



HF-10S Heat flux sensor

Technical Specifications

Thin heatflux sensor

Low thermal resistance

Small size

Weather proof

Calibration complies with JIS A 1412

The HF-10S measures heat flux through an object it is mounted to, in W/m². The HF-10S features a very thin design and has a low thermal resistance. Heat flux sensors can be used in a variety of research applications and manufacturing control processes. EKO has various types of thin substrate heat flux sensors in the product line-up.

A heat flux sensor is a thermopile sensor which generates an electric signal proportional to the temperature difference (ΔT) across the thermocouple hot and cold junctions. To generate a measurable voltage, heat flux sensors have multiple thermocouples spread over the total area connected in series. EKO heat flux sensors are available in different sizes and thickness.

	HF-10S
Response time 95%	25 Sec.
Sensitivity	Approx. 12 $\mu\text{V}/\text{W}/\text{m}^2$
Thermal resistance	Approx. 0.0016 $^{\circ}\text{C}/(\text{W}/\text{m}^2)$
Impedance	90 - 180 Ω
Operating temperature range	-30 - 120 $^{\circ}\text{C}$
Cable length	10 m
Dimensions mm	100 (L) x 100 (W) x 0.5 (H)
Weight	0.04 kg
Ingress protection IP	-
Substrate	Glass epoxy
Cladding	Epoxy

Options	HF-10S
Cable length	Without cable m

Specifications are subject to change without further notice.