

Water and Wastewater Secure Power Solutions

Guaranteed availability for mission-critical systems
in every stage of the municipal water cycle



Schneider
Electric

Secure power for your water and wastewater facilities

Water is a vital need and a precious resource. With today's steadily growing populations, water and wastewater facilities have a crucial role in every community. They must simultaneously protect the environment, keep waterborne diseases in check, and provide water suitable for industrial and human consumption. In addition, they also must keep rates low, adapt and comply with changing regulations, and operate on a restricted budget.

As a water or wastewater facility, one of the most significant challenges you face is the unpredictable cost of energy, especially in the form of electricity. Energy is typically second only to staff in water or wastewater facility expenses, and can represent up to 30% or more of your total operating costs.

Reliable power availability is the key to maintaining the flow of clean, safe drinking water that your community relies on, while achieving considerable energy savings as well as your operational goals.

UPS protection, dependable power architecture, and intelligent power monitoring systems are necessary to assure reliability and optimization. Having these systems in place protects power-critical applications such as ultraviolet disinfection, valve pulsing in the membrane system, and operation of controllers on remote panels. Keeping these applications operating during a power outage ensures critical data and equipment are secure.





The most complete power availability solutions in the water industry

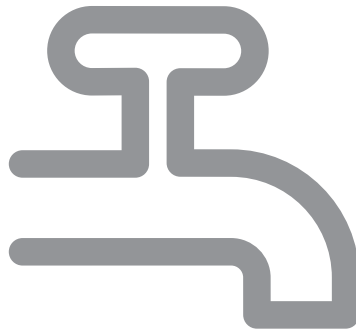
Schneider Electric offers a long-standing reputation for reliability, a comprehensive range of solutions designed specifically for electrical environments and industrial applications, a high level of engineering and service capabilities, and a global network of support with a local presence, anywhere you need us.

Our secure power solutions, experience, and expertise can help you to optimize CapEx and OpEx with up to 30% savings on operating and design costs while ensuring regulatory compliance, increased performance and safety, and energy-efficient operation.



We not only supply the data center infrastructure you need, but also critical power solutions from design to services that maximize the availability of utility power for all types of process-critical equipment, systems, and applications, including PLCs, SCADA, pumps, UV treatment, and security devices throughout the entire water treatment process.

Our end-to-end power protection and availability solutions can be found in water and wastewater facilities worldwide, playing a pivotal role in the efficient, safe, and reliable delivery of potable water by providing a continuous source of power for all stages of the water treatment and distribution cycle.



Mission-critical systems in the water/wastewater cycle

1 Pumping Station

- > Pumps and motors
- > APC Smart-UPS™ RT, Galaxy™ 3500/5000

2 Treatment Plant

- > Process automation (FU), Network, SCADA
- > APC Smart-UPS RT, Symmetra™ PX, Galaxy 3500/5000

3 UV Treatment

- > UV Filters
- > APC Smart-UPS RT, Galaxy 3500/5000

4 Desalination Plant

- > Process Automation (FU), Monitoring
- > APC Smart-UPS RT, Galaxy 3500/5000/7000, and GUTOR™

5 Storage Station

- > Pumps
- > APC Smart-UPS RT, Galaxy 3500/5000

6 Data Center

- > Control Center
- > InfraStruxure™, Symmetra PX, EPS, Cooling, Distribution, and Management

7 Remote Control Services

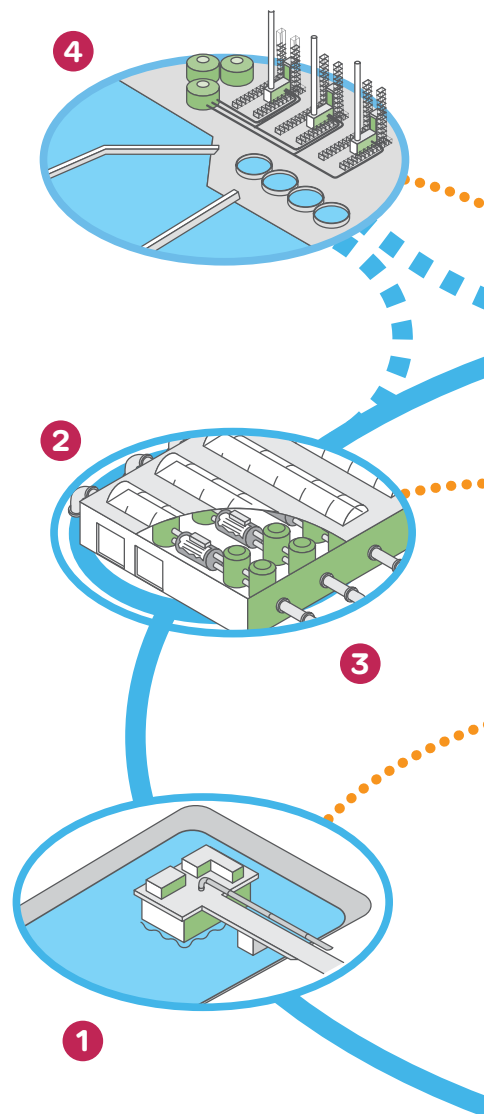
- > Control Center, SCADA
- > APC Smart-UPS RT

