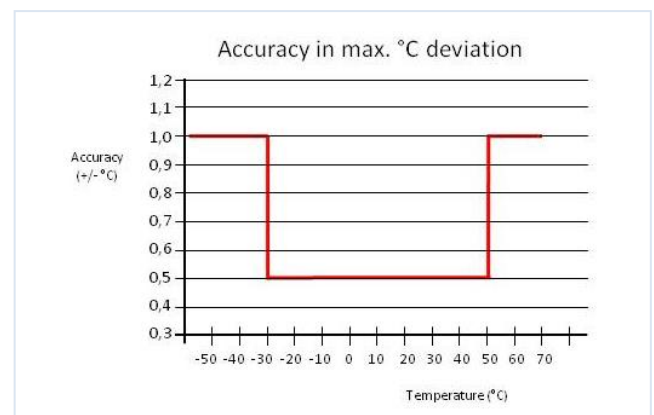# MOBEYE
Temperature sensor

Mobeye AC-TS-E1 & AC-TS-E2

The Mobeye temperature sensors AC-TS-E1 and AC-TS-E2 are highly accurate digital sensors that can be used in combination with all Mobeye temperature products. The optimal performance is in the range between -30°C and +50°C which makes it extremely suitable for temperature measurement in building automation, medical and pharma technologies, food, industrial and mobile applications.

Mobeye AC-TS-E-series

Temperature range	-50 ··· +150 °C
Threshold values in Mobeye products	-35 ··· +70 °C

Accuracy
  T1: -30 ℃ to 50 ℃
  T2: < -30 ℃ and >50 ℃
	max. -0,5 °C deviation
	max. 1 °C deviation

Dimensions sensor header	Ø 6 mm, length 45 mm
Cable length	AC-TS-EC1: 1 meter AC-TS-EC2: 10 meter
Diameter cable	4,5 mm
Extension cables (e.g. AC-EC1, AC-EC2, AC-EC3)	Max. 30 meter, Ø≥0,25 mm^2 Jack plug 3,5 mm^2

Accuracy in max. °C deviation

Digital sensors versus RTD sensors

For accuracy reasons and ease of use, Mobeye chooses digital temperature sensors. Alternatives, such as the (RTD) resistance sensors PT100 and PT1000, require regular calibration. The Mobeye digital temperature sensors have been tested and calibrated at the factory with absolute measuring accuracy and remain stable.

The digital sensor element has, in addition to an accurate ADC, an on-chip DSP core with memory for the calibration value. Digital values go from the sensor head to the Mobeye base unit, so there is no influence due to cable resistance.

* For applications where deviation within specifications must be known and/or exact calibration is required, Mobeye can supply uniquely labelled sensors with a 36-month quality declaration, based on a two-point or four-point calibration.

About Mobeye

Mobeye is a Dutch company with local development and production. With sensors and low-power telemetry, Mobeye offers products in the field of measuring, logging, alarming and controlling. In close consultation with customers in various sectors, the products have been optimized for optimal use.

Product image may differ from reality