



Advanced Heating
& Hot Water Systems



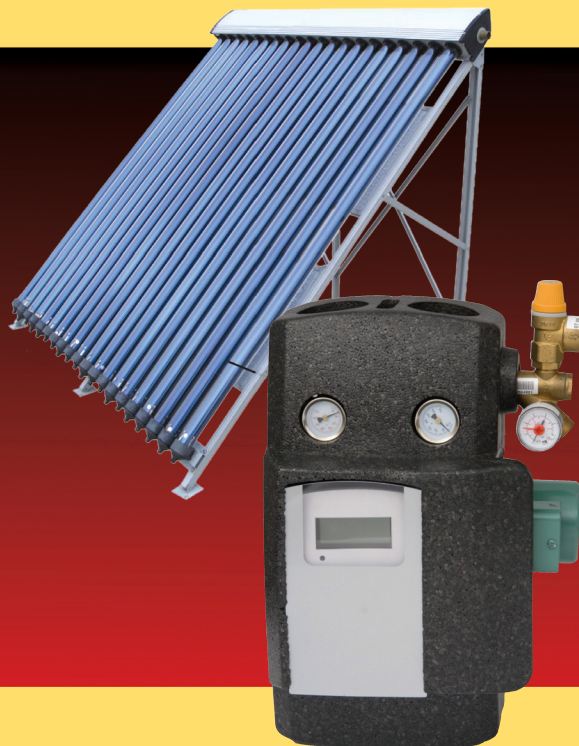
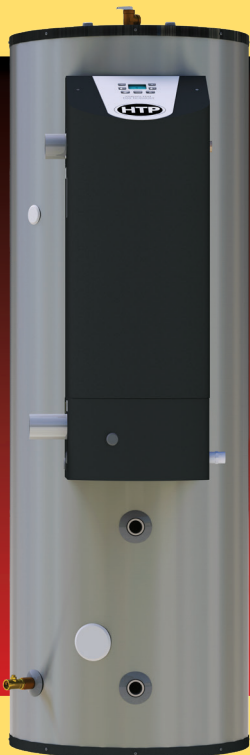
SOLAR

Solar Water Heating
Clean Green Energy

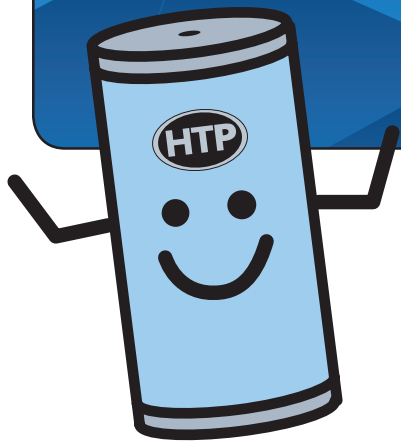
innovation

GREEN TECHNOLOGIES

HIGH EFFICIENCY, RENEWABLE ENERGY AND LOW EMISSIONS



Why Solar ?



Because Rebates Lower the Costs

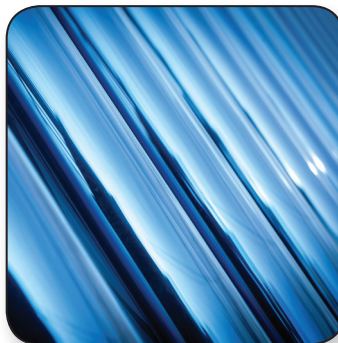
- \$ Federal Tax Incentives
- \$ State Rebates & Incentives
- \$ Utility Rebates & Incentives
- \$ Local City or Municipality Rebates & Incentives

Because We Care

Each solar panel eliminates tons of carbon dioxide from being released into the atmosphere. It would take the planting of 40 trees per year to recoup that much CO₂.

Because Solar Pays

Collecting and using solar energy reduces fuel consumption, be it electricity or natural gas, by 15,000 cubic feet of natural gas or 4,400 kwh, based on 40,000 BTU per day for each solar panel. (Consult local utility rates for your area.)



