LightManufacturing H1 Heliostat

High-performance Heliostat with Wireless Remote Control

 Integral WiFi networking (IoT)
 85%+ reflective mirror
 Robust worm-gear mechanism
 IP66 stepper motors
 Shatterproof reflectors, field replaceable
 Mirror options: flat or parabolic focus.
 Mirror area 1.5 M2 / 1275 watts reflected power
 Integral microprocessor tracking system
 Low cost per reflected watt
 Ideal for heating & day-lighting uses
 Multiple units can be controlled as one array

LightManufacturing’s H1 Heliostat brings new performance and cost-efficiency to solar thermal and lighting applications.

The unit’s integral microprocessor tracks the sun accurately throughout the year. External software is used only for initial configuration and for target selection.

With WiFi network capability, the H1 joins your network for quick setup and target selection via web browser.

Multiple targets can be defined and stored, allowing the user to conveniently switch what they are heating / lighting.

Combine many H1s into powerful arrays to deliver unlimited heat / light for advanced applications.

Tracking accuracy is <.5 degree. Configuration and setup is simple, requiring only a vertical pole for mounting and basic local data such as true-South direction, date, time, latitude and longitude.

Solve your industrial or residential solar projects with ease - with the LightManufacturing H1 heliostat.
Available Options

• Vacuum–Focus Mirror - delivers 900+ watts to highly concentrated target. 10cm diameter spot at 20 meter distance.

• PV-panel support configuration (no mirror) - Sun Tracker.

• Solar Power System
  Provides photovoltaic panel and weather-proof power box (battery / charger) to operate up to 6 H1 heliostats.

Specifications

<table>
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<tr>
<th>Performance Specifications</th>
<th>Physical Specifications</th>
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<tbody>
<tr>
<td>Reflective Efficiency</td>
<td>Weight: 45 lb. 11.3 kg</td>
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<tr>
<td>Max wind load (any position)</td>
<td>Mounting Points: Self-Centering aluminum post mount fist 2 3/8&quot; (60mm) diameter poles.</td>
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<tr>
<td>Max wind load (safe position)</td>
<td>Reflector Types*: 48” square /1.5 M2 Flat 48” square /1.5 M2 Parabolic*</td>
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<tr>
<td>Wireless range</td>
<td>*Vacuum adjustable focal length</td>
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<tr>
<td>Angular Range:</td>
<td>Warranty / Support</td>
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<tr>
<td>Maximum delivered heat:</td>
<td>1 Year, Mechanical Defects</td>
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<td>Support: email/phone technical support, periodic software updates delivered via WiFi.</td>
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<table>
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<tr>
<th>General Specifications</th>
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<tr>
<td>Power Required:</td>
<td>11.5-14 V DC, 3A (peak current)</td>
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<td>Electronics:</td>
<td>Integrated circuit, housed in NEMA / IP66 enclosure, integral WiFi.</td>
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<td>Motion:</td>
<td>2x IP66 Stepper</td>
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NO SOFTWARE required - simple web browser control

On-Board microprocessor controller. Operates autonomously if desired.

Bronze/Stainless lead-screws, IP68 Enclosure

Weatherproof Stepper Motor (2x)
Mounts to standard fence post (2.375”/ 60mm Dia. not provided)
Requires: 12V DC 3A Power supply (not included)

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