



# Application Brief: One-Step Automation

*Control, monitoring, and live video from a mobile HMI*

**OPTO 22**  
The Edge of Automation.™

## **Opto 22**

43044 Business Park Drive • Temecula • CA 92590-3614

Phone: 800-321-6786 or 951-695-3000

Pre-sales Engineering is free.

Product Support is free.

[www.opto22.com](http://www.opto22.com)

Form 2086-210326

© 2014-2021 Opto 22. All rights reserved. Dimensions and specifications are subject to change. Brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

# APPLICATION BRIEF: ONE-STEP AUTOMATION

## Control, monitoring, and live video from a mobile HMI

### THE CHALLENGE

One-Step Automation in Niverville, Manitoba, builds custom automation systems to control grain handling and seed processing facilities. Automation Specialist Arlin Friesen says One Step's clients increasingly request an HMI or operator interface they can use anywhere. "They want control, monitoring, and live video."

"Much of the equipment in seed processing facilities is driven by variable frequency drives (VFDs)," he explains. "Clients want to adjust those motor speeds based on the quality of product they see coming off the processing equipment. And they want to monitor product quality with a live camera feed."

Customers also want real-time feedback on bin levels, motor failures and alarms, and surge hopper levels, as well as the ability to control shutdown processes.

Currently all of these require an HMI in the facility itself. But Friesen says clients want to run their facilities longer and from remote locations, reducing onsite staff.

One-Step Automation first tackled the challenge with what Friesen calls "a makeshift solution" that involved coding HTML and PHP pages on a web server, plus programming an Opto 22 SNAP PAC controller to exchange data with the web server.

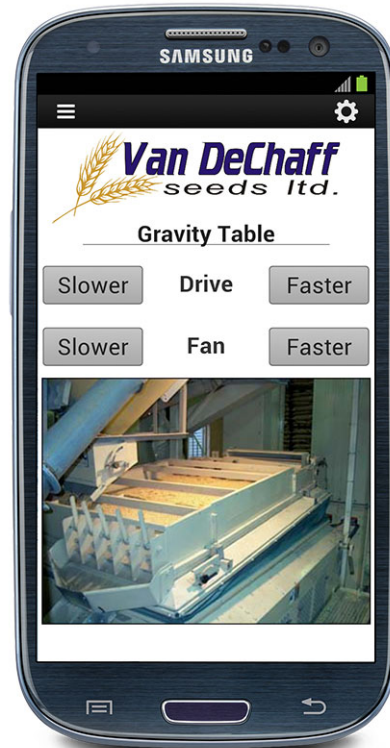
It was uphill work.

"We're primarily electricians," he says. "Naturally our skills aren't as spectacular in these areas. Being a smaller business, we don't have the time or resources to improve or support it to a point where it's polished and able to communicate information to the client in a quick efficient manner."

### THE SOLUTION

With *groov* View from Opto 22, Friesen put together a solution quickly. Using just a web browser with no plugins, he built an operator interface that can be used equally well on computers, tablets, and smartphones—virtually any device that uses a web browser.

Customers control VFD speed using adjustable buttons or sliders, and the interface includes live views from IP cameras on the equipment to clearly show product flow.



Seed processing equipment is securely monitored and controlled on a smartphone.



## Application Brief: One-Step Automation

Customers are happy with their new ability to monitor quality control while away from the processing facility—and One-Step is happy to be able to meet their needs.

In addition to seed and grain handling equipment, the Canadian integrator also builds control panels for machine builders and OEMs (original equipment manufacturers) to use in their products. Friesen expects *groov* View interfaces to be an attractive option for these panels and other projects as well.

"I'm excited about the possibilities of *groov* View and how this opens the door for our automation systems to be run entirely from mobile devices," he says. "I'm looking forward to watching this product develop over time."

### ABOUT ONE-STEP AUTOMATION

From seed processing, grain handling, and fertilizer blending to panels for OEMs and other industrial automation applications, One-Step Automation offers highly efficient, cost-conscious designs to meet your needs.

Visit [one-step.ca](http://one-step.ca) or call One-Step: **204-388-4101**

### 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.

**Customers control VFD speed using adjustable buttons or sliders, and the interface includes live views from IP cameras on the equipment to clearly show product flow.**

In early 2013 Opto 22 introduced *groov* View, an easy-to-use IoT tool for developing and viewing mobile 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](http://opto22.com) or contact **Opto 22 Pre-Sales Engineering:**

Phone: **800-321-6786** (toll-free in the U.S. and Canada) or **951-695-3000**

Email: [systemseng@opto22.com](mailto:systemseng@opto22.com)