8 Lift Stations

- > Pumps; Motors
- > APC Smart-UPS RT, Galaxy 3500/5000

9 Wastewater Treatment

- > Process Automation, Monitoring
- > APC Smart-UPS RT, Galaxy 3500/5000



Single-phase UPS

1 – 16 kVA, APC Smart-UPS, Smart-UPS RT, Back-UPS™, Symmetra LX



- > Performance power protection with scalable runtime for space-constrained server rooms and networks
- > Rack/tower convertible and optimized form factor for easy integration

Three-phase UPS

10 – 4,800 kVA, MGE Galaxy 3500, 5000, 7000, MGE EPS 7000 and 8000, Symmetra MW, Symmetra PX



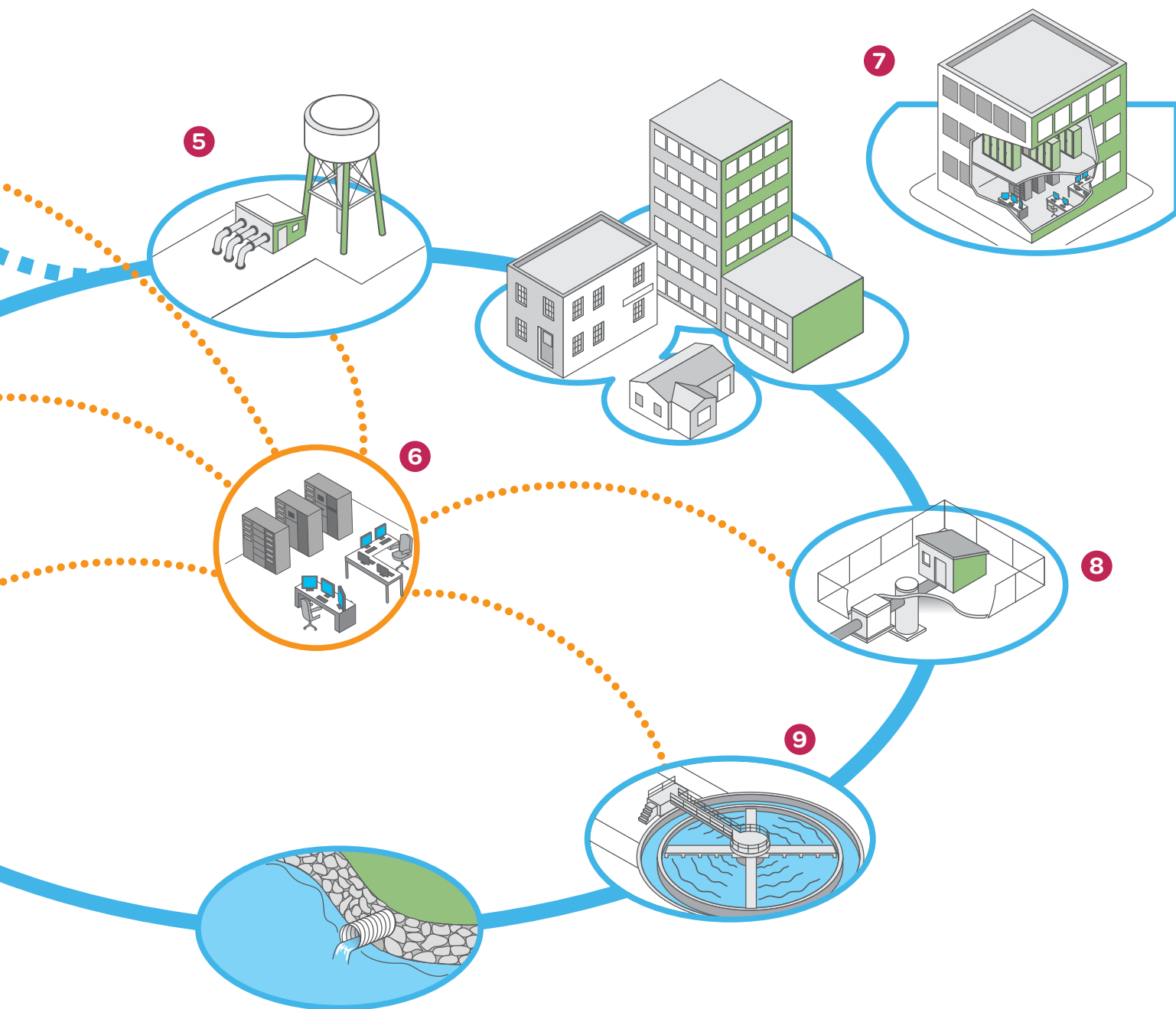
- > Right-sized three-phase power protection for any size high-density power zone or data center
- > High power quality to ensure optimum operation of applications
- > Reduced footprint for easy installation in reduced space

Single-phase and Three-phase Customizable DC and AC UPS

5 – 220 kVA, GUTOR PEW, GUTOR PDW



- > Robust design and long life-expectancy with minimal servicing required
- > Compatible with harsh or unstable electrical environments and able to withstand seismic requirements
- > Independent power modules allow individual sizing of the rectifier and inverter



