



## MF-180 Heat flux sensor

### Technical Specifications

Thin heatflux sensor

High sensitivity

Small size

Calibration complies with JIS A 1412

The MF-180 is a thin, sensitive, heat flux sensor. Small and easy to handle, the MF-180 is easy to attach to and detach from a range of surfaces. It can measure medium to low heat flux values, and is suitable for a range of applications; with a measurement range from -30 °C to 120 °C.

A heat flux sensor is a thermopile, an electronic device that translates thermal energy into electrical voltage proportional to the temperature gradient across its thermocouples' hot and cold junctions. To generate a high enough measurable voltage, heat flux sensors are equipped with multiple thermocouple junctions connected in series, distributed over the area of the sensor.

EKO Instruments offers a selection of thin substrate heat-flux sensors, in a range of different sizes and thicknesses; an ideal option for research and engineering applications as well as manufacturing control and monitoring processes.

	<b>MF-180</b>
<b>Response time 95%</b>	25 Sec.
<b>Sensitivity</b>	Approx. 28 $\mu\text{V}/\text{W}/\text{m}^2$
<b>Thermal resistance</b>	Approx. 0.01 $^{\circ}\text{C}/(\text{W}/\text{m}^2)$
<b>Impedance</b>	150 - 550 $\Omega$
<b>Operating temperature range</b>	-30 - 120 $^{\circ}\text{C}$
<b>Cable length</b>	10 m
<b>Dimensions mm</b>	40 (L) x 20 (W) x 0.9 (H)
<b>Weight</b>	0.0011 kg
<b>Ingress protection IP</b>	-
<b>Substrate</b>	Teflon
<b>Cladding</b>	Polyester
<b>Cable length</b>	10 m

<b>Options</b>	<b>MF-180</b>
<b>Cable length</b>	20 or 30 m

Specifications are subject to change without further notice.