SolarSpring’s Membrane Distillation (MD) Module Test Facility is designed for scientific investigations and feasibility studies. The heart of the testing facility is a spiral wound Membrane Distillation Module. Channel configuration and heat recovery efficiency can be customized to fit your research goals and investigative applications.

### System Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customized module</td>
<td>Full flexibility in research applications</td>
</tr>
<tr>
<td>Fully automated</td>
<td>Independent set point testing</td>
</tr>
<tr>
<td>Stand alone unit</td>
<td>No costly infrastructure required</td>
</tr>
<tr>
<td>Safety design</td>
<td>Drained drip pan, chemical resistance</td>
</tr>
<tr>
<td>Ergonomic design</td>
<td>Complete workstation</td>
</tr>
</tbody>
</table>

The Module Testing Facility gives a full range of possibilities including:

- Module characterization testing; parametric studies, long term trials
- Variable channel configurations; Direct Contact MD, Air Gap MD, Liquid Gap MD,
- Feed water trials and feasibility studies
- Long term material durability testing
- Calculation model validation
- Industrial wastewater characterization
- Experimental integration into industrial applications
- Hybridization with other technologies e.g. FO, RO
Flat Sheet Test Facility

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed flow range</td>
<td>200-500 l/h</td>
</tr>
<tr>
<td>Condenser inlet temperature</td>
<td>10°*-40 °C</td>
</tr>
<tr>
<td>Evaporator inlet temperature</td>
<td>40°-80°C</td>
</tr>
<tr>
<td>Tank volumes</td>
<td>Feed 100 L, Product 30 L</td>
</tr>
<tr>
<td>PLC</td>
<td>Siemens S7, Touchpanel</td>
</tr>
<tr>
<td>Heating</td>
<td>On board</td>
</tr>
<tr>
<td>Cooling</td>
<td>Heat exchanger provided</td>
</tr>
<tr>
<td>Full data acquisition</td>
<td>USB connect, .csv format</td>
</tr>
<tr>
<td>Electric supply</td>
<td>400V, 3 phases</td>
</tr>
</tbody>
</table>

* Depending on ambient temperature