



Application Brief: GG Services

*Mobile HMI for mobile water treatment
system tracks pH, ORP, flow, and more*

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APPLICATION BRIEF: GG SERVICES

Mobile HMI for mobile water treatment system tracks pH, ORP, flow, and more

THE CHALLENGE

Gavin Gray is the owner and sole employee of Los Angeles, California-based automation integrator and machine builder GG Services, which designs and installs custom control systems in the southwestern United States. GG Services specializes in alternative energy systems and industrial machines.

Gray is a busy guy, and when a client needed remote, real-time access to its mobile water treatment system—specifically access to the Opto 22 control system he had built—Gray recognized that delivering this remote access was going to demand a lot of his time. He was up to the job, but thought that his time was better spent on other tasks.

Gray had added remote monitoring and HMI capabilities to control systems before, and he knew that a number of problems often turned up in the process. Installing, configuring, debugging, and deploying the various elements of a remote access system can grow complicated



when, for example, the control system and remote access system have difficulty exchanging information.

Or when a PC-based HMI requires access rights an IT department won't approve.

Or when an HMI expensively exchanges too much data with a remote site over a cellular modem.

THE SOLUTION

Gray had heard about *groov* products from his regional Opto 22 sales engineer and decided to take a closer look. He thought *groov* View looked like a simple yet solid approach to setting up mobile communications.

He was right.



Key parameters for a mobile water treatment system are monitored and controlled using a tablet.

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"*groov* View is an easy and uncomplicated system that provides a web-based approach to monitoring a system and gathering data," explains Gray.

After installing a communications link at the mobile water treatment plant, Gray configured the *groov* Box and built screens for the interface. On startup, real-time data on pH, ORP, flow rate, conductivity, and other parameters were immediately available.

The client can also remotely control pumps and filters, set tank levels, and track power use.

"With real-time data from the water treatment system," says Gray, "we can see problems and make corrections, as well as get general information."

Gray is pleased that he's saved a lot of time. "*groov* View," he says, "takes 90% of the work out of setting up remote HMI and remote monitoring."

ABOUT OPTO 22

Opto 22 was started in 1974 by a co-inventor of the solid-state relay (SSR), who discovered a way to make SSRs more reliable.

Opto 22 has consistently built products on open standards rather than on proprietary technologies. The company developed the red-white-yellow-black color-coding system for input/output (I/O) modules and the open Optomux® protocol, and pioneered Ethernet-based I/O.

In early 2013 Opto 22 introduced *groov* View, an easy-to-use IoT tool for developing and viewing mobile

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- Gavin Gray, GG Services

operator interfaces—mobile apps to securely monitor and control virtually any automation system or equipment.

Famous worldwide for its reliable industrial I/O, the company in 2018 introduced *groov* EPIC® (edge programmable industrial controller). EPIC has an open-source Linux® OS and provides connectivity to PLCs, software, and online services, plus data handling and visualization, in addition to real-time control.

All Opto 22 products are manufactured and supported in the U.S.A. Most solid-state SSRs and I/O modules are guaranteed for life.



The company is especially trusted for its continuing policy of providing free product support, free training, and free pre-sales engineering assistance.

For more information, visit opto22.com or contact **Opto 22 Pre-Sales Engineering:**

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