HELIO-PAK HEAT-TRANSFER APPLIANCE

The Helio-Pak (HPAK) is an all-in-one closed loop heat-transfer appliance, specifically designed to simplify solar hot water systems, and provide maximum heat transfer. The HPAK comes factory assembled, and wired with all necessary components, making installation a trouble-free experience. With its unique design, the SRCC rated its performance as being **25% more efficient** than conventional internal heat exchangers.

A major benefit the Helio-Pak provides is that it attaches directly onto the hot water tank. As a result, under certain conditions, the HPAK can be mounted onto a pre-existing water tank, thereby reducing costs. This is a feature no other solar hot water heat-exchanger on the market can offer.

**Features**
- Augmented heat exchanger surface promotes maximum heat generation
- Superior heat transfer via unique counterflow design
- 25% more efficient than conventional internal heat exchangers
- Under certain conditions, can mount to existing tank
- “Plug & Play” installation
- Viewable heat exchanger leak detection
- Several sizes available for differing loads

**HELIO-PAK PRO UPGRADE**

The Helio-Pak Pro (with pre-installed Delta-T Pro controller) further enhances the residential solar hot water system, with the addition of user-friendly customizable settings, remote navigation, and expanded system performance data.

**Features**
- Remote Wi-Fi system navigation
- BTU metering
- Stored energy data (BTU, °F, GPM)
- Adjustable user settings
- Vacation mode

Optional IPAQ PDA for remote system monitoring. An optional add-on to the HPAK Pro. Sold separately.
# TECHNICAL SPECIFICATIONS

**Double wall heat exchanger** maximizes the heat transfer between the domestic hot water and the solar fluid.

- **Flow Sensor** (HPAK Pro model only) included controller monitors and regulates the system.
- Insulating foam minimizes heat loss, and adds a clean look.
- **Expansion tank connection** and **DHW Connections**.
- **Solar loop connections** Combo valve includes a gravity break (to prevent thermosiphoning at night), check valve, ball valve, and thermometer.
- **Valve for convenient and quick filling of the system**.

![Mounting diagram](image)

**Hydraulic diagram**

- Temp. gauge
- Ball valve
- Check valve
- **Temp/Flow sensor** (HPAK Pro only)
- Solar loop pump
- Water supply pump
- Pressure gauge
- Relief valve
- Fill valve
- Ball valve
- Fill valve

## MODEL

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HPAK 16</th>
<th>HPAK 24</th>
<th>HPAK 32</th>
<th>HPAK 48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat transfer rate (BTU / hour&lt;sup&gt;1&lt;/sup&gt;)</td>
<td>16000</td>
<td>24,000</td>
<td>32,000</td>
<td>48,000</td>
</tr>
<tr>
<td>Recommended Flow Rate&lt;sup&gt;2&lt;/sup&gt; (Gallons per Minute)</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Max Collector Surface Area (ft&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>96</td>
<td>160</td>
<td>200</td>
<td>321</td>
</tr>
<tr>
<td>Recommended Pump Speed (Energy Use)</td>
<td>1 (60W)</td>
<td>2 (90W)</td>
<td>2 (90W)</td>
<td>3 (110W)</td>
</tr>
<tr>
<td>Max Piping Resistance&lt;sup&gt;3&lt;/sup&gt; (ft of Water)</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Weight (lbs)</td>
<td>55</td>
<td>65</td>
<td>75</td>
<td>90</td>
</tr>
<tr>
<td>Expansion Tank</td>
<td>2 gal.</td>
<td>2 gal.</td>
<td>5 gal.</td>
<td>5 gal.</td>
</tr>
<tr>
<td>Voltage</td>
<td>110 VAC, 60 Hz</td>
<td>110 VAC, 60 Hz</td>
<td>110 VAC, 60 Hz</td>
<td>110 VAC, 60 Hz</td>
</tr>
</tbody>
</table>

1 - At full sun and 20° log mean temperature differential  
2 - With max collector surface area installed  
3 - With recommended pump speed

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