



PT ELECTRONICS, INC.

# PT-OD1100

## OnDemand Domestic Hot Water Recirculating Pump Control

Pump Runtime Reduced as much as 80%-90%  
Reduce Hot Water Gas Consumption as much as 30%\*

\*Based on Study Results performed by Department of Energy / Gas Technology Institute Emerging Technology Program

Quick Payback Period  
Efficiency at its Best



### BENEFITS

#### Non-Invasive Installation

■ No Plumbing or Pipe Fitting Required

#### Energy Efficient

■ Reduce energy consumption ■ Gas and Electric

#### Building Automation System Integration

■ Serial RS485 ModBus ■

#### Modular Design

■ Field repairable ■ Plug and Play Components

#### Multiple Modes of Operation

■ OnDemand - Aquastat - Override

#### Warranty

■ 2 Year Warranty ■

### HOW DOES IT WORK?

Traditional Domestic Hot Water recirculating pumps operate 24Hrs/7Days a week to only facilitate Hot Water at the fixture instantly. Continuous recirculating pumps often waste as much as 30% more gas due to heat loss associated with constant water circulation.

The PT-OD1100 eliminates the need to operate the recirculating pump 24/7 by utilizing a NON-INVASIVE method. Using a high accuracy surface mount strap-on sensor as a Demand Flow Indicator and a High Accuracy surface mount strap-on sensor on the return line the recirculating pump operates on an OnDemand Function.

Recirculation Pump time is reduced drastically by energizing the pump only if:

- Demand is Sensed (Hot Water Draw)
- &
- Recirculating loop temperature drops below a User Setpoint

### COMPREHENSIVE FEATURES

- Backup Circuit Built-In

In a case of sensor fault the system will automatically energize the recirculating pump and run on Override Mode.

- Pump Runtime

Built-In Runtime feature that allows the system to keep track of the recirculating pump minutes of operation.

- Domestic Hot Water XLearn Capable (Future Feature Update)  
(Smart Domestic Hot Water Scheduling)

- Datalog Function Capable

Datalog feature keeps track of Setpoints, Real Runtime Return, Flow, and Supply Temperatures. OnDemand Status; Active/Inactive, & Pump Runtime. Each of these datapoints are Time Stamped and provided on a CSV file stored locally on a MicroSD card (User Provided).