



MultiSmart Powered by Nexicon®

PREPROGRAMMED WASTEWATER PUMPING CONTROLLER

A more efficient way to control and monitor your pumping station.

With today's complex and critical environmental conditions, challenges related to water and wastewater are increasing. Monitoring, automation, and optimization are needed to help secure access to a well-functioning water cycle and reduce the environmental impact by preventing overflows, decreasing energy consumption and improving resource utilization. Digitalization and application expertise is key to achieving resilient and sustainable wastewater management.

With more than 120 years of combined knowledge from treating and transporting water and wastewater, Xylem experts have developed a modular, easy-to-install-and-operate pump station control solution for up to four pumps. MultiSmart powered by Nexicon has been preprogrammed with basic and advanced functionalities for optimized pump station management and developed in accordance with international cybersecurity standards (IEC-62443) to meet the demands and regulations for critical applications.

Thanks to DNP3 and Modbus communication protocols, it can be connected to SCADA systems, creating a powerful network to remotely monitor and manage operations while helping to reduce downtime and unplanned visits.





MultiSmart
powered by
Nexicon has been
developed with
expertise of more
than 120 years
in wastewater
pumping.





Simple

Preprogrammed with a wide range of advanced wastewater pumping functions. The controller will configure itself based on selected hardware and the full installation is easy to complete using the Setup Wizard.



Expandable

Designed with modular architecture that allows system adaptation to different situations. Thanks to CODESYS standard programming, the controller is future-proof and can adapt to your current needs and those that come up later.



Sustainable

Designed with sustainability in mind. Because of its energy-optimizing features, built-in cybersecurity, and capability to run Flygt Concertor at its best, this is one of the most energy efficient solutions to run your pump station.



Economical

Ready to use without the need for extra engineering hours. The controller offers energy savings and streamlined operations, including built-in automatic monitoring and reporting. As a result, easier planned maintenance will provide better protection for assets and reduce downtime.

Outcomes you can expect

- › Up to 70% energy savings with a Flygt Concertor system
- › Better resource planning, less unplanned maintenance
- › Reduced downtime and operational costs



Energy efficient anti-clog solution for Flygt pumps

With functions like dry run and motor protection, sump cleaning and overflow detection as well as inbuilt redundancy for basic operation, MultiSmart powered by Nexicon will control the system to increase energy efficiency and reduce clogging, callouts, and maintenance costs.

In addition, Flygt Concertor pumps will benefit from specific features like Energy Minimizer and Pump Cleaning.

Remote monitoring with a cloud-based solution

The controller integrates with cloud-based solutions. This enables remote monitoring with smart functions, providing insights to help detect issues before failures. Industry-standard protocols, such as Modbus, allow you to interface with compatible external equipment and instrumentation.

Prepared for current and future cybersecurity regulations

MultiSmart powered by Nexicon is built according to ISA/IEC 62443-4-2 standard requirements, which makes it secure by design and establishes a cybersecurity foundation for current and future statutes and regulations.

Modular and flexible solution



Modules

Backplane Supply	Power and communication supply to backplane
Backplane	Communication and power supply distribution for five slots
Application Manager	2 analog inputs, 4 digital outputs, 6 digital inputs, configurable
Machine Module	
Direct On Line Module	1 analog input (dedicated), 2 digital outputs (dedicated), pump interface (leakage/temperature), 5 digital inputs
Concertor Module	1 analog input (dedicated), 3 digital outputs (dedicated), machine interface (leakage/temperature/pump communication), 3 digital inputs
Variable Frequency Drive Module	1 analog input (dedicated), 1 analog output (dedicated), 4 digital inputs (dedicated), 3 digital outputs (dedicated)
Digital I/O Module	6 digital inputs, 4 digital outputs, configurable
Analog I/O Module	4 analog inputs, 4 analog outputs, configurable
Probe Module	10 probe inputs, 2 analog inputs (dedicated), 1 digital output (dedicated)

Technical data

Power Supply	+12-13V, backup battery for controller
Interface	(2) RS-485, (1) USB, (1) Ethernet (IPv4)
Protocols	Modbus RTU/TCP, DNP3, IEC 60870-5-104
Temperature	-20°C to +60°C (-4°F to +140°F)
Enclosure	IP 20
Approvals	CE/UKCA/UL/CSA/RCM
Communication	Ethernet (IPv4)
Cybersecurity	IEC 62443-4-1

Main Features

	<ul style="list-style-type: none"> › Preprogrammed pump logic › Remote control by local HMI or web › CODESYS and WebVisu licenses included › Energy Minimizer function for Concertor pumps and VFD-driven pumps › Personnel on site › Pipe flushing › Pump cleaning for Concertor pumps › Sump cleaning › Pump station control for up to four pumps › Set-up wizard for quick and easy installation › Event log for simplified troubleshooting › Single phase power and energy calculation › Grease stripe minimization › Pump alternation on number of starts/classic pump alternation › Pump redundancy feature for continued operation › Maintenance run › Support for flow measurement equipment › Pressure transducer, float water level and customizable alarm thresholds › Possibility to run Concertor pumps and DOL in the same system
Main Features	
Main pump & Motor Protection Configuration	<ul style="list-style-type: none"> › Supports Flygt FLS and standard leakage signals › Max pump run time › Thermal monitoring › Dry run protection with low level switch › Standard hands-off-auto (HOA) switch › Snoring detection

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

xylem vue

Digital transformation starts with Xylem Vue

Digital adoption is no longer an option; it's an urgent reality to meet the increasing pressures you face. Xylem Nexicon is an important part of our full suite of digital solutions, Xylem Vue, that combines smart and connected technologies, intelligent systems and services, and 150+ years of problem solving expertise. Xylem Vue helps solve your most pressing water challenges and deliver transformative outcomes for your communities – faster and more affordably.

For more information on Xylem Vue, go to xylem.com/XylemVue



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