

**LI18**  
**HAND-HELD READ-OUT UNIT**

The LI18 is a high accuracy hand-held read-out unit that can be used with a variety of sensors. LI18's most common application is with heat flux- and solar radiation sensors. It can be used both for mobile measurements and as an amplifier directly connected to a PC. The LI18 has an RS-232 interface and software for readout via PC.

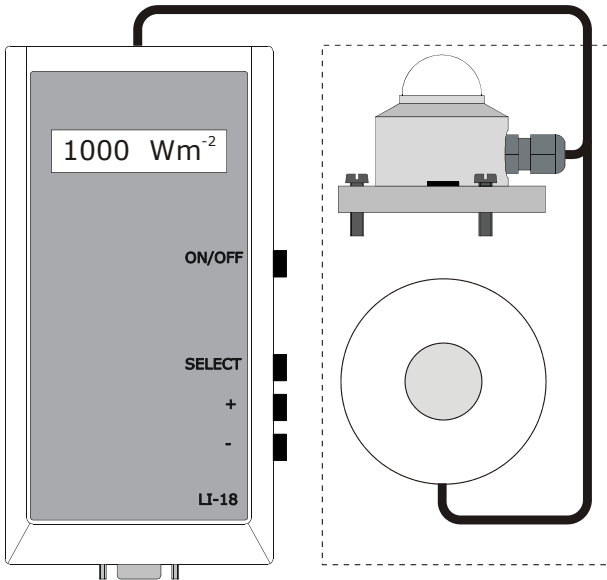


Figure 1 LI18 connected to a solar radiation sensor or a heat flux plate. (sensors are not part of the delivery). Other sensors can be connected as well; please consult Hukseflux. The 9-pin RS232 connection is located on the bottom.

Using the buttons and software menu on the LI18, the sensor type and the calibration factor of that sensor are entered. The reading on the display now shows a calibrated value with the correct engineering units. LI18 can be used to make mobile measurements, and also as an accurate microvolt amplifier for use with a PC. The LI18 is battery powered but also has a connection for a mains adapter that is typically used in indoor applications. An adapter (100-230 VAC - 50/60 Hz) is included in the delivery. The LI18 not only measures but also integrates the input signal. The daily totals of the integrated value are stored. Up to 31 days can be stored. The totals can be read from the display. Delivered includes PC software. The software has the following functions:

- display real-time values
- make a graph with selectable sample interval
- store data with selectable sample interval
- read-out and store integrated totals (24 hr totals or from one manual reset to the next)

**SUGGESTED USE**

- Meteorology, building physics.

**LI18 SPECIFICATIONS**

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|---------------------------|--|
| Display functions:        | actual or integrated values<br>set sensor type<br>set calibration factor<br>set internal clock<br>read-out stored totals<br>set integration method |
| A/D resolution:           | 1:10.000   |
| A/D sample rate:          | 10/second  |
| linearity error:          | 1 LSB max.   |
| offset :                  | 5 $\mu$ V over -20...+40°C   |
| temperature coefficient : | < 0.01%/°C   |
| power supply:             | standard 9V battery (PP3) or mains adapter 100-230 VAC   |