



# Xylem Edge Control

A SUITE OF SOLUTIONS DESIGNED TO MEET YOUR CONVENTIONAL ACTIVATED  
SLUDGE FACILITIES' NEEDS

# Versatile, Off-the-Shelf CAS Control and Monitoring Options

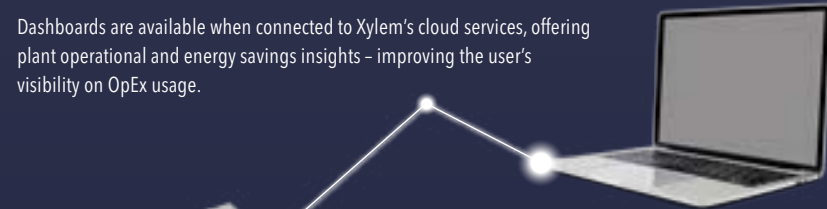
Xylem Edge Control is an off-the-shelf suite of digital solutions to help conventional activated sludge (CAS) plants improve process control, save energy, reduce costs, and minimize chemical usage. Further, these solutions can help you maintain nutrient compliance while providing digital security through the Xylem Gateway.

Built for versatility, Xylem Edge Control can operate with any PLC under various communications protocols using your existing hardware (sensors and probes).

Xylem Edge Control is available as a stand-alone process or with a dashboard requiring cloud connectivity. When connected via the Cloud, Xylem Edge Control provides data visualization such as:

- Calculated energy savings
- Real-time data trending
- Reports
- Alerts and alarms via e-mail

Dashboards are available when connected to Xylem's cloud services, offering plant operational and energy savings insights - improving the user's visibility on OpEx usage.



All Xylem Edge Control solutions are developed to make improvements to existing biological processes through the Xylem Gateway. Each Xylem Edge Control solution is a targeted software pre-installed and configured onto the Xylem Gateway:

The various Xylem Edge Control solutions receive process signals as inputs and provide optimized process set points as outputs.

SCADA / HMI system communicates directly with PLC.



The Xylem Gateway is PLC agnostic and functions by means of making process recommendations to any existing PLC systems.

Xylem Gateway and PLC systems communicate over industry standard protocols such as Modbus TCP and Ethernet/IP.

The Xylem Gateway is hardware agnostic, able to leverage any brand of new or existing process sensors to monitor process health.



Process recommendations are carried out via existing PLC control logic, further optimizing the unit process.



## See Better Outcomes, Maximize Efficiency and Save Energy

With decades of experience and deep, expansive knowledge of all aspects of bioprocessing, the Xylem team has designed and built complex bioprocess solutions for customers around the world. Xylem Edge Control represents the latest in our list of successful solutions to improve outcomes, maximize CAS plant efficiency and save energy.

### Xylem Edge Control Pulsed Aeration

A digital, energy-saving solution that prevents over-aerating while providing adequate mixing to improve the overall biological process in plants that see underloaded conditions.

### Xylem Edge Control Ammonia Removal

Ideal for plants with an ammonia limit while also serving the need to save energy and other means of OpEx reduction.

### Xylem Edge Control Ammonia + Nitrogen Removal

Ideal for plants with both TN and ammonia limits seeking significant energy savings and other means of OpEx reduction. Ammonia + Nitrogen removal utilizes the patented, one-of-a-kind AvN® wastewater treatment process.

### Xylem Edge Control P-Removal

Controls chemical feed pumps based on real-time phosphorus concentration to reduce chemical usage while meeting today's strict phosphorus limits.

## Which Xylem Edge Control Solution Is Right For You?

	Pulsed Aeration	Ammonia Removal	Ammonia + Nitrogen Removal	P-Removal	
<b>Benefits</b>	Energy Savings	✓✓	✓✓	✗	
	Reduce CapEx	✓	✓✓	✓	
	Reduce Carbon Dosing	✓	✓✓	✗	
	Reduce Alkalinity Dosing	✓	✓✓	✗	
	Ammonia Monitoring	✗	✓✓	✓✓	✗
	Total Nitrogen Monitoring	✗	✗	✓✓	✗
	Reduce Chemical Dosing (P-Removal)	✗	✗	✗	✓✓
Remote Monitoring (via dashboard)	○	○	○	○	
<b>Sensors</b>	DO Sensor	✓	✓	✗	
	NH3-N Sensor	○	✓	✓	✗
	NO3-N Sensor	○	○	✓	✗
	ORP Sensor	○	○	○	✗
	Orthophosphate Analyzer	○	○	○	✓

✓✓ Best Fulfills Requirement

✓ Fulfills Requirement

○ Optional

✗ Not Option

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

**For more information on how Xylem can help you, go to [www.xylem.com](http://www.xylem.com)**



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