



## 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/m<sup>2</sup>. 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 ( $\Delta T$ ) 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.

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

<b>Options</b>	<b>HF-10S</b>
<b>Cable length</b>	Without cable m

Specifications are subject to change without further notice.