65 – 130 square foot commercial collectors for reduced installation costs

- High efficiency solar thermal panel with PVD coating, laser welded absorber, and serpentine heat transfer system
- Low heat loss, high insulation values
- Versatile on-roof or free standing installation
- Weather-resistant anthracite powder coated aluminum frame for a long service life
- 10-year limited warranty
- SRCC-OG100 Certified
Commercial Solar Thermal Systems

Lochinvar Corporation, with its world headquarters based in Lebanon, Tennessee and TiSUN headquartered in a region of the eastern Alps in Austria, develops, produces and distributes high-efficiency solar collectors, solar storage tanks, pump stations, controls, stratified tanks and solar accessories to withstand extreme climatic conditions, for the U.S. market. Innovative cutting-edge technology, superior quality and an outstanding distribution and service network have brought this remarkable partnership together with promises of huge growth in the commercial solar market.

Lochinvar/TiSUN aim to make the heat supply and backup heating independent from fixed energy resources. This commitment provides customers a great advantage for cost savings while utilizing this technology for the benefit of the planet.

Commercial Solar Flat Plate Collectors

The Commercial Solar Flat Plate Collector is suitable for on-roof and freestanding installations on pitched or flat roofs as well as on the ground. It is available as a single-piece large collector in sizes ranging from 65 to 130 square foot which offers considerable installation savings in commercial applications where multiple 30-square foot panels would traditionally be used.

The SCH panels are SRCC OG-100 certified and ready to be incorporated into your next energy saving project.

Solar Thermal Package

Lochinvar / TiSUN also offers a wide variety of light-duty commercial solar thermal collectors, storage tanks, controls and accessories that enable you to take advantage of a single source solar package.

Even better is our custom packaging capabilities which offers limitless options for systems to be skid mounted, piped, wired, factory packaged* and tested at our facility and delivered to yours ready to be set in place as a single unit. We take the guesses out of designing solar and provide you with piece of mind knowing that it was engineered and manufactured to your specification.

* System packaging excludes solar panels and substructures which are shipped loosed and field installed at the jobsite
**Outstanding Features**

**Design** - On-roof flat panel collector for crane installation

**Housing** - Anthracite powder-coated aluminium frame structure with aluminium sandwich rear panel

**Cover** - Prismatic solar safety glass, .16” thick, with maximum light transmission

**Insulation** - .80” heat-resistant special PU hard foam and 1.57” mineral wool insulating board, nominal bulk density 50 kg/m³, emission-free, non-flammable – A1 DIN 4102 Part 1, SPF (solar technology testing and research institute) approved

**Absorber** - Full-area absorber, laser-welded with high-selectivity PVD coating (PVD = Physical Vapor Deposition), serpentine flow

**Collector Sealing** - Aluminium section system with double temperature- and UV-resistant silicone seals, emission-free

**Connections** - 4 x .87” copper pipes, including cutting rings, support sleeve and union nut.

**Collector Angle** - 15°–70°

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**Under the Glass**

1. **Absorber**: Laser-welded full area absorber with high selectivity PVD coating and serpentine flow.

2. **Rear panel**: Aluminium sandwich rear panel.

3. **Insulation**: 1.57” mineral wool, emission-free, non-flammable insulation.

4. **Glass cover**: Prismatic solar safety glass, .16” thick with light transmission.

5. **Housing**: Anthracite powder-coated aluminium frame structure with structured aluminium rear panel.
### Commercial Solar Flat Plate Collectors Dimensions and Specifications

<table>
<thead>
<tr>
<th>SCH</th>
<th>SCH065</th>
<th>SCH090</th>
<th>SCH110</th>
<th>SCH130</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Glass Panels</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Gross Surface Area (sq. ft)</td>
<td>65.66</td>
<td>87.19</td>
<td>108.72</td>
<td>130.2</td>
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<tr>
<td>“A” Dimension</td>
<td>6’ 7”</td>
<td>6’ 7”</td>
<td>6’ 7”</td>
<td>6’ 7”</td>
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<tr>
<td>“B” Dimension</td>
<td>9’ 10”</td>
<td>13’ 2”</td>
<td>16’ 4”</td>
<td>19’ 7”</td>
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<tr>
<td>“C” Dimension</td>
<td>5.25”</td>
<td>5.25”</td>
<td>5.25”</td>
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<tr>
<td>Weight</td>
<td>309 lbs</td>
<td>411 lbs</td>
<td>513 lbs</td>
<td>614 lbs</td>
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<tr>
<td>Solar Transfer Volume</td>
<td>1.43 gallons</td>
<td>1.9 gallons</td>
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<td>2.86 gallons</td>
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<td>Max Operating Temperature</td>
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<tr>
<td>Max Operating Pressure</td>
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<td>Max Snow Load</td>
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<td>61.4 lb/ft²</td>
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<td>Wind Load Certification</td>
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### SCH Collector Substructure Kits

<table>
<thead>
<tr>
<th>Angle Brackets</th>
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<th>SCH130</th>
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</thead>
<tbody>
<tr>
<td>Parallel/0°</td>
<td></td>
<td></td>
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<tr>
<td>Bottom Hooks</td>
<td>(2) SSK20004</td>
<td>(2) SSK20004</td>
<td>(2) SSK20004</td>
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<tr>
<td>Side Brace</td>
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<tr>
<td>20°</td>
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<td>(4) SSK20005</td>
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<tr>
<td>40°</td>
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<td>(3) SSK20002</td>
<td>(3) SSK20002</td>
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<tr>
<td>60°</td>
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<td>(3) SSK20003</td>
<td>(3) SSK20003</td>
<td>(4) SSK20003</td>
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</tbody>
</table>

### Hydronic Connection Kits

For the connection and expansion compensation of large collectors with corrugated stainless steel pipe and cutting ring threaded connection including insulation, immersion tube and dummy plug.

- HYK20001
  - (2) 6’-6” Connections

- HYK20002
  - (1) 6’-6” Connections & (1) 13’ Connection

### Expansion Connection Sets

- HYK20003
  - Connection for panels piped one over the other in series

- HYK20004
  - Connection for adjacent panels piped in parallel

- HYK20005
  - Connection for adjacent panels piped in series

### Miscellaneous Options

- **GBK20003 - Gable Bracing Kit**
  - Additional bracing for collectors when installing at right angles to gable roofs. One bracing kit required per collector

- **Mechanical Connections**
  - MCK20001 - Side by side
  - MCK20002 - Stacked

- **Piping Cover**
  - MCK20003 - Side of collector