Energy for generations

+ Hot water
+ Solar heating
+ Swimming pool
+ Process heat
Pick up the energy from the sky

The use of solar energy creates warmth and comfort. The sun is the only energy source that is infinitely available and emission-free heating supplies. A solar panel on the roof to help you, to save on heating costs. With solar panels of SOLARFOCUS can diffuse and direct sunlight are used to produce energy.
The sun
Energy for generations

In just 3 hours, the sun supplies enough energy to cover the annual energy needs of the entire population of the earth. The potential of solar energy is thus greater than the sum of all other renewable energy sources together. Both diffuse and direct sunlight (solar radiation) can be used for energy generation. The average annual global radiation in Central Europe totals approx. 950 to 1,500 kWh/m².

It would be ideal if the collector always faced south

The irradiation angle of the sun on the collector surface changes continually with the earth’s movement. This means that the majority of the sun’s rays strike the collector at an angle. The positioning of the collectors therefore plays an important role when designing the solar energy system.
Always south would be ideal
Solar irradiation during the course of the day

The theoretically optimum orientation would be exactly to the south in order to be able to use the solar irradiation throughout the day. As the conditions in the early morning hours are less favourable to the use of solar energy (morning mists, cooler air temperatures), a deviation of approx. 10° to the south-west is recommended. As a result, the poorer conditions in the morning are deliberately not used, but the late afternoon sun can be utilised longer and under better conditions.

Planning/design of a solar system

These design recommendations should assist you in planning your system. The assumed values are for guidance only. Important parameters, such as hot water consumption, roof incline and aspect must be given individual consideration during the planning phase. The house energy index and type of heating are decisive in determining the coverage for partial solar heating installations. SOLARFOCUS supports you in planning, tender preparation and execution of your solar system!

<table>
<thead>
<tr>
<th>Persons and Intended Use</th>
<th>Collector Area</th>
<th>Storage Tank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ca. 5.0 m²</td>
<td>300 liters DHW tank</td>
</tr>
<tr>
<td>ca. 5.6 m²</td>
<td>300 - 400 litres DHW tank</td>
<td></td>
</tr>
<tr>
<td>ca. 8.4 m²</td>
<td>300 - 500 litres DHW tank</td>
<td></td>
</tr>
<tr>
<td>2-4 90 m²</td>
<td>ca. 14.0 m²</td>
<td>800 litres Hyko Thermal Store</td>
</tr>
<tr>
<td>3-5 120 m²</td>
<td>ca. 16.8 m²</td>
<td>1000 litres Hyko Thermal Store</td>
</tr>
<tr>
<td>4-6 150 m²</td>
<td>ca. 22.4 m²</td>
<td>1500 litres buffer store and 400 litres DHW tank</td>
</tr>
</tbody>
</table>
Each ingenious invention is based on a simple principle

The angle of the sun on the collector surface changes continually with the Earth’s movement. A standard flat-plate collector reaches its optimum efficiency when the sunlight hits the absorber directly at an angle of 90°. However, this means that the majority of the sun’s rays will strike the collector at an angle.

Concentration in flat, weak radiation

Due to its CPC geometry, the collector can still achieve usable temperatures even with weak sunlight at a low angle of incidence, this is important during the transitional period (spring and autumn), since up to 80% of the sun’s rays penetrate at an angle.

- Based on the cylindrical design of the CPC reflector, the diffused part of the light is also absorbed (Kdiff= 0.87).
- Normal flat-plate collectors are irradiated from a single side and must be insulated on the back of the absorber to minimise heat loss. The CPC collector absorber is irradiated from both sides. Due to this double-sided irradiation, there is effectively no blind side to the absorber which would otherwise represent a net heat loss area.
- The small absorber strip of the CPC collector also provides quick heating.
Efficient use reduces heating costs

The angle factor is the ratio of the optical efficiency from the current angle of entry to the vertical entry. The cylindrical shape of the CPC reflector allows it to absorb even diffuse light. Angle factor at 30 ° angle deviation = 1.10.

- The vertical installation of the absorber allows the use of the inclined penetrating light.
- The small absorber strip designates a small heat radiating surface and therefore less heat loss (radiator principle).
- At the same time the small absorber strips of the CPC collector ensure rapid heating due to increased concentration.

