

## TECHNICAL DATA SHEET

# STP SERIES

## TANK AND PLATE STORAGE WATER HEATER

### FEATURES:

- Recovery rates from 600 to 10,800 GPH with 180°F boiler water for 100°F temperature rise.
- Tank Sizes ranging from 175 to 500 gallons standard.
  - 750-1000 gallons special order
- Domestic storage temperature control range 50-180°F.
- Double Wall Brazed Plate Heat Exchanger - 316L stainless steel plates. (AHRI 400 Rated)
- Compact Footprint.
- Modular design with simplex and duplex heat exchanger options available for built-in redundancy and extra capacity.
- NEW Advanced Electronic PID controls with touchscreen user interface and compatible with Building Management System via ModBus or built-in BacNet
- Temperature control options:
  - Standard: Using either VFD pump or 2-way or 3-way control valve on boiler water side (modulating heat input)
  - Optional Simple control: Domestic solution with pump enable/disable based on aquastat to maintain domestic water storage temperature set point
- Storage Tank Material:
  - Standard: Carbon steel Tank with double glass lining
  - Power anodes with carbon steel tanks
  - Optional: Duplex stainless steel
- Fully Assembled- Skid Mounted Package for quick and easy single point connections
- Certifications: ASME, UL (Controls)

The DHT STP Series is a fully packaged storage water heater that utilizes double wall brazed plate heat exchanger to optimum heat transfer through generating more efficient and faster hot water replenishment of the storage tank.

The STP Series modular design allows multiple heat exchangers to be stacked to give you built in redundancy within a small footprint. This also allows for easy maintenance as you can isolation each heat exchanger to clean and maintain without any system downtime.



### APPLICATIONS:

- Ideal for new or retrofit installations
- Suitable for both single or multiple unit installations
- Support variety of water to water heating applications including:
  - Apartment Complexes
  - Prisons / Correctional Facilities
  - Hospitals/ Nursing homes/ Medical Centers
  - Hotels/ Entertainment Facilities
  - Schools/ Colleges/ Universities/ Dormitories
  - Commercial laundries
  - Government & Office buildings

## DHT'S NEW CONTROL SYSTEM:

### FEATURES:

- 4.3 HMI Touchscreen
- Feedforward Logic Controller includes 1/8 DIN with LCD display (back-up interface)
- Boiler Water Inlet and Outlet Temp Sensors (optional)
- Fault Log
- Trending/Graphing
- RS485 MODBUS® Data Port
- Compatibility with Modbus and BacNet BAS system standard without the need for external gateway.
- Optional gateway is available for all other protocols
- Ethernet connection
- Data Logging
- Remote Monitoring: Through Ethernet Connection



The NEW DHT state of the art control system offers unmatched performance and full user configurability for water heater applications. It features a durable temperature sensor transmitting a millivolt signal through quality twisted shielded wiring. The signal transmits directly into the advanced PID controller, which in turn sends a signal to the electrically activated fully modulating and fast acting three-way control valve with high turndown to achieve accurate temperature control over various demand situations. The control valve can also be configured for straight through two-way operation when used with VFD pumps. Unit can also be integrated with Building Management System via Modbus and BacNet standard for remote monitoring or domestic supply water temperature control. Optional communications gateway is also available for other communication protocols.

### DHT CONTROL SPECIFICATIONS:

Enclosure Dimensions	12”H x 10” W x 7” D
Display	4.3” TFT Color LCD
Graphics Display Resolution/ Colors	480 x 272 pixels w/ 65,536 diplay colors
Backlight	White LED, service life 50,000 hours and 24hr operation
Brightness control	16 Levels (Adjusted with touch panel)
Operating Mode	Single Tone, Visual Indicator
Sound Level	80dB @ 10cm, 24VAC
Memory:	8Gb
Interfaces:	Ethernet 10/100 Base-T, USB 2.0 Type A with 5V DC PSU and mini B
Supply Voltage	120/240 VAC
Certifications	NEMA 4, UL

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