# Comply with Regulatory Requirements

Facilities must present documentation that shows they have met certain specifications and standards for their water system which includes accurate, reliable data. Symphony allows you to centralize your water management data and documentation from your facility and your service providers for regulatory compliance.

- Centralized document repository
- Compliance and validation
- Calendar management



Aquanomix's superior level of expertise and support allowed us to effectively implement Symphony™. By using Symphony's algorithms and the real-time biofilm sensor we have precise continuous monitoring of our system performance, while protecting our assets and ensuring reliability. This is what our customers have come to expect from us. ▶▶

David EdwardsLEED AP

# **ESG GOALS THAT DATA IMPACTS**



## **ENVIRONMENTAL**

Water management and energy efficiency



## SOCIAL

Empowering staff with tools and data resources



## **GOVERNANCE**

Transparency and compliance

#### **Sustainability Goals**

The world has a diminishing supply of water. Symphony aims to help facilities around the world to achieve their sustainability goals by enhancing water quality and improving both water and energy efficiency in their water systems - leading to lower costs. Our software can help deliver points towards LEED® certification as well as support other initiatives like the Fitwell Standard, Science Based Target Initiatives, and the WELL Building Standard.

# RETURN ON INVESTMENT

Symphony provides real-time data analytics to help successfully run an efficient, sustainable, and profitable building.

#### ANNUALIZED OPERATIONAL SAVINGS

<b>Energy Cost</b>	\$247,500
Water Cost	\$53,422
Chemicals	\$15,500
<b>HVAC Maintenance</b>	\$7,000
<b>Total Cost Per Year</b>	\$323,422

Lifecycle	20 years
Total Lifecycle Cost	\$6,468,440
Projected Operating Savings	5.00% (per year)
<b>Annual Operating Savings Per Year</b>	\$ 16,171.10

#### **ANNUALIZED CAPITAL SAVINGS**

Lifecycle	20 years
Chiller Plant Cost (Capital cost)	\$1,600,000
Chiller Plant Cost (per year)	\$80,000
Projected Increase in Service Life	5%
<b>Annual Savings Over Service Life</b>	\$4,000
NPV	\$131,685

#### **TOTAL ANNUAL SAVINGS: \$20,171 per year**

Assumptions: Chiller Plant Size: 1,000; 20-year Asset Lifecycle; 75% Load: System Efficiency at 0.60KW/Ton: Electrical Cost at \$0.11 KWH; Cycles of Concentration: 5; Cost of Water: \$8.00 per 1,000 gallons; HVAC Maintenance: \$7.00 per Ton; Water Treatment Cost: \$15.50 per Ton. One failure results in \$500,000 loss. Annualized over 20 years is \$25,000. For general information purposes only. Costs and savings vary based on factors such as equipment age and physical location as well as the owner taking necessary actions if an alert arises.

# WANT TO LEARN ABOUT THE RETURN-ON-INVESTMENT SYMPHONY CAN PROVIDE YOU?



Contact us for more information or to schedule a demo.

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