Powerful, flexible management of water and wastewater systems

Flygt APP 800 pump and process controller
Powerful, flexible control of water and wastewater systems

The Flygt APP 800 controller puts complete control at your fingertips, thanks to an intuitive graphical user interface and greater flexibility to control functionality and adapt communications. This translates into maximum uptime, minimal costs for installation, operation and maintenance, and greater energy savings, which boost your bottom line.

The ultimate all-in-one communicator
The Flygt APP 800 is an all-in-one water and wastewater controller designed to make system installation, operation and maintenance easy and efficient – without additional engineering. Unlike general-purpose PLC systems, this powerful control system with dedicated pump I/Os is specifically engineered for control of water and wastewater systems. It delivers the advanced functionality required by pump operators - plus broad process functionality for reliable control over your plant. Total control with the Flygt APP 800 is easy, powerful and intuitive.

Dedicated modular pump station control
Cutting-edge technology empowers your team with ultimate control over pump stations or entire treatment processes. All-encompassing functionality, full telemetry, alarm handling distribution, data logging and storage functions are already built in. This expandable modular control system comes with enhanced features, including an intuitive graphical user interface, dedicated pump modules and an embedded web server.
Just plug in the Flygt APP 800 to harness its power and easily configure pump station control to your requirements.

Why you’ll love APP 800
- Dedicated to water and wastewater
- Easy-to-use graphical user interface
- Flexible, state-of-the-art pump modules
- All-encompassing built-in pump station functionality
- Advanced alarm handling and distribution
- Seamless integration to SCADA
Reliable control at your fingertips

**Easy-to-use graphical user interface**
Flygt APP 800 has an intuitive touchscreen that provides a complete overview of your pump station 24/7. Simply point and click using the logical structure and symbols to get fast access to relevant data or change the settings by adjusting the values on the display.

**Embedded web server**
Using your web browser from any location, you can monitor equipment status, troubleshoot and identify trends, handle alarms, diagnose and resolve faults - all with a few clicks. This convenient, cost-effective way to monitor your complete pump station or plant gives you access to critical data from anywhere. You can, for instance, check the status from a service car or get data directly on your PC or through your smartphone.

**Advanced alarm handling and distribution**
Flygt APP 800 offers full telemetry and alarm handling, distribution, data logging and data storage, recording data, time and details of up to 1,000 events. For added convenience, operators can change the alarm priority and code either on the display itself or from a remote location.

State-of-the-art pump usability
A compact screen instantly presents critical data - such as flow, level, alarms, capacity, running times and energy costs - on up to 10 pumps.
Advanced all-encompassing pump station functionality

**Powerful functionality already built in**
Flygt APP 800 comes with standard features, easily adapted to meet the needs of each customer, as well as a range of powerful built-in functions that make commissioning easy.

In pump station applications, Flygt APP 800 accurately monitors the water flow and level, pump capacity, running times, energy costs and other key data. All functions are pre-engineered based on decades of worldwide experience.

**Flexible and future-proof**
Empower your future one step at a time. Flygt APP 800 is easily adapted to your growing needs and changing field conditions. From Day One, you get a complete solution to ensure a reliable plant. The software design is as flexible as the built-in connections and communication modules.

With our modular and flexible I/O modules, you can easily add on to your control system in small or large increments and connect new devices to meet your needs.

**Pump station expertise**
For more than a quarter of a century, we have been responsible for the operation of more than 100,000 Flygt pump controllers, which ensure continuous uptime of our pumps and mixers around the globe.

APP 821 and APP 841 pump controllers provide standard functionality and web accessibility for medium and large pump stations with two to four pumps. Customization is available upon request.

**Some built-in control functions**
- **Blocking** redirects flow to prevent potential overflows or enable pump station repair, when required.
- **Energy calculation** provides an overview of the station’s energy costs and a trend analyses to guide energy conservation.
- **Flow calculation** takes pulse of the piping network to ensure optimal pump performance with minimal risk of unscheduled shutdowns.
- **Sump cleaning** regularly drains the sump until the pumps are snoring to prevent odor and debris build-up.
Customizable process functionality

Flexible process functionality
Flexible, free programmable software makes the Flygt APP 800 controller easy to adapt to virtually any water and wastewater process requirement. Our controller also comes in pre-engineered versions for different types of sub-processes, such as sludge pumping and blowers, as well as for complete treatment plant solutions.

Engineering excellence
Our knowledge of fluid handling runs deep. We constantly apply our vast engineering experience and expertise in all aspects of water and wastewater processes to improve your processes. The Flygt Maestro programming and configuration tool can facilitate automation in all parts of your plant. This enables you to freely program functionality into your controller — from basic PLC logics to advanced cascade PID regulator loops.

Treatment expertise
Every Flygt controller comes with three decades of expertise and experience in optimizing the design and performance of water treatment processes.

Free programmable software
- Plug-and-play configuration and programming of pump and process controllers.
- Data compilation, tracing functionality and register handling.
- Easy modification of functionality through connection-oriented programming.
- Embedded GUI (graphical user interface) tool for a total overview.
TECHNICAL DATA

Flexibility, scalability and ease

Optimizing performance seamlessly
For full end-to-end control of your entire plant, you can combine the Flygt APP 800 controller with a SCADA system, such as Flygt AquaView. Our controllers are based on open standards and communicate with most PLC or SCADA systems. This makes continuous real-time monitoring of individual components possible. Detailed data on events help identify trends and diagnose problems before they occur. With total control, you can save money, boost energy efficiency and raise performance at your plant.

Daily energy control
Flygt APP 800 measures and reports the energy consumption in the station and monitors the pumping costs by calculating the specific energy (kWh/m³). It provides an easy overview of the station’s momentary and cumulative energy consumption, with trend analyses to guide energy conservation.

Within aeration processes, Flygt APP 800 delivers measurable energy savings. It automatically adapts the air supply to your oxygen requirements based on daily and seasonal variations, generally cutting energy consumption.

Seamless integration

- Easily adapt to the growing needs of your plant
- Can be used as stand-alone systems
- Can be upgraded to connect to a SCADA system
- Support many common protocols as standard
- Include SCADA, pump supervision, pump drives, general variable frequency drives, starters and controllers
To realize additional energy savings and lower operating and maintenance costs even further, Flygt APP 800 can be used in combination with fully integrated application solutions for pumps and other Flygt units. This includes the SmartRun™ pump drive and MAS 800 pump supervision system.

Close to you - every step of the way

Support wherever and whenever
To ensure trouble-free operation and minimal downtime, you can count on us for quick, professional response and outstanding support and service wherever you are. Our global network of local service centers and authorized service partners provide service and support for safe, efficient and reliable operation worldwide.

Total peace of mind
We understand that system reliability is of paramount importance. With Xylem as your single reliable partner, you not only can improve control over your operations, but also improve productivity and profitability. Flygt products are designed to make installation, operation and maintenance easy and efficient - without additional engineering. What's more, our control systems are flexible, scalable and future-proof and can accommodate additional equipment in virtually any water and wastewater application.
Xylem |ˈzɪlem|

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

We’re 12,000 people unified in a common purpose: creating innovative solutions to meet our world’s water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. 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, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xyleminc.com