xylem
Let's Solve Water

Xylem Nexicon™ for Wastewater

MONITORING AND CONTROL POWERED WITH APPLICATION EXPERTISE

Top Four Benefits of Xylem Nexicon™

Control lifetime costs

Produced by Xylem's pump professionals, Nexicon™ reduces your total expense on installation, engineering, commissioning and daily operation. It allows for long-term savings on power consumption, longer pump life and better utilisation of sewer systems and wells. Nexicon™ pump protection functionality collects and logs data, which helps you monitor pump efficiency, mitigate risk and quickly respond to events that could affect your equipment.

Get instant benefits – and no skills needed

You need no expert knowledge to get started. Nexicon™ is pre-loaded with software specifically for wastewater stations and provides you with the flexibility to configure a system of 1 to 4 pumps. To start, simply fit Nexicon's hardware modules onto a DIN (standard mounting rail) and connect the cables. All devices will perform seamlessly together from machine to cloud connection.

Design your own solution

Nexicon's built-in documentation and troubleshooting guides enable you to:

- Identify trends, manage alarms and run diagnostics from a web interface
- Configure alarms and fault handling for any specific conditions

Alarms are shown on the display or sent by email or to a SCADA system, ensuring important anomalies like level or flow rate are acted on quickly. Modbus communication allows you to connect to external devices and instruments. The controller integrates through various communication protocols easily fitting into any SCADA system as well as Xylem's new cloud solution, Avensor.

Prepared for the future

Select only what you need now and add modules to expand and upgrade, according to future needs. Nexicon™ can also adapt to meet bespoke needs using the industry standard development environment CODESYS (technical skills required).

Main Features and Technical Information

Application manager*

Main features:
- Control and monitoring of a pumping station
- Connection to supervision systems through fieldbus
- Plug and play functionality as a standard setup
- Configurable for different applications
- Optional programming with CODESYS
- A real-time clock (RTC) energized by a battery
- Option to install an SD card
- Analog inputs, and digital inputs and outputs

Digital I/O module*

The extended digital input/ output module includes:
- Six digital inputs
- Four digital outputs

Analog I/O module*

The extended analog input/ output module includes:
- Four analog inputs
- Four analog outputs

Backplane supply module

Main features:
- +24 VDC to the other modules
- +24 VDC to other equipment
- Connection to a backup battery
- Connection to an HMI and to a service tool

Machine module*

Main features:
- Machine interface for leakage and temperature sensors
- High-level switch
- Monitoring of the pump current
- Pump feedback signals

Backplane*

The backplane is used for:
- Input power to the modules
- Communication between the modules

Technical data

Power supply	+24 V
Interface	2* RS 485 - USB - Ethernet (IPv4)
Protocols	Modbus RTU/TCP, DNP3, IEC-104
Digital I/O Module	4 Digital Out, 6 Digital In, configurable
Analog I/O Module	4 Analog Out, 4 Analog In, configurable
Application Manager	2 Analogue In, 4 Digital Out, 6 Digital In, configurable
Machine Module	1 Analogue In, 3 Digital Out, 5 Digital In, dedicated
Temperature	-20 C - +60C (-4F -+ 140F)
Enclosure	IP 20
Communication	Ethernet (IPv4, IPv6)
Pre-programmed pump logic features	› Pump station control for 1-4 direct online started pumps and/or Concertor pumps › Set up wizard for quick and easy installation › Event log for simplified trouble shooting › Power and Energy calculation › Grease stripe minimization, alternating the start level to prevent build up of fat around the sump edges › Overflow calculation › Pump alternation on number of starts/Classic pump alternation › Pump redundancy feature guarantees continued operation
Pump/motor protection configuration	› Support for flow measurement equipment › Max run time › Leakage › Dry run protection with low level switch › Temperature › Pressure transducer and float water level and customizable alarm thresholds › Standard pump control (HOA) › Flexible and intelligent alarm management › Maintenance run

* Powered from the backplane supply module.

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