### Airtight and watertight design

In contrast with conventional flat plate collectors, the CPC collector has an airtight and watertight construction. When heated, the air inside expands and the pressure is relieved via a special pressure relief valve. When the collector cools down again, a partial vacuum is created and the solar safety glass is supported over a large area by the reflectors. The airtight and watertight design without ventilation holes and rivets prevents any soiling of the absorbers, provides permanent protection for the inside of the collector and guarantees constant energy yields for years to come.

### Standard flat plate collector

Dirt deposits reduce the collector yield

### SOLARFOCUS CPC collector

Sealed construction guarantees consistently high energy yields for decades
CPC-Collector

Technical data

<table>
<thead>
<tr>
<th>Structure</th>
<th>CPC S1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>[mm] 2404</td>
</tr>
<tr>
<td>Width</td>
<td>[mm] 1155</td>
</tr>
<tr>
<td>Height</td>
<td>[mm] 65</td>
</tr>
<tr>
<td>Surface area</td>
<td>[m²] 2,8</td>
</tr>
<tr>
<td>Aperture area</td>
<td>[m²] 2,5</td>
</tr>
<tr>
<td>Content</td>
<td>[l] 1,6</td>
</tr>
<tr>
<td>Weight (empty)</td>
<td>[kg] 51,6</td>
</tr>
<tr>
<td>Absorption coefficient Absorber</td>
<td>[%] 95</td>
</tr>
<tr>
<td>Glass cover Solar-safety glass</td>
<td>[mm] 3,2</td>
</tr>
<tr>
<td>Transmissivity Solar-safety glass</td>
<td>[%] 92</td>
</tr>
<tr>
<td>Max. operating pressure</td>
<td>[bar] 10</td>
</tr>
</tbody>
</table>

Your benefit

+ 10-year guarantee against condensation
+ No insulation in the collector
+ Exclusively high-quality materials
+ Perfect exploitation of light at a low incident angle 87% diffusion factor
+ Suitable for all installation variants
+ Flat construction, simple hydraulic connection
+ Universal application: Swimming pool, DHW preparation, heating support
The advantages

The collector is exposed to environmental influences such as wind, rain, dirt, UV radiation, snow loads and extreme variations in temperature over a period of decades. It is therefore all the more important that only high-quality materials are used that can withstand these adverse conditions. Materials such as wood, plastic and rubber do not offer the necessary resistance in the long term.

Collector tray (1)
- The 1.5 mm tight welded aluminium tray without ventilation holes forms the “foundation”.
- The airtight and watertight design without ventilation holes and rivets protects the inside of your collector for decades.

Absorber (2)
- The highly selective coated copper absorber impresses with a solar absorption rate of approx. 95% and a thermal emission rate of approx. 5%.
- The floating absorber coated on both sides guarantees maximum energy yields.

Reflector (3)
- The cylindrical, high-gloss rolled, galvanically anodized pure aluminium reflector concentrates the penetrating solar radiation onto the vertically installed absorber ship.
- The cylindrical, mirror-finish rolled, galvanically anodised pure aluminium reflector bundles the incidental sun rays onto the vertically installed absorber strip. The reflectors in the tray are protected against environmental influences, thereby guaranteeing a long service life. No wear of the coating. Optimum light bundling by the cylindrical form of the CPC reflector. As a result, the diffuse fraction of the light is also absorbed (Kdiff = 0.87).

Solar safety glass (4)
- 3.2 mm low iron content prism structured solar safety glass
- Very high light permeability for high yields, impact and hail-resistant

Special seal (5)
- Permanently elastic UV-protected special seal
- Connects the tray, the glass and the glass holding strip. Diffusion-proof. Prevents the ingress of moisture and dirt.

Glass holding strip (6)
- Anodised aluminium special profile.
- A UV and weathering-resistant aluminium profile instead of a rubber seal ensures the protection of the glass edges. Guarantees the lasting connection of glass and tray.