Helpful Rebate Links:

www.htproducts.com
(go to our web site for more info)
www.energystar.gov
www.dsireusa.org
www.aceee.org

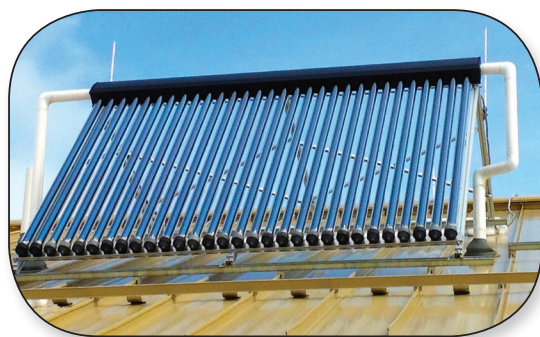
Because Solar Heating Pays Off For You

- Saves you money by cutting your electricity or gas use
- Provides 50 to 75% of your home hot water needs
- Diminishes CO₂ gasses that pollute our air
- Adds resale value to your home or business
- Provides energy savings
- Provides radiant heating for your home or business

Solar Accessories

**Contact Your Local Wholesaler or
HTP Representative for Your Solar Needs**

**HTP Solar
Accessories:**
Drain Back Tanks
Controllers
Monitors
Pump Stations
Loggers
Pumps



HTP has Everything
You Need for a
Complete Solar System.
Keep Yourself In
Hot Water the GREEN Way

Vacuum Tube Collectors



Freeze-protected heat pipes transfer heat energy from within the evacuated tubes up to an insulated copper "header" through which a heat transfer liquid is circulated. HTP Solar Tube Collectors maintain strong efficiency levels even at high temperature differences. For this reason, the collectors are ideal for installations in cold regions or for high temperature applications anywhere.

Collector Thermal Performance Rating for 30-tube Collectors

Thousands of Btu Per Panel Per Day			
Weather-Category (Ti-Ta)*	Clear Day 2000 Btu/ ft ² -d	Mildly Cloudy 1500 Btu/ ft ² -d	Cloudy Day 1000 Btu/ ft ² -d
A (-9°F)	46.1	34.8	23.5
B (9°F)	44.0	32.7	21.4
C (36°F)	40.6	29.3	18.0
D (90°F)	34.2	23.0	11.8
E (144°F)	27.1	15.9	5.9

A-Pool Heating (Warm Climate) B-Pool Heating (Cool Climate)
C-Water Heating (Warm Climate) D-Water Heating (Cool Climate)
E-Air Conditioning

*Ti = Inlet temperature to the collector

*Ta = The ambient air temperature

(For the methodology of this thermal performance rating see
www.solar-rating.org/standards/ogdocuments/RM-1_2002.PDF)

Tube collector		
HP-30SC	30 Evacuated Tube Solar Collector with Mounting Hardware	101" x 79"



Drain Back Tank

Drain Back	Model with Heat Exchanger	Gal.	Height/Diameter	Freight Weight (lbs)	
SSU-10DB	SSU-10DBX	10	20"/ 19.25"	31	39.7
SSU-15DB	SSU-15DBX	15	22"/ 19.25"	33	41.5
SSU-20DB	SSU-20DBX	20	27"/ 19.25"	37	54.1
SSU-30DB	SSU-30DBX	30	39.5"/ 19.25"	49	75
SSU-40DB	SSU-40DBX	40	51.875"/ 19.25"	61	84
SSU-60DB	SSU-60DBX	60	52.125"/ 23.25"	90	116
SSU-80DB	SSU-80DBX	80	71.5"/ 23.25"	125	151

Drain Back Tanks come in a 10 Gallon Tank size on up to an 80 Gallon Tank size, with or without a heat exchanger option (see Chart)



Drain Back systems are a smart choice. The Drain Back Tank allows the solar collectors to drain all the water from collectors and related pipe connections into a reservoir to protect the system from either freezing or overheating. HTP's Drain Back system also has fewer components, so maintenance is greatly reduced.



