High Efficiency Condensing Gas Tankless Water Heater

- Produces Endless Hot Water
- Very High Efficiency (Up to 0.97 EF)
- 304 Stainless Steel Heat Exchanger
- Low Pressure Drop
- Direct Vent Up to 100'
- Low Lead Content Certified
- Natural Gas and Propane Models in 2 Sizes (180 & 199 MBH)
- Advanced Control System –
  - Maintains Stable Water Temperature
  - Gas Leak Detection
  - 10:1 Turndown Ratio
  - Low NOx – 2012 SCAQMD Certified
- 12 Year Limited Warranty
- 5 Year Limited Parts Warranty

User Friendly Interface

1. **LCD Display** – Shows current operation status and setpoint
2. **Menu Button** – Provides access to operating information and settings
3. **On/Off Button**
4. **Set Point Adjustment Button** (95° - 140°F)
5. **Temperature Units Button** (°C - °F)
6. **Adjustment Dial** – Dial provides an easy way to scroll through menus and adjust settings
# Technical Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>TWH180</th>
<th>TWH180LP</th>
<th>TWH200</th>
<th>TWH200LP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Modulation (MBH)</td>
<td>18 - 180</td>
<td>18 - 180</td>
<td>19.9 to 199</td>
<td>19.9 to 199</td>
</tr>
<tr>
<td>Energy Factor</td>
<td>0.95</td>
<td>0.95</td>
<td>0.97</td>
<td>0.97</td>
</tr>
<tr>
<td>Fuel</td>
<td>NG</td>
<td>LP</td>
<td>NG</td>
<td>LP</td>
</tr>
<tr>
<td>DHW Flow Rate @ 35° F Rise (GPM)</td>
<td>9.8</td>
<td>9.8</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>DHW Flow Rate @ 45° F Rise (GPM)</td>
<td>7.6</td>
<td>7.6</td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td>DHW Flow Rate @ 77° F Rise (GPM)</td>
<td>4.4</td>
<td>4.4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>DHW Minimum Flow Rate (GPM)</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>DHW Maximum Temperature (°F [°C])</td>
<td>140 [60]</td>
<td>140 [60]</td>
<td>140 [60]</td>
<td>140 [60]</td>
</tr>
<tr>
<td>Cabinet Width</td>
<td>17-1/2&quot;</td>
<td>17-1/2&quot;</td>
<td>17-1/2&quot;</td>
<td>17-1/2&quot;</td>
</tr>
<tr>
<td>Cabinet Depth</td>
<td>15-1/2&quot;</td>
<td>15-1/2&quot;</td>
<td>15-1/2&quot;</td>
<td>15-1/2&quot;</td>
</tr>
<tr>
<td>Gas Connections</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Weight (Lbs)</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
</tbody>
</table>

---

## Internal Diagram

- **Exhaust**
- **Intake**
- **BLDC Turbo fan**
  - Normal operation even during line voltage fluctuations
- **Gas Valve**
- **Metal-fiber Burner**
  - Pre-mixed burner with high combustion efficiency and low CO & NOx emissions
- **Main Control**
  - Multiple safety functions
  - Built in dual stage anti-freezing mechanism
  - Switched-mode power supply (SMPS) design
- **State of the Art Built-in Gas Leak Detector**
  - In the event of gas leak, the leak detector shuts the unit off and alarms the user
- **Air/Fuel Actuator**
  - Automatic combustion control system ensures efficient combustion over a wide range of operation
- **Primary Heat Exchanger**
  - High quality stainless steel (ST 304)
  - Low pressure drop
  - High efficiency oval tube & fin design
- **Secondary Heat Exchanger**
  - Premium grade stainless steel (ST 304)
  - Minimize calcium deposit
- **Mixing Valve**
  - Maintains a stable water temperature during changing operating conditions
- **Condensate Trap**
  - (Behind Main Control)
- **Flow Control Valve**
  - Water flow control ensures stable water temperature during peak demands

Triangle Tube reserves the right to make product changes or improvements at any time without notice.