Flush-sealing connections (7)
- 1/2” external thread with flat seal
- The surface seals on the inside and outside of the tray are fastened plane-parallel with brass nuts and hemetically seal the tray against environmental influences. No rubber or plastic seals susceptible to weathering. Simple hydraulic connection of the collectors.

Negative pressure relief valve (8)
- When the air inside the collector is warmed for the first time, the air expands and a positive pressure is created. The valve opens and the air can escape. When the air cools again, the valve closes and a negative pressure is created inside the collector. The reflectors support the glass pane on the tray.
- No corrosion inside the collector caused by aggressive ambient air.
- No exchange between inside and outside air, and hence no convective heat losses.
- No condensation, and therefore no destruction of the highly absorber coating.

Annular gap air vent (9)
- The annular gap air vent is located in the distributor pipe of the collector.
- The annular gap air vent allows the solar collectors connected in series to be easily vented.
Sunnyline – flat plate collector

Your benefit

+ 10-year warranty
   Exclusively high-quality materials

+ Welded aluminium tray: Provides the best possible protection for the inside of the collector for decades to come. Highly selective full-area copper absorber

+ Low installation costs

+ Suitable for all installation variants: roof-integrated, on-roof, free-standing and wall mounted

+ Universal application: Swimming pool, DHW preparation, heating support

+ Simple hydraulic connection

Technical data

<table>
<thead>
<tr>
<th>Sunnyline 28</th>
<th>Flat plate collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td></td>
</tr>
<tr>
<td>Length [mm]</td>
<td>2404</td>
</tr>
<tr>
<td>Width [mm]</td>
<td>1155</td>
</tr>
<tr>
<td>Height [mm]</td>
<td>91</td>
</tr>
<tr>
<td>Surface area [m²]</td>
<td>2,8</td>
</tr>
<tr>
<td>Aperture area [m²]</td>
<td>2,5</td>
</tr>
<tr>
<td>Content [l]</td>
<td>1,6</td>
</tr>
<tr>
<td>Weight (empty) [kg]</td>
<td>46,6</td>
</tr>
<tr>
<td>Rear wall insulation [mm]</td>
<td>50</td>
</tr>
<tr>
<td>Absorption coefficient Absorber [%]</td>
<td>95</td>
</tr>
<tr>
<td>Glass cover Solar-safety glass [mm]</td>
<td>3,2</td>
</tr>
<tr>
<td>Transmissivity Solar-safety glass [%]</td>
<td>92</td>
</tr>
<tr>
<td>Max. operating pressure [bar]</td>
<td>10</td>
</tr>
</tbody>
</table>

Guarantee

years

years
The advantages

The collector is exposed to environmental influences such as wind, rain, dirt, UV radiation, snow loads and extreme variations in temperature over a period of decades. It is therefore all the more important that only high-quality materials are used that can withstand these adverse conditions. Materials such as wood, plastic and rubber do not offer the necessary resistance in the long term.

**Collector tray (1)**
- The 1 mm tight welded aluminium tray forms the foundation.
- The high-quality finishing protects the inside of your collector for decades to come.

**Absorber (2)**
- The highly selective coated *copper absorber* impresses with a solar absorption rate of approx. 95% and a thermal emission rate of approx. 5%.
- The floating absorber unit (blue-line absorber plate and copper heat transfer medium pipework are welded ultrasonically) guarantees the highest energy yields. Perfect appearance.

**Solar safety glass (3)**
- 3.2 mm low iron content prism structured solar safety glass.
- Very high light permeability for high yields, impact and hail-resistant.

**Special seal (4)**
- Permanently elastic UV-protected special seal.
- Connects the tray, the glass and the glass holding strip.
  Diffusion-proof. Prevents the ingress of moisture and dirt.

**Glass holding strip (5)**
- Anodised aluminium special profile.
- A UV and weather-resistant aluminium profile instead of a rubber seal ensures reliable protection of the glass edges. Guarantees the lasting connection of glass and tray.

**Flush-sealing connections (6)**
- 1/2” external thread with flat seal.
- The surface seals on the inside and outside of the tray are fastened plane-parallel with brass nuts and hermetically seal the tray against environmental influences. No rubber or plastic seals susceptible to weathering. Simple hydraulic connection of the collectors.

