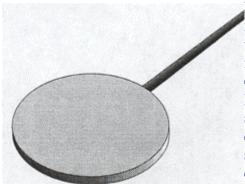
The HFP01 heat flux plate offers a solution for measuring heat fluxes. It is especially designed for use inside walls and inside the soil.



HFP01 is a conventional heat flux plate. It serves to measure the heat that flows through the object in which it is incorporated. The actual sensor in HFP01 is a thermopile. This thermopile measures the differential temperature across the plastic body of HFP01. Working completely passive, it generates a small output voltage that is proportional to this differential temperature. Assuming that the heat flux is steady, that the thermal conductivity of the body is constant

DIMENSIONS IN MM

cable 5m

sensitive area

and that the sensor has negligible influence on the

top

guard

thermal flow pattern, the signal of HFP01 is proportional to the local heat flux.

Using HFP01 is easy.

For readout of one only needs an accurate voltmeter that works in the millivolt range. To

convert the measured voltage to a heat flux, the voltage must be divided by the calibration constant; an individual constant that is supplied with each instrument.

HFP01 is a weatherproof sensor.

SUGGESTED USE

Estimation of evapotransmission or Bowen Ratio in meteorology.

Estimation of U-Value's in building physics.

HFP01 FEATURES

- @ Easy handling
- @ Humidity proof connection to 5 metres of cable
- @ Specially adapted high thermal conductivity for use in soil and in walls



SPECIFICATIONS

Sensitivity 50 uV / W m⁻²

Resistance (nominal) 2 ohms

Temperature range $-30 \text{ to } +70^{\circ}\text{ C}$

Response time $\pm 4 \text{ min (equals soil)}$ Range $\pm 2000 \text{ to -}2000 \text{ W. m-}2$

Temperature <0.1% / °C

dependence

ORDERING INFORMATION

HFP01 Heat Flux Plate