

Floor surface and air temperature sensor (Pt100 output)



- ▶ Double sensor for measuring the temperature in contact with the floor and the air temperature at 10 cm from the floor
- ▶ Used for the calculation of localized discomfort indices according to ISO7730: Dissatisfied by floor temperature and % dissatisfied by temperature differences. LSI LASTEM's data loggers can directly calculate such indexes
- ▶ Ideal for portable applications, it does not require special precautions to fix the sensor to the floor
- ▶ Pt100 sensors with 0.15°C accuracy
- ▶ Connection to M-Log (ELO009) data logger
- ▶ In-house calibration laboratory ISO17025 accredited

Sensor for measuring the floor surface temperature and air temperature at 10 cm from the floor. The sensor is mounted inside a bayonet system, for which it is easily resting on the floor without special fixing systems. This sensor finds application in the testing of heated floors and evaluation of localized comfort (according to the ISO7730 standard), given by the temperature of the floor and the temperature gradient, both these indices are calculated directly by the M-Log (ELO009) data logger, when combined with another air temperature sensor (type EST033), mounted at a height of 1.1 m.

Technical Specifications

PN	EST130	
Temperature	Principle	N.2 Pt100 1/2 DIN A
	Measuring range	-50...70°C (M/E-Log)
	Accuracy	0.15 °C (0 °C)
	Output	2xPt100 DIN-IEC 751 table (EN 60751)
	Resolution	0.01 °C
	Response time (T90)	3.5 min floor surface temperature 6 min air temperature
General Information	Protection grade	IP54
	Power consumption	None
	Operative temperature	-40...80 °C
	Cable	L=2 m
	Connector	Double Min-DIN connector addressed to M-Log
	E/M-Log derived quantities obtained	<ul style="list-style-type: none"> • % of people dissatisfied by floor temperature • vertical air (*) temperature differences (ISO7730) * required additional air temperature sensor at H.1,1 m

Accessories

	SVICA0003	ISO9001 type calibration certificate (Surface temperature)
	SVICA0003	ISO9001 type calibration certificate (Air temperature)



▶ All sensors manufactured are tested inside our laboratory. LSI LASTEM provides Test report for any sensor supplied and on request ISO9001 calibration certificates (see Accessories list).



▶ With regard to thermal comfort in the European standard EN ISO 7730, dissatisfaction may be the result of too high vertical temperature gradient, and uncomfortable floor temperatures.