**Backing insulation (7)**
- 50 mm low-binder mineral wool.
- Thanks to the low binder content in the mineral wool, the insulation releases practically no gases on exposure to heat.

**Annular gap air vent (8)**
- The annular gap air vent is located in the distributor pipe of the collector.
- The annular gap air vent allows the solar collectors connected in series to be easily vented.
Technical data

<table>
<thead>
<tr>
<th>Structure</th>
<th>SUN eco 21</th>
<th>SUN eco 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length [mm]</td>
<td>1785</td>
<td>2404</td>
</tr>
<tr>
<td>Width [mm]</td>
<td>1155</td>
<td>1155</td>
</tr>
<tr>
<td>Height [mm]</td>
<td>91</td>
<td>91</td>
</tr>
<tr>
<td>Gross area [m²]</td>
<td>2.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Aperture area [m²]</td>
<td>1.86</td>
<td>2.5</td>
</tr>
<tr>
<td>Content [l]</td>
<td>1</td>
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<tr>
<td>Weight (empty) [kg]</td>
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<td>47.0</td>
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<tr>
<td>Rear wall insulation [mm]</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Absorption coefficient Absorber [%]</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Glass cover Solar-safety glass [mm]</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>Transmissivity Solar-safety glass [%]</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Max. operating pressure [bar]</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Your benefit

+ 10-year warranty
  Exclusively high-quality materials
+ Collector tray: Provides the best possible protection for the inside of the collector for decades to come.
+ Highly selective full-area alu/copper absorber with omega-heat conducting
+ Suitable for all installation variants: roof-integrated, on-roof, free-standing and wall mounted
+ Universal application: Swimming pool, DHW preparation, heating support
+ Low installation costs, simple hydraulic connection
The advantages

The flat plate collector **SUN**eco is equipped with an ultrasonic welded, highly selective alu/copper full-surface absorber. The absorber tube is surrounded by a omega-heat conducting and ensures a highly efficient heat transfer. For optimal energy absorption at low radiation losses is ensured.

Collector tray (1)
- The tightly bonded trough forms the foundation of the collector.
- The high-quality finishing protects the inside of your collector for decades to come.

Absorber (2)
- The highly selective coated **alu/copper absorber** with omega-heat conducting impresses with a solar absorption rate of approx. 95% and a thermal emission rate of approx. 5%.
- The floating absorber unit guarantees the highest efficiency and ensures for perfect appearance.

Solar safety glass (3)
- 3,2 mm low iron content prism structured solar safety glass.
- Very high light permeability for high yields, impact and hail-resistant.

Special seal (4)
- Permanently elastic UV-protected special seal.
- Connects the tray, the glass and the glass holding strip.
  Diffusion-proof. Prevents the ingress of moisture and dirt.

Glass holding strip (5)
- Anodised aluminium special profile.
- A UV and weather-resistant aluminium profile instead of a rubber seal ensures reliable protection of the glass edges. Guarantees the lasting connection of glass and tray.

Flush-sealing connections (6)
- 1/2” external thread with flat seal.
- The surface seals on the inside and outside of the tray are fastened plane-parallel with brass nuts and hermetically seal the tray against environmental influences. No rubber or plastic seals susceptible to weathering. Simple hydraulic connection of the collectors.

Backing insulation (7)
- 50 mm low-binder mineral wool.
- Thanks to the low binder content in the mineral wool, the insulation releases practically no gases on exposure to heat.

Toxpunkt-pinch (8)
- The Toxpunkt-pinch is located in the manifold of the collector.
- The Toxpunkt-pinch ensures the fastest possible ventilation of the collector during filling.
Plug-IN Domestic Hot Water Tank
with solar plant for hot water treatment

- DHW tank with pre-fitted pump set and solar control unit
- Dual coil solar storage tank
- With high efficiency pump

Your benefits
+ Easy installation
+ Plug-in delivery
+ Avoiding assembly errors by preassembled solar control and pump unit

