

**HF03 / LI 19**  
PORTABLE HEAT FLUX SENSOR, WITH  
READ-OUT UNIT

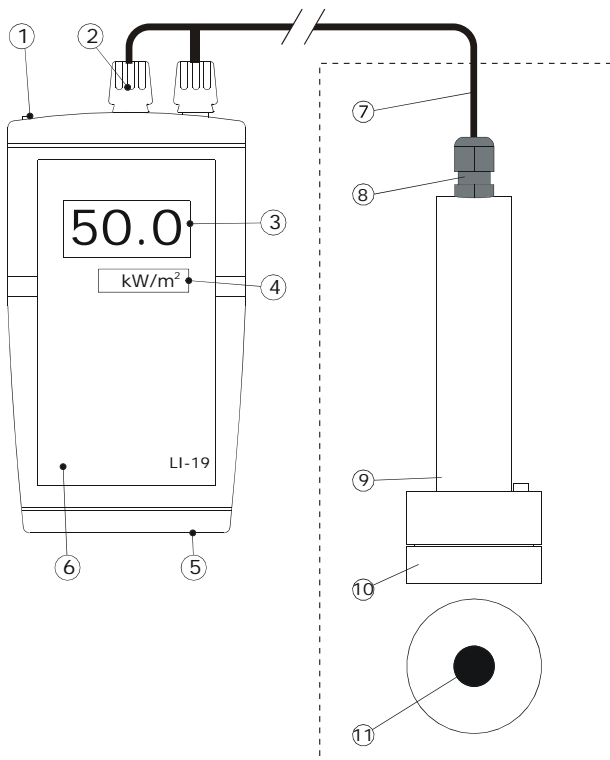


Figure 1 LI19 connected to HF03. Heat flux sensor surface (11), metal heat sink (10), plastic grip (9), polyurethane cable (7).

**Operation:**

- 1 switch on LI19, connect HF03
- 2 connect LI19 to PC, using USB connection box and LI19 software
- 3 check sensor settings
- 4 disconnect from PC
- 5 optional: mark settings on LI19
- 6 remove HF03 cap
- 7 start measurement
- 8 switch off LI19

**Delivery:**

HF03 / LI19 / 2 spare batteries / Transport casing / USB connection box / cap HF03. NOTE: the latest software should be downloaded from <http://www.leiderdorpinstrument.nl>

The HF03 is a heat flux sensor that can be used in mobile applications. It is combined with LI19, a high accuracy hand-held read-out unit that can be used both for mobile measurements and as an amplifier directly connected to a PC. The combination HF03 / LI19 is typically used to study heat flux levels around flares and fires, and to calibrate flare radiation monitors / flare heat flux sensors.

The HF03 is a heat flux sensor of the type that is commonly used in fire testing. The HF03 housing and sensor are designed to be suitable for short (10 minute) observation of high flux environments (up to 10 kW/m<sup>2</sup>)

LI19 is used to display the measured flux level; for attaining that, the sensitivity of HF03 is entered into the LI19, by programming it using a PC. USB connection is part of the delivery. Software should be downloaded (this is to ensure that the latest version is applied). The LI19 is battery powered, using 2 AA-type batteries. These are included in the delivery. Batteries allow 50 days of operation.

HF03 / LI19 is not rated for EEx environments, nevertheless it is admitted in many cases, because the instrument operates on 3VDC only.

**HF03 / LI19 SPECIFICATIONS**

Heat flux range (HF03 only):	up to 10 kW/m <sup>2</sup>
Exposure time:	10 minutes (max)
Calibration traceability:	NIST
Cable length:	3 m
Display functions:	actual values
A/D resolution:	1 or 10 μV
A/D sample rate:	1/second
power supply:	2 AA type batteries
Transport casing	Supplied with the instrument