

# HELIODYNE OPEN LOOP SOLAR TANK SYSTEM

The Heliodyne HTOL is a factory-assembled, open-loop solar hot water system with integrated storage and electric backup, designed for fast installation, code compliance, and long-term reliability. Designed to meet plumbing code requirements and HECO guidelines, the HTOL features a compact footprint ideal for projects with limited mechanical room space and accelerated installation schedules.

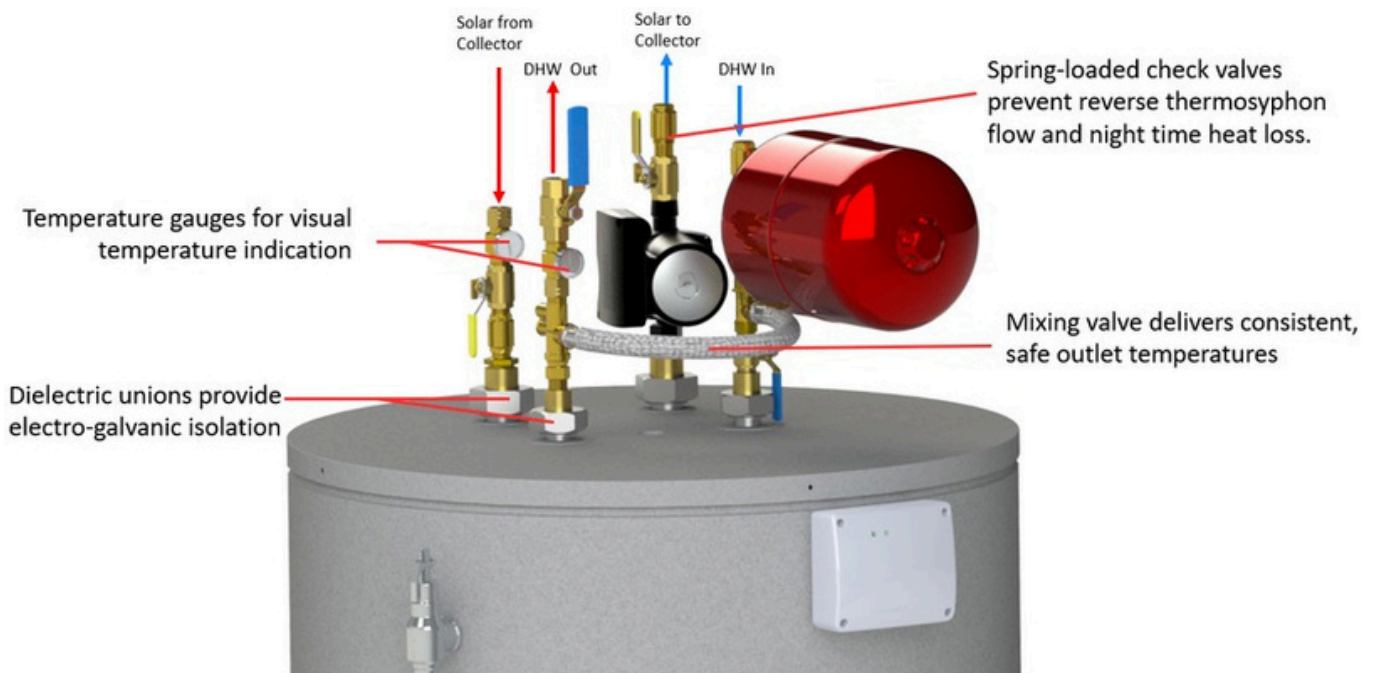
## Factory-Plumbed & Pre-Wired for Rapid Deployment

Every HTOL system arrives fully assembled with critical components integrated and optimized at the factory, reducing field labor, installation errors, and commissioning time

- **Delta-T Differential Temperature Controller** with Tank Sensor maximizes solar performance.
- **High-Efficiency Circulation Pump** provides reliable heat transfer with low power consumption.
- **Adjustable thermostatic mixing valve** with Recirculation Return Port maintains safe outlet storage temperatures while maintaining higher temperatures for improved solar efficiency.
- **Isolation & Service Valves** enable easy maintenance and minimize service downtime.
- **Analog Temperature Gauges** (Collector Return & Hot Water Supply) provide immediate visual verification of system performance.
- **Dielectric Unions** on Tank Top Connections prevent galvanic corrosion by electrical isolation of the solar loop for long term system reliability.
- **Check Valves on Collector Supply & Return Lines** prevent thermosiphoning, eliminating unwanted heat loss and improving system efficiency.
- **Check Valve on Cold Water Inlet** prevents backflow and protects potable water integrity.