---

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Diameter without insulation</th>
<th>Diameter with insulation</th>
<th>Total height</th>
<th>Upper heating coil</th>
<th>Lower heating coil</th>
<th>Weight</th>
<th>Tilted height</th>
<th>El. screw-in heating 6/4&quot; possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 l</td>
<td>500 mm</td>
<td>600 mm</td>
<td>1794 mm</td>
<td>0,8 m²</td>
<td>1,52 m²</td>
<td>148 kg</td>
<td>1892 mm</td>
<td>✅</td>
</tr>
<tr>
<td>400 l</td>
<td>600 mm</td>
<td>700 mm</td>
<td>1591 mm</td>
<td>1,0 m²</td>
<td>1,81 m²</td>
<td>159 kg</td>
<td>1738 mm</td>
<td>✅</td>
</tr>
<tr>
<td>500 l</td>
<td>600 mm</td>
<td>700 mm</td>
<td>1921 mm</td>
<td>1,27 m²</td>
<td>1,95 m²</td>
<td>230 kg</td>
<td>2044 mm</td>
<td>✅</td>
</tr>
</tbody>
</table>
Hygienic combined tank „HYKO“

with solar plant for hot water treatment in continuous flow mode and heating support

- Combined buffer tank (optional with two coils) for heating support and hot water preparation
- Stratified charging pipe for the heating return flow
- Stratified separation plate

Your benefits

+ Low cost, low space requirement for hot water treatment and solar heating support
+ Hygienic domestic hot water preparation with continuous flow mode
+ Serves as a storage tank for solar and biomass energy

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Diameter without insulation</th>
<th>Diameter with insulation</th>
<th>Total height</th>
<th>Upper heating coil</th>
<th>Lower heating coil</th>
<th>Weight</th>
<th>Tilted height</th>
<th>El. screw-in heating 6/4“ possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 l / R</td>
<td>700 mm</td>
<td>900 mm</td>
<td>1700 mm</td>
<td>1,2 m²</td>
<td>1,8 m²</td>
<td>145 kg / 158 kg</td>
<td>1670 mm</td>
<td>✔</td>
</tr>
<tr>
<td>800 l / R</td>
<td>790 mm</td>
<td>990 mm</td>
<td>1760 mm</td>
<td>1,8 m²</td>
<td>2,4 m²</td>
<td>170 kg / 192 kg</td>
<td>1740 mm</td>
<td>✔</td>
</tr>
<tr>
<td>1000 l / R</td>
<td>790 mm</td>
<td>990 mm</td>
<td>2090 mm</td>
<td>2,4 m²</td>
<td>3 m²</td>
<td>202 kg / 232 kg</td>
<td>2100 mm</td>
<td>✔</td>
</tr>
<tr>
<td>1250 l / R</td>
<td>950 mm</td>
<td>1200 mm</td>
<td>2100 mm</td>
<td>2,4 m²</td>
<td>3 m²</td>
<td>234 kg / 273 kg</td>
<td>2100 mm</td>
<td>✔</td>
</tr>
<tr>
<td>1500 l / R</td>
<td>1000 mm</td>
<td>1250 mm</td>
<td>2125 mm</td>
<td>2,4 m²</td>
<td>3,6 m²</td>
<td>272 kg / 308 kg</td>
<td>2215 mm</td>
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</tr>
</tbody>
</table>
Buffer tank

with solar thermal system and fresh water module for external hot water in continuous flow mode and heating support

- Buffer tank with two smooth pipe registers for fast charging
- Hygienic domestic hot water preparation with external module
- Ideal in connection with a biomass boiler
- Stratified charging pipe for the heating return flow
- Stratified separation plate

Your benefits

+ Serves as a storage tank for solar and biomass energy
+ Low space requirement
+ Simple, efficient system hydraulics