- Virtually maintenance free operation
- **Quality construction:** a highly efficient cupronickel heat exchanger boasts excellent heat transfer properties, while the robust **stainless steel** tank eliminates the need for anode rods
- Lightweight construction (easier installation)
- **Effortless monitoring:** sight window makes it possible to visually monitor the tank's water level
- Aesthetically pleasing: the durable plastic jacket will not rust or dent
- **5 year limited warranty**

Phoenix Solar

Stainless Steel • Solar • Gas Fired Back-Up • Water Heater



- Up to 96% thermal efficiency
- 5 to 1 turndown ratio
- The tank loses only ½° F per hour, due to 2" of environmentally safe foam insulation
- Virtually maintenance free
- System flexibility: built in auxiliary taps provide connections to air handlers or supplemental storage tanks
- Quality construction: an extremely durable cupronickel and stainless steel heat exchanger boasts excellent heat transfer properties and resists corrosion

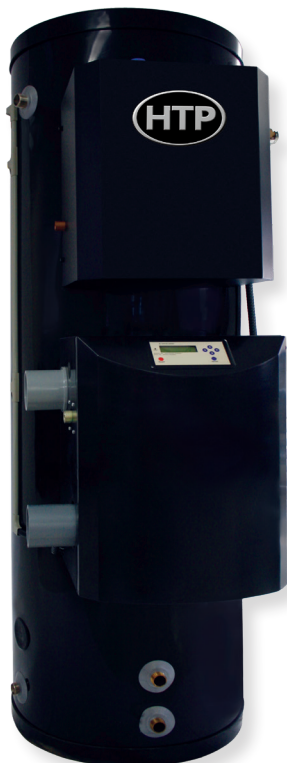
Model	Input Modulation	Gal.	First Hr. Rating	Height/ Diameter	Freight Weight
PH130-80S	35,000–130,000	80	227 gal	72" / 23"	245 lbs
PH199-80S	40,000–199,000	80	314 gal	72" / 23"	245 lbs
PH130-119S*	35,000–130,000	119	257 gal	74" / 27"	415 lbs
PH199-119S*	40,000–199,000	119	335 gal	74" / 27"	415 lbs

*SNHX (Solar No Heat Exchanger) Versions Available

- Robust 316L stainless steel tank eliminates the need for anode rods
- Vents in inexpensive, easy to install PVC or CPVC pipe, with combined vent lengths up to 200' in 3" pipe and combined vent lengths up to 85' in 2" for the 130 models
- Eligible for tax credits & utility company rebates
- 7 year limited warranty

VERSA-HYDRO SOLAR

Space Heating & Domestic Hot Water Combined • Solar with Gas Fired Back-Up



- The tank loses only ½° F per hour when the burner is off
- Virtually maintenance free operation
- The modulating burner operates at a 5 to 1 turndown ratio, while the space heating module operates at a 10 to 1 turndown ratio
- Low energy costs resulting from ultra high 96% thermal efficiency and 93% combustion efficiency ratings
- 12 year limited warranty

Model	Gal.	Btuh	Space Heating Module Btuh	1st Hour Rating	Max. Space Heater Temp.	Height/ Diameter	Freight Weight
PHE130-80S PHE199-80S*	80	130,000	100,000	227 Gal.	160° F	72" / 23"	275 lbs
		199,000	135,000	314 Gal.			
PHE130-119S PHE199-119S*	119	130,000	100,000	257 Gal.	160° F	74" / 27"	445 lbs
		199,000	135,000	335 Gal.			

*SNHX (Solar No Heat Exchanger) Versions Available

- Incredible system flexibility: Built-in auxiliary taps provide connections to air handlers or supplemental storage tanks
- The Versa-Hydro saves space by combining the equivalent of a 135,000 BTU boiler, an indirect water heater, and a buffer tank into one small footprint
- An extremely durable cupronickel & stainless steel heat exchanger boasts excellent heat transfer properties and resists corrosion



Phoenix LD Solar

Stainless Steel • Solar • Gas Fired Back-Up • Water Heater

- Reduce your water heating bills by 50% to 75%
- Federal solar tax credits
- Utility rebates & state incentives
- Energy compliance credits & fuel savings
- Long lasting 316L stainless steel tank
- No anode rods needed
- Super insulated!
- Extremely durable 316L stainless steel solar heat exchanger
- Space heating with auxiliary port
- 76,000 Btuh modulating burner with up to 3 to 1 turndown ratio
- 10 year limited warranty



**Solar Tank
with a Up to 97%
High Efficiency
Gas Fired Back-up**

Model	Input Modulation	Gal.	Height/ Diameter	Freight Weight
PH76-80S	25,000-76,000	77	69"/ 23"	245 lbs