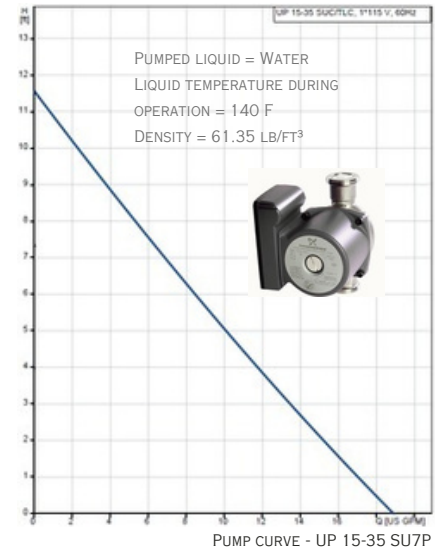
Compliant and Listed to Hawai'i Energy Design Guidelines



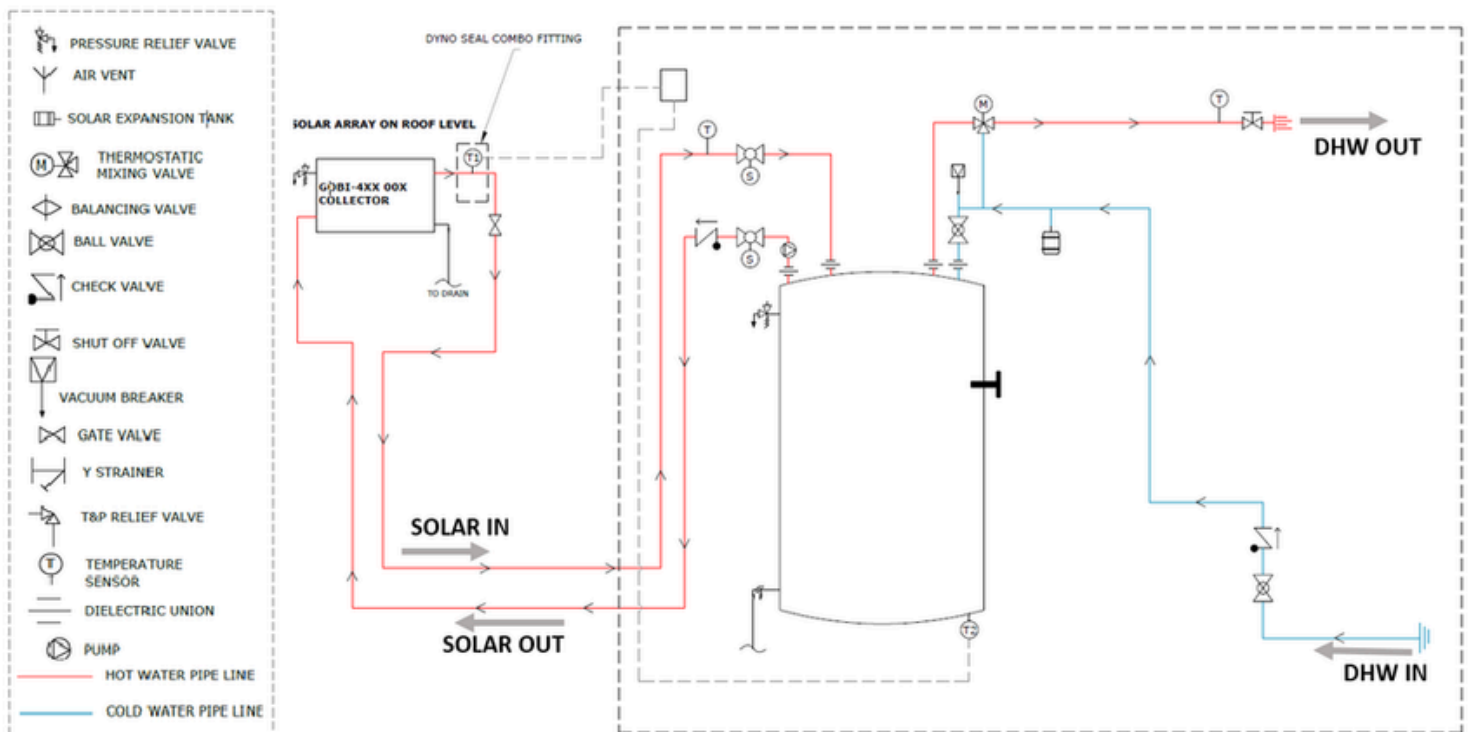
## Technical Specification

The HTOL is a fully pre-plumbed, open-loop solar domestic hot water system with an integrated glass-lined storage tank, available in 65, 80, and 120 gallon sizes to match project demand. A 4.5 kW electric element provides automatic backup heating when solar input is insufficient.

Solar heat transfer is driven by a Grundfos UP 15–35 circulator controlled by a Delta-T differential controller, which activates the pump when collector temperature exceeds tank bottom temperature by the programmed setpoint. Potable water circulates directly between the collectors and tank to store solar energy. Temperature gauges on the solar supply and return lines provide visual confirmation of system operation. The HTOL delivers efficient, reliable performance in a compact, integrated design.



## Solar water heating open loop system plumbing diagram



MODEL	HTOL 065 115	HTOL 080 115	HTOL 120 115
Storage Capacity (Gal)	65 (Gal)	80 (Gal)	120 (Gal)
Dimensions (Inches)	59 x 21 (HxD)	67 x 24 (HxD)	76 x 28 (HxD)
Max Collector Surface Area (ft <sup>2</sup> )	40 sq ft	64 sq ft	80 sq ft
Weight (lbs)	158 lbs	198 lbs	284 lbs
Controller Type	Standard	Standard	Standard
Expansion Tank	2 gal.	2 gal.	2 gal.
Tank back-up heating element	4500 W ,240 VAC	4500 W ,240 VAC	4500 W ,240 VAC
Input Voltage	120 VAC , 60 Hz	120 VAC , 60 Hz	120 VAC , 60 Hz
Pump	UP 15–35 SU 7P	UP 15–35 SU 7P	UP 15–35 SU 7P
Included Sensors	1 x 10K Ohm	1 x 10K Ohm	1 x 10K Ohm