<table>
<thead>
<tr>
<th>Capacity</th>
<th>without insulation</th>
<th>Diameter with insulation</th>
<th>Total height</th>
<th>Upper heating coil</th>
<th>Lower heating coil</th>
<th>Weight</th>
<th>Tilted height</th>
<th>El. screw-in heating 6/4“ possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 l/R</td>
<td>650 mm</td>
<td>850 mm</td>
<td>1700 mm</td>
<td>---</td>
<td>1,2 m²</td>
<td>103 kg</td>
<td>1670 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>800 l/R</td>
<td>790 mm</td>
<td>990 mm</td>
<td>2090 mm</td>
<td>---</td>
<td>3,0 m²</td>
<td>156 kg</td>
<td>2090 mm</td>
<td>auf Anfrage</td>
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<tr>
<td>1000 l/R</td>
<td>950 mm</td>
<td>1200 mm</td>
<td>2060 mm</td>
<td>---</td>
<td>3,0 m²</td>
<td>189 kg</td>
<td>2090 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>1250 l/R</td>
<td>1000 mm</td>
<td>1250 mm</td>
<td>2200 mm</td>
<td>---</td>
<td>3,6 m²</td>
<td>210 kg</td>
<td>2210 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>500 l/2R</td>
<td>650 mm</td>
<td>850 mm</td>
<td>1700 mm</td>
<td>1,2 m²</td>
<td>1,8 m²</td>
<td>131 kg</td>
<td>1670 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>800 l/2R</td>
<td>790 mm</td>
<td>990 mm</td>
<td>2090 mm</td>
<td>1,6 m²</td>
<td>2,4 m²</td>
<td>169 kg</td>
<td>1740 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>1000 l/2R</td>
<td>950 mm</td>
<td>1200 mm</td>
<td>2090 mm</td>
<td>2,4 m²</td>
<td>3,0 m²</td>
<td>204 kg</td>
<td>2090 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>1050 l/2R</td>
<td>990 mm</td>
<td>2200 mm</td>
<td>2,4 m²</td>
<td>3,0 m²</td>
<td>200 kg</td>
<td>2170 mm</td>
<td>auf Anfrage</td>
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</tr>
<tr>
<td>1250 l/2R</td>
<td>950 mm</td>
<td>1200 mm</td>
<td>2080 mm</td>
<td>2,4 m²</td>
<td>3,0 m²</td>
<td>240 kg</td>
<td>2090 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>1500 l/2R</td>
<td>1000 mm</td>
<td>1250 mm</td>
<td>2200 mm</td>
<td>2,4 m²</td>
<td>3,6 m²</td>
<td>254 kg</td>
<td>2210 mm</td>
<td>auf Anfrage</td>
</tr>
</tbody>
</table>
Buffer tank

with solar thermal system, solar stratified charging module and fresh water module for external hot water in continuous flow mode and heating support

- Buffer storage tank for large-scale solar energy systems
- With external two-zone solar stratified charging module
- Hygienic domestic hot water preparation with external module
- Ideal in connection with a biomass boiler
- Stratified charging pipe for the heating return flow
- Stratified separation plate

Your benefits

+ Serves as a storage tank for solar and biomass energy
+ Energy is supplied only when required
+ Avoids unnecessary boiler start-ups and low-load operation - longer service life for the boiler and a higher solar coverage rate for your solar energy system

Optionally with fresh water module or DHW tank

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Diameter without insulation</th>
<th>Diameter with insulation</th>
<th>Total height</th>
<th>Upper heating coil</th>
<th>Lower heating coil</th>
<th>Weight</th>
<th>Tilted height</th>
<th>El. screw-in heating 6/4“ possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 l/PS/SPS</td>
<td>850 mm</td>
<td>850 mm</td>
<td>1700 mm</td>
<td>---</td>
<td>---</td>
<td>79/90 kg</td>
<td>1670 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>800 l/PS/SPS</td>
<td>790 mm</td>
<td>990 mm</td>
<td>2090 mm</td>
<td>---</td>
<td>---</td>
<td>114/132 kg</td>
<td>2090 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>1000 l/PS/SPS</td>
<td>790 mm</td>
<td>990 mm</td>
<td>2200 mm</td>
<td>---</td>
<td>---</td>
<td>146/162 kg</td>
<td>2170 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>1250 l/PS/SPS</td>
<td>950 mm</td>
<td>1200 mm</td>
<td>2060 mm</td>
<td>---</td>
<td>---</td>
<td>163/182 kg</td>
<td>2210 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>1500 l/PS/SPS</td>
<td>1000 mm</td>
<td>1340 mm</td>
<td>2440 mm</td>
<td>---</td>
<td>---</td>
<td>225/250 kg</td>
<td>2450 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>2000 l/PS</td>
<td>1100 mm</td>
<td>1490 mm</td>
<td>2720 mm</td>
<td>---</td>
<td>---</td>
<td>280/301 kg</td>
<td>2705 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>3000 l/PS</td>
<td>1250 mm</td>
<td>1490 mm</td>
<td>2900 mm</td>
<td>---</td>
<td>---</td>
<td>431/452 kg</td>
<td>2910 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>4000 l/PS</td>
<td>1400 mm</td>
<td>1640 mm</td>
<td>2995 mm</td>
<td>---</td>
<td>---</td>
<td>501/521 kg</td>
<td>3010 mm</td>
<td>auf Anfrage</td>
</tr>
<tr>
<td>5000 l/PS</td>
<td>1600 mm</td>
<td>1840 mm</td>
<td>2995 mm</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
Solar stratified charging module

