

Success story

Industry: water

PLC
+ HMI
ALL IN ONE™

“

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Carney Neave,
Waterplay Solutions Corp.

How can you downsize your control system without losing functionality?

Summary:

Waterplay Solutions Corp. creates custom aquatic recreation features, which are installed in public parks and other urban locations. Waterplay installs controllers to activate and monitor these attractions, but they sometimes find that in dense urban areas the space available for a control system is limited. As a result, for some of their projects, they were looking for a way to downsize their control system without

compromising the functionality. Waterplay selected the Unitronics Vision130 PLC+HMI as a solution; this full-function PLC has an integrated HMI and onboard I/O, making it a compact choice requiring minimal wiring. Additionally, the all-in-one design means that the PLC, HMI and communications can all be programmed in a single easy to use software.



TEAL RUN NORTH SPLASH PAD, TX

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PLC + HMI ALL IN ONE™

INDUSTRY ► water

With thousands of installations world-wide, Waterplay Solutions Corp. has provided their customers premium aquatic recreational features since 1987. They offer a variety of innovative products designed to turn any space into an exciting attraction, which they customize according to their customer needs. Waterplay's offerings include aquatic play features, slide activity centers and waterslides, urban water features, and water management solutions.

One project Waterplay was working on was an aquatic play pad in Texas; they needed PLC control to activate the system, among other things. Unfortunately, the line of controllers Waterplay typically used didn't offer a relay output rated to operate the system's valves. As a result, Waterplay was on the search for a PLC with internal relays that could operate a solenoid valve that requires 0.41 amps of in-rush current (0.25 amps holding). Additionally, the space available to install the PLC was limited, so Waterplay hoped to find a controller with an integrated HMI.

They selected the Unitronics Vision130 all-in-one PLC+HMI for the project; the model Waterplay chose, the V130-33-R34, is a PLC with a built-in graphical display and keypad and onboard I/O. The compact all-in-one design allowed Waterplay to install the controller in a small, six-by-ten-inch housing without compromising on the physical requirements they needed.

The Vision130 was also able to accommodate all of Waterplay's programming requirements. Firstly, they programmed the unit to

control the system start and stop times both on a weekly and daily basis. When the system is turned on, inputs from the field trigger a start sequence to activate the play pad, automatically turning on features via the relay outputs. Waterplay also took advantage of the Vision130's data logging capabilities to track the number of activations per day in a downloadable file.

Another advantage of the Vision130 PLC was the all-in-one software, which is available free of charge. PLC configuration, HMI design and communication set-up can all be programmed in a single environment, streamlining what would otherwise be a multi-step process. Carney Neave of Waterplay® Solutions Corp. says, "The controller was very easy to program and customize for our application. The staff and tech support of Unitronics are very efficient and knowledgeable." Furthermore, if Waterplay wanted to make any changes to the application, they can reprogram the unit in the field from an SD card.

Unitronics is proud to be a part of Waterplay's role in bringing the joy of water to people and communities. "We do more than build aquatic play features. We've helped turn crime-ridden downtown parks into family attractions," says Neaves. "We've given new life to abandoned community facilities, bringing kids back to play in them. We work with you to create environments that promote exploration and discovery, fostering imaginative, interactive play."