SUPERstor PRO SOLAR

- Reduce your water heating bills by 50% to 75%
- Federal solar tax credits
- Utility rebates & state incentives
- Energy compliance credits and fuel savings
- Long lasting 316L stainless steel tank
- No anode rods needed
- Super insulated!
- Top connections: inlet, outlet and auxiliary ports auxiliary port for the recirculation line increases overall efficiency by eliminating short cycling of the connected boiler
- 10 Year limited warranty

**Solar Electric
with an Indirect
Back-Up**

**Extremely Durable Heat Exchanger:
Enhanced Corrugated Surface:
316L Stainless Steel Heat Exchanger
Boasts Excellent Heat Transfer
Properties, Resists Corrosion & Offers
Extremely Low Pressure Drop**

SSP solar water heater with an electric back-up				
Model	GAL.	Height/ Diameter	Freight Weight	1st Draw **
SSP-60SE	60	52.625"/ 23.5"	150 lbs	37 Gal.
SSP-80SE	80	69"/ 23.5"	160 lbs	40 Gal.
SSP-100SE	100	61"/ 27"	215 lbs	40 Gal.
SSP-115SE	115	69"/ 27"	235 lbs	60 Gal.

** First draw was acquired by heating the entire tank until thermostat was satisfied, then drawing until a Delta T of 15°F was seen at the outlet



SUPERstor ULTRA

316L Stainless Steel

LONG LASTING!
BEST WARRANTY!

SSU tanks with preheat, water heater backup

Model	Gal.	Height/ Diameter	Freight Weight	Recomm. Flow Rate
SSU-20	20	27"/ 19.25"	60 lbs	8
SSU-20PH (pool)	20	27"/ 19.25"	60 lbs	8
SSU-30	30	39.5"/ 19.25"	72 lbs	8
SSU-45	45	52.5"/ 19.25"	88 lbs	10
SSU-60	60	52.5"/ 23.25"	110 lbs	10
SSU-80	80	72"/ 23.25"	139 lbs	12
SSU-119	119	74"/ 27"	206 lbs	14

SB tanks with boiler backup

Model	Gal.	Height/ Diameter	Freight Weight	1st Draw 65° Rise
SSU-60SBN	60	52.5"/ 23.25"	120 lbs	40 Gal.
SSU-80SBN	80	72"/ 23.25"	151 lbs	60 Gal.
SSU-119SBN	119	74"/ 27"	220 lbs	90 Gal.

Tank Key: Number = Gallon Capacity; SB = Solar Backup; DW = Double Wall; SE = Solar Electric; NHX = No Heat Exchanger; DB = Drain Back; DBX = Drain Back with Exchanger; S = Solar (most tanks are available in these variations)

For the ultimate in performance and longevity, choose a SuperStor Stainless Steel Solar Tank. Each SuperStor Solar Tank features the highest performance available. Its internal cupronickel finned heat exchanger is capable of quickly transferring energy from any solar collection system. Its tank is constructed of high quality **316L stainless steel** for long service life and eliminates foul water caused by anode rods.

A limited **Lifetime Protection Plan** gives users peace of mind that their investment is backed by the industry's strongest warranty. Thick CFC-free foam insulation provides superior heat retention and durability. Encased in an attractive silver colored jacket, the SuperStor Solar Tank will look good while providing many years of worry-free performance.

- Number one selling indirect water heater in the country
- Ultra high performance, can generate over 50% more hot water than many water heaters of similar size (offered in 7 sizes: 20 to 119 gallons)
- Minimal heat loss, due to thick, water blown, foam insulation
- Virtually maintenance free operation
- Extremely durable cupronickel heat exchanger boasts excellent heat transfer properties and resists corrosion
- Robust 316L stainless steel tank eliminates the need for anode rods
- Aesthetically pleasing: the attractive and durable silver plastic jacket ensures a rustproof finish, even in humid environments
- Limited lifetime residential warranty: The industry's strongest protection plan
- Low energy costs

Market
Leadership
For Over

**30
Years**



HTP Pool Heater SSU-20PH



Robust 316L stainless steel tank eliminates the need for anode rods