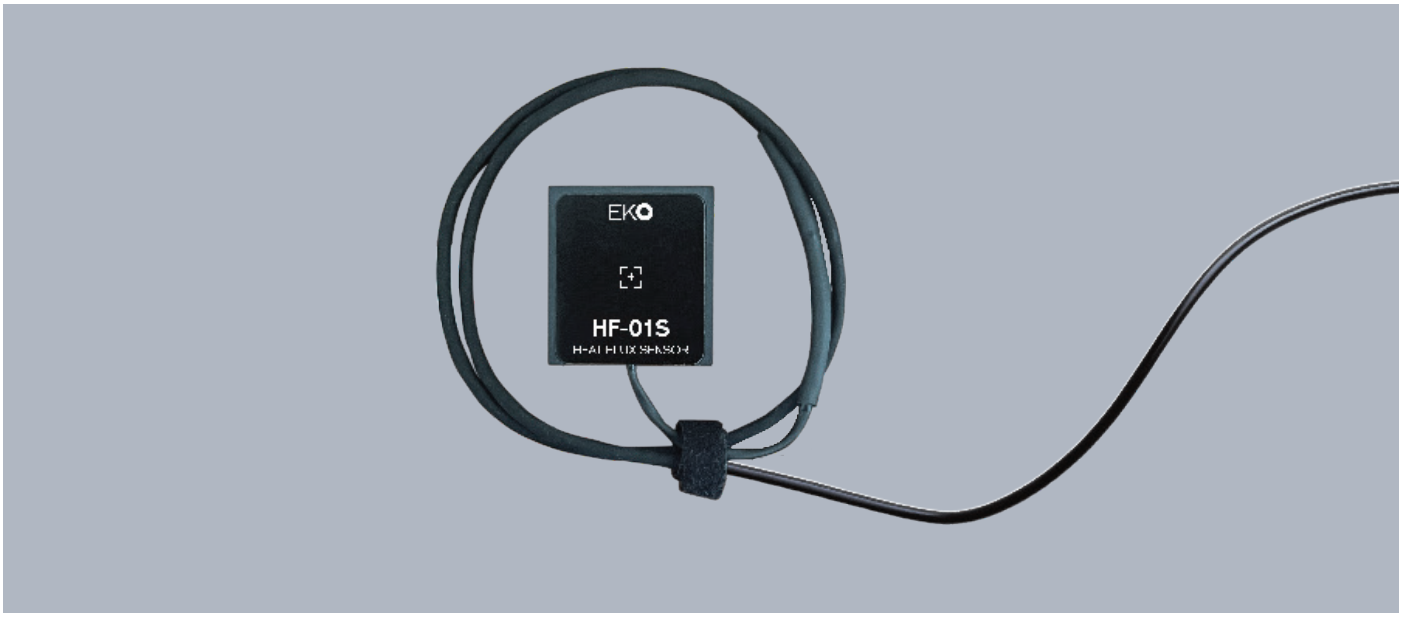
THERMAL ANALYSIS INSTRUMENTS | SPECIFICATION SHEET

HF-01S

Standard Heat Flux Sensor



Overview

The HF-01S is a small size standard plate type heat flux sensor. It is an ideal option for research and engineering applications as well as manufacturing control and monitoring processes. Manufactured in compliance with standards ASTM C1046 and ISO 9869, EKO HF-01S includes a built-in thermal guard and two facings to ensure an even heat flux distribution and therefore a reliable measurement experience. The unique combination of small size, thin body, and high sensitivity, makes this sensor a perfect choice for accurate measurement of heat flux, even in low heat flux conditions. Thanks to the thin body and high thermal conductivity, the thermal resistance is kept very low to minimize the heat flux disturbance on the surface and avoid edge losses.

Features

- High sensitivity
- Fast response
- Thin, small, compact form factor
- Water proof (IP67)
- Durable & versatile
- Suitable for a range of application

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Made in Japan for over 90 years, EKO solar energy sensors and environmental instruments are built on a legacy of innovation, an uncompromising commitment to quality, and industry-leading accuracy. With a range of products and services to suit every project or application requirement, explore EKO now, or get in touch to find out how EKO Instruments can help you.

- Transducers MC-20
- LI-19 HH Datalogger
- Thermal Conductivity Testers
- Thermal Analysis Instruments
- Heat Flux Sensors

Sensor Specifications

Nominal Sensitivity	55 µV/W/m²
Time Constant (63%)	< 2 sec
Thermal Resistance	2.3 x10^{-3} m² K/W
Electric Impedance	8 Ω – 12 Ω (+10°C – +40°C)
Operating Temperature Range	-30 to 100°C, cable -20°C to +60 °C
Heat Flux Range	±10000 W/m²
Temperature Dependancy	0.2 %/°C
Dimensions (L x W x H)	25 x 24 x 2.0 mm
Sensing Area	500 mm²
Guard Width	5x thickness of the sensor
Calibration Uncertainty	±3 % (K=2)
Ingress Protection	IP67
Cable Dimensions	3m (Diameter: 2.1 mm)

Application

Use HF-01S to measure the heat flux from or towards a surface of interest. This helps you evaluate the insulation performance of for instance, a wall. Install the sensor on building walls, refrigeration units, insulated enclosures, and any surface where the heat transfer rate is to be determined. Installation is straightforward, but must be done correctly to ensure accurate and reliable data. Follow the Quick Start Guide and the Demonstration video to install and measure.

Check out EKO QHT-10 Thermal monitoring Kit used to monitor heat flux and temperature, equipped with a battery-powered datalogger. Experience a plug & play measurement experience.





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Use the QR code to visit our website, contact our team, or to find out more about the **HF-01S**, other related products, and the full range of industry- leading EKO sensors and instruments.

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