

SMARTEN Retrofit Kit for Rod Lift Controllers

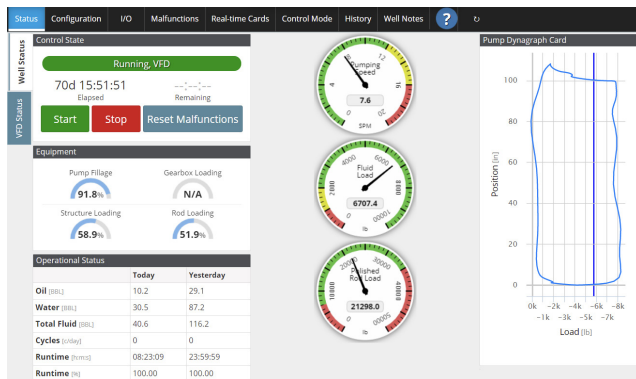
A simple and cost-effective solution to upgrade your equipment

APPLICATIONS:

- Fields with aged controllers that are causing time, resource, and cost burdens due to failures and component replacements

BENEFITS

- Strengthen your bottom line with cost savings in the form of less time and resources invested in replacing failing components
- Improve automation performance by injecting new technology into existing equipment
- Increase system reliability with a 12-month warranty and responsive technical support



The SMARTEN dashboard is user-friendly and customizable, allowing components of the automation system to be replaced or reconfigured to fit your specific needs.

Upgrade your equipment without emptying your wallet.

Are your existing rod pump controllers dated or not functioning properly? Are there components you need to replace, but you don't want to pay for a new unit? The SMARTEN™ retrofit kit enables you to cost-effectively convert legacy controllers into modern units. The kit uses existing infrastructure and can be installed on either standalone pump off controllers (POCs) or integrated variable speed drives (VSDs). The kit provides a practical alternative to purchasing an entirely new unit while still benefitting from industry-leading technology.



The standard retrofit package is a door replacement kit that includes a 7-inch touchscreen, motherboard and processor, wiring, and power supply unit (for POCs only). Wi-Fi connectivity can be included as an optional feature.

The process is quick and simple. Our team will replace the inner door with a small amount of wiring. Where possible, we will use existing load and position components as well as communication equipment end-devices. If those items are no longer operable, we can service or replace them during the installation as well. The SMARTEN interface setup is user-friendly, only requiring a few screens to complete.

The SMART choice

Built on the SMARTEN controls platform, you reap all the benefits of our advanced SMARTEN technology. This includes storage capacity of more than 3,000 dynagraph cards that you can save directly to your computer from the field. You can also take advantage of SMARTEN Live, which allows you to access the controller remotely and make operational changes as if you were on location. And our iChem™ chemical optimization logic is now available in our SMARTEN hardware, so you can cost-effectively optimize your chemical injection programs with no additional hardware.

Contact your local representative or visit ChampionX.com/SMARTEN to learn how you can save with the SMARTEN retrofit kit.

SMARTEN Retrofit Kit Specifications

I/O	
Analog inputs (AI)	Qty 4 - Configurable 0 to 10V, 0 to 20mA, 4 to 20mA
Load cell analog input (AI)	Qty 1 - 20mV max input
Analog outputs	Qty 1 - Configurable 0 to 10V, 0 to 20mA, 4 to 20mA
Discrete inputs (DI)	Qty 8 - Signal level is configurable for pulse counting up to 1Khz 5V and 24V isolated power available
Discrete outputs (DO)	Qty 6 - Firmware configurable as dry contact emulation or direct 12V DC output
Rod Pump and Load Position	
Loadcell support	Compatible with industry standard load cells (30K, 40K, 50K)
Analog position device	Yes
Hall effect position device	V 4.1 and higher
Human Machine Interface	
Display	800x480 resolution; high brightness; sunlight readable
HMI	7-in. capacitive touch
UI	HTML 5; can also be viewed on a laptop/tablet/PC with standard web browser
Connectivity	
Wi-Fi	Available as an optional feature
USB	USB port for software upgrades and data downloads
SD card slot	SD card slot for additional storage
Serial ports	3 configurable RS232/RS485
Modbus protocols	Modbus TCP, RTU
Construction	
Environmental ingress	Aluminum powder coat; hinged door
Operating temperature	Electronics: -40 to 185°F (-40 to 85°C) Touchscreen: -4 to 158°F (-20 to 70°C)
Power	
DC input	Operating 11V to 15V DC, nominal 12V
Power consumption	10 watts
Computing Core	
Processor	AM335 x 1GHz ARM Cortex-A8
Memory	512MB DDR3 RAM
Storage	4GB 8-bit eMMC flash storage
Software	Embedded Linux OS
Certifications	
USA and Canada	Conforms to UL STD 508A and CSA STD C22.2 No.14
International	Conforms to 61439-2, IEC61000-6-2, IEC61000-6-4

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