

# Pyranometer and pyr heliometer calibration

## - all major brands, affordable -

Hukseflux' worldwide calibration services at your disposal

*Hukseflux is a leading manufacturer of solar radiation sensors. Our worldwide calibration and servicing organisation is at your disposal; not only for pyranometers of the Hukseflux brand. Hukseflux can work more efficiently if you supply us your sensors in batches of 3 or more instruments. Benefit from our quantity discounts!*

### Introduction

Hukseflux' main area of expertise is measurement of heat transfer and thermal quantities. We are a leading manufacturer, both in technology and market share, of solar radiation sensors. Did you know that Hukseflux offers calibration services for pyranometers and pyr heliometers as well?



**Figure 1** a typical calibration system at Hukseflux

### Services: what we do

- perform accurate calibration of solar radiation sensors
- work according to established standards
- calibrate multiple brands

### Why work with us

- well established and traceable calibration methods
- fast turnaround times
- calibration references for the most common brands and models

- Hukseflux has calibration facilities in the main global economies: USA, EU, China, India, Japan and Brazil



**Figure 2** pyranometer and pyr heliometer users are supported by the worldwide Hukseflux calibration and servicing organisation

### Restrictions

See next page for calibration capabilities and restrictions. In case other-than-Hukseflux brand sensors need extensive servicing or repair, we recommend obtaining this service from the manufacturer.



**Figure 3** accurate calibration of all major brands

This page provides a brief overview of our solar sensor calibration services. Please contact us for more details.

## Sensor calibration service capabilities

**Table 1** Hukseflux' most popular calibration services

<b>HUKSEFLUX' MOST COMMON CALIBRATION SERVICES</b>			
<b>calibration item</b>	<b>brand and model</b>	<b>calibration method</b>	<b>comment</b>
Pyranometers and pyrhemometers	Hukseflux LP, SR, DR series	ISO 9847:1992 Solar energy - Calibration of field pyranometers by comparison to a reference pyranometer	Hukseflux has limited repair possibilities for other-than-Hukseflux brand sensors.
	Kipp & Zonen CMP, SMP, CHP, SHP series	ISO 9847 is also applied to pyrhemometers ASTM G207 - 11 Standard Test Method for Indoor Transfer of Calibration from Reference to Field Pyranometers	
amplifiers	Hukseflux –TR amplifiers	Calibration and re-programming.	Calibration traceable to traceable voltage and current standards
	Kipp & Zonen AMPBOX series		

## Checklist / requirements for recalibration of sensors

**Table 2** Checklist for calibration services

<b>HUKSEFLUX CALIBRATION SERVICES</b>		
<b>subject</b>	<b>responsible party</b>	<b>responsibility</b>
RMA form	customer	Products and calibration items may only be returned or sent for calibration to Hukseflux after obtaining a Return Materials Authorisation and the accompanying RMA number. To obtain such authorisation, please request and complete the RMA form and e-mail it to <a href="mailto:info@hukseflux.com">info@hukseflux.com</a> . A completed RMA form contains the sensor model(s), quantity and serial number(s), the sensor condition, in particular if additional servicing is needed or not
prices / quantity discounts	customer and Hukseflux	Increase efficiency; ask for our quantity discounts for batches of 3 or more pyranometers in one order. Please note that your shipment costs per instrument also benefit from batch processing
additional information	customer	In case of other-than-Hukseflux brand sensors only: transmit the brand name and a scanned copy of the original calibration certificates
	customer	Only if different-than-usual calibration reference condition are required: specify required calibration reference conditions
logistics; supply	customer	Specify shipment responsibility. Usually the customer will be responsible for shipment both ways
quotation, RMA authorisation, RMA number	Hukseflux	The quotation will include an RMA number. Possibly, in case of unclear condition of the sensor, the quotation includes a diagnostics fee. This fee must also be paid in case the sensor is irreparable. In case sensors are not clean, a cleaning fee may be charged per sensor
order	customer	Include RMA number
calibration	Hukseflux	For common models, of heat flux sensors, pyrhemometers and pyranometers, the calibration has a processing time of 15 working days. This can be shortened upon request
logistics: pickup	customer	Please follow Hukseflux shipment directions

### About Hukseflux

Hukseflux Thermal Sensors offers measurement solutions for the most challenging applications. We design and supply sensors as well as test & measuring systems, and offer related services such as engineering and consultancy. With our laboratory facilities, we provide testing

services including material characterisation and calibration. Hukseflux is ISO 9001:2015 certified.

Would you like more information?  
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