Three-phase Static Transfer Switch

30 – 2,000 A, MGE Upsilon™ STS,
MGE Epsilon™ STE

- > Supplies power to a range of equipment from two independent and redundant sources
- > Automatically transfers power to a stable alternate source in less than five minutes
- > Detection and transfer times up to 10 times faster than many other switches



InfraStruxure HD-Ready Architecture

10 – 500 kVA

- > Integrated power, cooling, and electrical distribution
- > Built-in N+1 redundancy for higher availability
- > Standardized parts make for quick, easy installation and streamlined maintenance



Your partner for end-to-end power availability and reliability

With the combined expertise of APC, GUTOR, and other leading Schneider Electric brands, your water and wastewater facilities can be outfitted with the best in automation and energy management — all from the world leader in electrical distribution, power, and control.

Our complete catalog of power solutions offers an unmatched range of single- and three-phase UPS units, rectifiers, inverter systems, active filters, and static transfer switches from 1 kVA to several MVAs. With flexible, scalable designs suited to data centers, high power systems, large SCADA systems, UV/ozone treatment, control rooms, and smaller environments within each type of facility, we have a solution that will work for you.

Our secure power solutions deliver continual power availability, fast and easy maintainability, and high efficiency for optimized equipment operation, increased safety and security, energy savings, and reduced cost of operation. Choosing the right combination of products and services from Schneider Electric gives you the convenience of a total solution — systems, software, and services from a single source.



Power protection for every stage of the water/wastewater cycle

Our integrated solutions make water and wastewater management efficient, productive, and green, from the smallest pumping station to the most complex treatment plant.

Pumping Station:

- > Maintains automation that monitors and controls the water distribution system
- > Optimizes management and security of plants

Water/Wastewater Treatment Plant:

- > Protects applications that measure water quality and monitor processes
- > Increases energy efficiency of the plant
- > Keeps SCADA system operational during a power outage, eliminating loss of data

Desalination Plant (Reverse Osmosis):

- > Protects the fragile, costly membranes used in reverse osmosis
- > Keeps the PLC and radio running for reliable communications

Desalination Plant (Thermal):

- > Maintains critical applications such as SCADA, DCS, emergency lighting, instrumentation, alarms, and sensors

Ultraviolet Disinfection:

- > Protects water quality by preventing bulb outages
- > Enables power breaker maintenance without complete shut down of power to the bulbs
- > Increases ballast and bulb life by eliminating restrikes from power loss

Schneider Electric Critical Power & Cooling Services

Dedicated teams with experience you can trust

The worldwide dedicated service team at Schneider Electric Critical Power & Cooling Services enables your water and wastewater plants to operate smoothly, ensuring optimized facility plans and streamlined project management, as well as guaranteed power availability for all stages of the water treatment and distribution process.

With Schneider Electric Critical Power & Cooling Services, you can concentrate on protecting the safety and security of your facilities while we take care of the details on the back end. Your solution can be safely and efficiently implemented with installation and startup performed by our certified field service engineers. Project services — such as project management, installation management, and site coordination — help you to implement your solution on time and on budget. Our trusted Remote Monitoring Service acts as a second set of eyes, with secure 24-hour monitoring to detect and resolve problems before they become critical.

For hassle-free maintenance that minimizes downtime and protects your investment, choose one of our comprehensive Advantage Plan service packages. Advantage Plans include technical support, preventive maintenance, quick on-site response, and remote monitoring, providing you with the peace of mind that your solution is receiving the care it needs.



Schneider Electric

A Total Water Industry Solution

Reliability, operational cost, and experience are just a few of the reasons for any business to choose Schneider Electric for an innovative, integrated solution.

But for those in the water and wastewater industry, Schneider Electric offers a complete solution, specifically tailored for this field. We are the global specialist you need to ensure both maximum energy efficiency and highest availability for critical applications and systems throughout the water cycle. With experts from the water and wastewater industry on staff, including certified personnel in water and wastewater processes, our dedicated team is ready to support you.

Through our strong commitment to investing in research and development, and with our network of more than 100,000 employees around the world, Schneider Electric ensures that you have access to the most efficient and innovative solutions for water and wastewater facilities, when and where you need them.

Schneider Electric secure power references in the water industry

- > China - Energy Efficiency for Industrial Wastewater Treatment plants
- > Spain - Desalination plant, Torrevieja Alicante
- > Hungary - Wastewater treatment plant, Csepel
- > New Zealand - Gisborne District Council
- > Brazil - COPASA MG Water Management Solution
- > United Kingdom - Anglian Water Telemetry System
- > France - Veolia Water
- > France - Wastewater treatment plant, Dijon
- > United States - Central Lake County Joint Action Water Agency (CLCJAWA)
- > France - Société des Eaux de Marseille
- > Spain - Aguas de Barcelona
- > United States - Dallas Water Utilities
- > Germany - Aktiengesellschaft für Versorgungs-Unternehmen (AVU)
- > Australia - Wide Bay Water Company

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www.schneider-electric.com/us
and enter key code **e174u**.

Enter key code

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