

HelioPoint

Calibrate entire heliostat fields in just a few days

The Challenge

Conventional heliostat calibration methods no longer meet today's project demands.

They depend heavily on external conditions, are slow to execute, and difficult to scale.

Typical limitations:

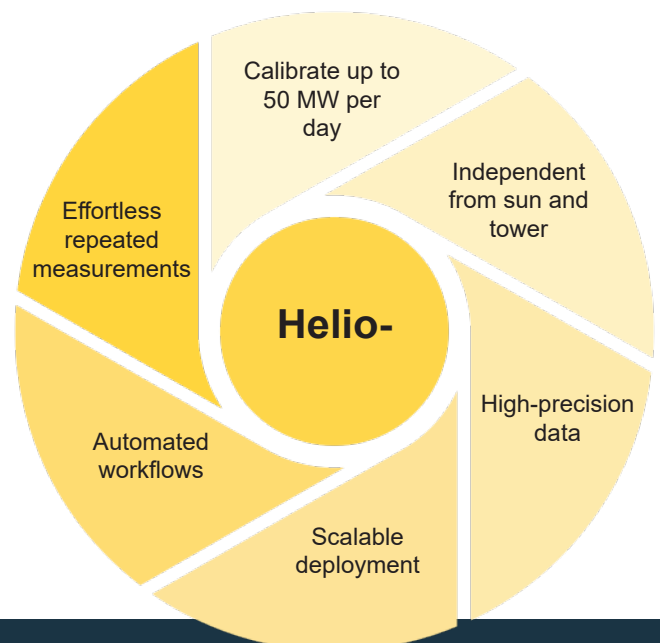
- Delayed commissioning leads to profit losses
- Tower and site availability
- Dependence on sun position and timing
- Sequential, time-consuming processes
- Limited scalability for large heliostat fields

HelioPoint is an **advanced calibration solution** for heliostat fields. It combines drone-based measurement with intelligent data processing. This delivers fast data acquisition and the precision required for reliable, high-quality calibration results.

Designed for fast commissioning and continuous optimization.

Key Benefits

HelioPoint adapts to different project phases and field conditions, providing an efficient way to **calibrate heliostat fields of any size**. Once set up, recurring calibrations are executed with minimal effort, supporting continuous performance improvements.



Accelerate commissioning. Unlock multi-million-dollar impact!

HelioPoint transforms heliostat calibration into a fast, repeatable, and scalable process. It enables rapid data acquisition and delivers results within hours. Up to 50 MW can be measured in a single day. This reduces calibration time from months to days — with direct impact on project timelines:

- **Faster commissioning, earlier production ramp-up**
- **Shorter performance guarantee periods**
- **Reduced O&M staffing during commissioning phase**
- **Lower costs for guarantees and financial securities**
- **Significantly less capital tied up during project execution**



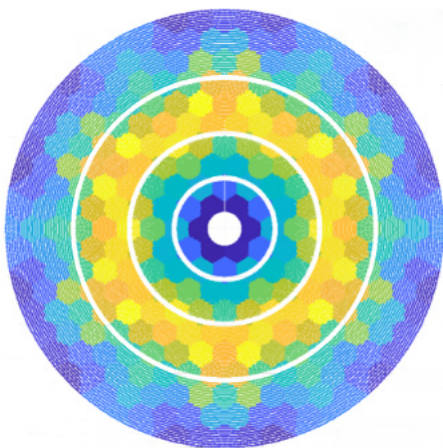
Setup

High performance with a simple setup:

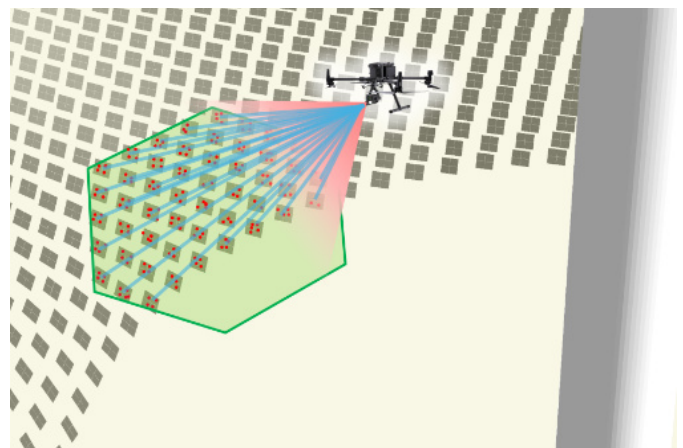
- Drone equipped with high-resolution camera
- Integrated high-power LED system
- Parallel calibration of large groups of heliostats
- Independence from tower infrastructure and sun conditions.

HelioPoint can be deployed for:

- Initial full-field calibration
- Partial-field optimization
- Recurring calibration in O&M programs
- Calibration after incidents (e.g. storms)



Segmentation into calibration groups



Example of data acquisition for one heliostat group

Supported by:



on the basis of a decision
by the German Bundestag



www.cspservices.de
info@cspservices.de



Cologne

CSP Services GmbH
Friedrich-Ebert-Ufer 30
51143 Cologne, Germany

Phone +49 2203 959 0030

Almería

CSP Services España, S.L.
Paseo de Almería, 73
04001 Almería, Spain

Phone +34 950 85 25 63