Solar stratified charging module – SLM 20-150 with or without fast charging mode: with high-efficiency pump

Your benefits

+ Optimum energy utilisation through stratified charging of the buffer storage tank
+ Minimum effort required for assembly
+ Delivered ready for connection

Legend:
1 Stainless steel plate heat exchanger
2 Solar circulation pump (high efficiency)
3 Puffer circulation pump (high efficiency)
4 Solar return
5 Solar flow
6 Puffer return
7 Buffer flow
8 Vent valve
9 Solar manometer + safety valve
10 Regulation (eco\textsuperscript{manager-touch} / independently)
11 3-way motorized diverter valve (Puffer return)
12 3-way motorized diverter valve (Buffer flow)
13 Rinsing and filling
14 Connection for ADG

For optimum charging of the buffer storage tank on two levels

From 20 m\textsuperscript{2} - 120 m\textsuperscript{2} collector area

Solar stratified charging module with fast charging mode

<table>
<thead>
<tr>
<th>Collector area m\textsuperscript{2}</th>
<th>SLM / SLME 20</th>
<th>SLM / SLME 40</th>
<th>SLM / SLME 60</th>
<th>SLM / SLME 80</th>
<th>SLM / SLME 100</th>
<th>SLM / SLME 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power kW</td>
<td>up to 20</td>
<td>up to 40</td>
<td>up to 60</td>
<td>up to 80</td>
<td>up to 100</td>
<td>up to 120</td>
</tr>
<tr>
<td>Pump Solar circuit</td>
<td>Yonos-Para 15/7,5</td>
<td>Yonos-Para 15/7,5</td>
<td>Stratos-Para 15/1-9</td>
<td>Stratos-Para 15/1-9</td>
<td>Stratos-Para 25/1-11</td>
<td>Stratos-Para 25/1-11</td>
</tr>
<tr>
<td>Pump heating circuit</td>
<td>Yonos-Para 15/7,5</td>
<td>Yonos-Para 15/7,5</td>
<td>Stratos-Para 15/1-9</td>
<td>Stratos-Para 15/1-9</td>
<td>Stratos-Para 25/1-11</td>
<td>Stratos-Para 25/1-11</td>
</tr>
<tr>
<td>Connections Solar circuit</td>
<td>3/4&quot; ÜWM</td>
<td>3/4&quot; ÜWM</td>
<td>1&quot; ÜWM</td>
<td>1&quot; ÜWM</td>
<td>1&quot; ÜWM</td>
<td>1&quot; ÜWM</td>
</tr>
<tr>
<td>Connections heating circuit</td>
<td>1&quot; IG</td>
<td>1&quot; IG</td>
<td>1&quot; IG</td>
<td>1&quot; IG</td>
<td>1&quot; IG</td>
<td>1&quot; IG</td>
</tr>
<tr>
<td>Gewicht (kg)</td>
<td>ca. 24</td>
<td>ca. 26</td>
<td>ca. 30</td>
<td>ca. 33</td>
<td>ca. 38</td>
<td>ca. 44</td>
</tr>
</tbody>
</table>
A freshwater module heats drinking water in accordance with the instant hot water principle, only when it’s needed. In contrast to a tradition hot water tank or boiler, water – which we need to live – is not used to store energy, and stored as hot water for hours or days at a time. Only when hot water is needed is it heated to the desired temperature with the aid of a stainless steel plate heat exchanger. Stockpiling over the course of days is now a thing of the past. The energy for heating drinking water is supplied by a buffer tank, which can be heated by the different systems – by solar power systems as well as by a pellet boiler, wood-fired boiler, traditional oil/gas boiler, heat pumps or other systems. High-efficiency pumps ensure the right volume flow from the buffer to the stainless steel plate heat exchanger.

