

Dynamic Pump Optimizer
SAVE TIME.

SAVE ENERGY.

SAVE YOUR PUMPS.



MONTHLY REPORTING

Health at a glance.

Automatically receive a monthly snapshot of pump health, operating summary, energy usage, and the net present value of repairs to make informed maintenance decisions backed by financial metrics.



PEAK ENERGY EFFICIENCY

Engineered for efficiency.

Maximize efficiency by selecting the optimal combination of pumps and speeds to maintain level or pressure with a variety of constraints.

13.5% Average Energy Reduction





EXTENDED PUMP LIFE

Complete protection.

The DPO monitors changes in pump health and maintains accurate pump curves to keep pumps running in their sweet spots making them last dramatically longer.

3.3XAverage Extended Pump Life

REDUCE LEAKS

A comfortable ride.

The DPO virtually eliminates pressure transients by gracefully transitioning pumps during stops, starts, and speed changes.

70%Average Reduction of Peak Transients



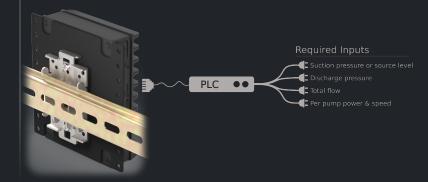
PREDICTIVE ASSET MANAGEMENT

Make every repair count.

The DPO identifies worn pumps and makes repair recommendations as soon as the net present value of a repair becomes positive.



Ease of installation.





INCLUDED COMPONENTS

- NEMA Indoor/Outdoor 1, 2, 4, 4x, 12 enclosure: 15.75" x 15.75" x 7.87" or may be integrated into customer control panel
- Temperature rating: 0°C to 70°C
- Required power: 120VAC, 4.5 9W

COMMUNICATIONS

- Supports communication with PLCs and VFDs using standard protocols including Modbus serial, Modbus TCP, EtherNet/IP, and USS
- · Cellular telemetry
- Supports communication with devices using RS-232, RS-485, and Ethernet as master or slave
- · Integrates with existing SCADA systems using Modbus

REQUIRED INSTRUMENTATION

- · Common suction pressure or source level
- · Common discharge pressure
- · Station flow
- · Per pump power
- · Per pump speed

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Secure Authentication

Strong password enforcement Two-factor authentication Passwords securely stored as SHA-256 hashes



Data Protection

Stored in a HIPAA certified facility Secure access over an encrypted connection Redundant backups

INSTALLATION PROCESS

- · DPO is installed at pump station near PLC
- · One DPO required per station
- · DPO connects to Specific Energy Servers
- · Operators use web-based interface to monitor current pump station status

SUPPORT & SERVICE

- Unlimited support during regular business hours during service contract term
- · Configurable, automatic text message alarms with available alarm history
- · Secure, web-based user interface
- · Free automatic software upgrades
- · Unlimited data logging
- · Data stored locally and backed up at servers in a HITRUST-certified facility
- · Any data set can be instantly exported at 1 second resolution to .CSV file

CONTROL SYSTEM

- High performance monitoring of pump station behavior to track pump helath and support preventative maintenance decisions
- · Web-based HOA for remote pump control and monitoring
- · All monitoring and configuration parameters accessibile via Modbus
- · Alarms can be configured on all monitored signals
- · Operationg Modes
- Advisory operators use interface to determine optimal combinations of pumps and speeds
- · Automatic PLC receives recommendations from the DPO



Monitoring and Updating

We follow the NIST Cybersecurity Framework Access logging and monitoring Regular security audits Devices receive the latest security updates



Detense

Strict firewalls on all devices Device protection with encrypted RSA-2048 public/private key pairs Exclusive use of encrypted protocols