When legionella fall on fertile ground

Accumulation of legionella (L. pneumophila) magnified with the aid of the electron microscope (TEM). One bacterium is approximately 0.003 mm long.

Image: Hans R. Gelderblom, Rolf Reissbrodt / Robert Koch Institute

SOLARFOCUS offers an extensive range of fresh water modules. Detailed information can be found in the prospectus „Freshwater modules“!
Intelligent smart regulation

+ Intuitive control with 7" touch display
+ Considering the weather forecast
+ mySOLARFOCUS-App
Upgrade your heating

With the help of innovative control center eco\textsuperscript{manager-touch}, modernizing your heating system and combine all the rules for solar, Heating circuits, DHW and foreign boiler on a modern 7" Color-Touch-Display. The eco\textsuperscript{manager-touch} is very simple to use. It provides individual adjustment options and a perfectly tuned heating system.

Weather forecast function

The weather forecast function (weatherman) is in the control center eco\textsuperscript{manager-touch} integrated as standard. These top innovation brings users not only additional comfort, but also helps to save pure cash. This rule applies Live data of a Weatherserver and communicates with the boiler, when to heat – or when he can stay there, because sunshine is expected.

mySOLARFOCUS-App

Even more convenient, you can use your heating system with the App mySOLARFOCUS control. In combination with the weatherman rich few seconds, set your system via smartphone. It does not matter where you are just: In the office, on the couch or on vacation. For Smartphone (Android and Apple) with an attractive design for intuitive operation the main heating parameters. Ability to visualize the solar yield over with installed heat meters and control eco\textsuperscript{manager-touch}. 
The production – ENVIRONMENT – FUTURE

All our work is done by people for whom the environment and the use of renewable technology is a priority. All solar panels and biomass boilers are manufactured at SOLARFOCUS headquarters in St. Ulrich near Steyr.

THE PHILOSOPHY

Conscious sustainability
SOLARFOCUS is proud to shape the future in a way that serves people’s needs and at the same time preserves the environment.

Strong partners
Success requires strong partners. SOLARFOCUS passes on its extensive know-how directly to heating engineers and installers. This enables proper planning and optimal installation of the heating system is guaranteed.
INNOVATION – ECONOMY – QUALITY

SOLARFOCUS is shaping the future with products that serve people and help the environment! SOLARFOCUS is concerned with the development, construction and distribution of solar and environmental technology products, with a focus on:

- Biomass heating
- Solar systems
- Heat pumps and Fresh water technology

SOLARFOCUS is one step ahead: thanks to ongoing research, development and cooperation with renowned research institutes and partners, we have been able to show dynamic company development. Our products are only available from specialist dealers across Europe. Ongoing training and seminars with our partners ensure that plant operators receive project-oriented advice and professional plant installation.

AWARDS such as:

- Young Entrepreneur’s Award
- Golden „Pegasus“ Business Award
- Nominated for National Award for Innovation
- Voted Leading Upper Austrian Company for Brilliant Business Ideas
- Upper Austrian Environmental Protection Award
- „Haustechnik Award“ HVAC Award 2004
- „FORLENER“ Italian Innovation Award for energy-saving and eco-friendly technologies 2012
- Polish Innovation Award Zloty Medal” 2012 and 2013
- Slovenian Innovation Award 2014
- Best Business Award 2014
- UK Build It Award 2015

...and many more attest to our philosophy.
Innovative products, the burden on the environment and wallet.

Everything from one supplier

- Biomass heating
- Solar systems
- Heat pumps
- Fresh water tecnology

Products for

- Pellets
- Pellets + log wood
- Log wood
- Wood chips
- Solar energy
- Fresh water
- Heat Pump

Your specialised dealer

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