ALLNET ALL3018

Combined sensor of temperature and humidity for ALL3000 / 3418v2 / 3500 / 3500PoE / 3505 / 3692 / 4001 / 4076 / 4500 / 5000

- Combined sensor of temperature and humidity
- Measuring range -40...+80°C
- Calibration of the sensor element according to Iso/IEC 17025
- 1m cable length

Control, measure, and regulate automatically and independently

ALLNET for years been pursuing the concept of intelligent control of processes in building over network and Internet. Intelligent building not only offers more comfort, but actively promotes the reduction of energy costs.

Centrally managed and via network / internet accessible the ALLNET home automation products allows intelligent building automation regardless of time and location.

The ALL3018 combined sensor has a measuring range of -40...+80 °C and 0...100 % RH

Article: 27359

Note: Product specification is subject to change without notice.

Combined sensor of temperature and humidity

- Measuring range -40 bis +80 °C (resolution 0,01 °C) / 0...100 % RH (resolution 0,5%)
- 1m cable length

Sensor Performance

Relative Humidity

Parameter	Condition	min	typ	max	Units
Resolution[1]		0.4	0.05	0.05	%RH
		8	12	12	bit
Accuracy[2] SHT71	typ		±3.0		%RH
	max		see Figure 2		
Accuracy[2] SHT75	typ		±1.8		%RH
	max		see Figure 2		
Repeatability			±0.1		%RH
Hysteresis			±1		%RH
Nonlinearity	raw data		±3		%RH
	linearized		<<1		%RH
Response time[3]	tau 63%		8		s
Operating Range		0		100	%RH
Long term drift[4]	normal		< 0.5		%RH/yr

Temperature

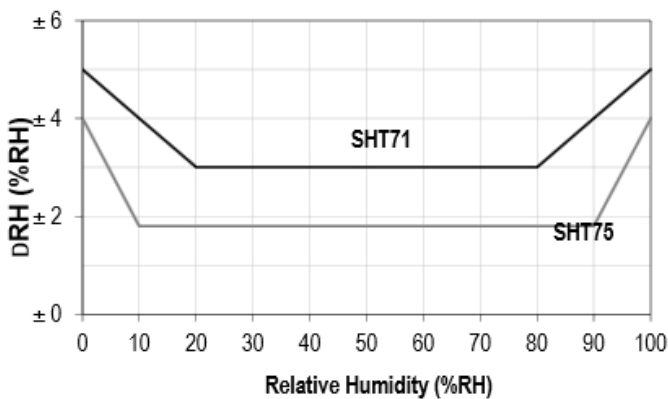| Parameter	Condition	min	typ	max	Units
Resolution[1]		0.04	0.01	0.01	°C
		12	14	14	bit
Accuracy[2] SHT71	typ		±0.4		°C
	max		see Figure 3		
Accuracy[2] SHT75	typ		±0.3		°C
	max		see Figure 3		
Repeatability			±0.1		°C
Operating Range		-40		123.8	°C
		-40		254.9	°F
Response Time[6]	tau 63%	5		30	s
Long term drift			< 0.04		°C/yr

Figure 2: Maximal RH-tolerance at 25°C per sensor type.
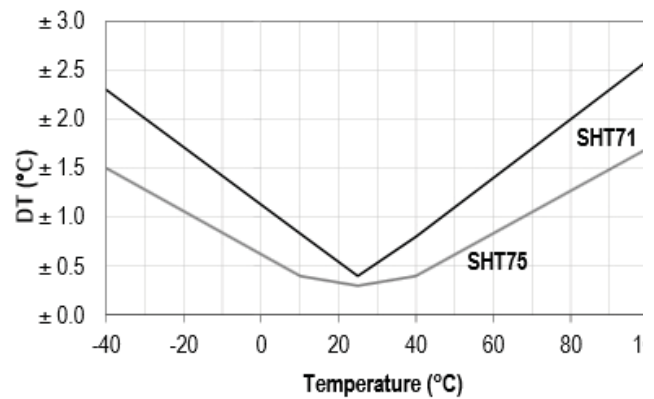
Figure 3: Maximal T-tolerance per sensor type.

Calibration Certification

Product: SHT1x / SHT2x / SHT3x / SHT7x Series

Description: Digital Humidity and Temperature Sensors

The above mentioned products are calibrated to meet the specifications according to the corresponding Sensirion data sheet. Each device is individually tested after its calibration.

Sensirion uses transfer standards for the calibration. These transfer standards are themselves subject to a scheduled calibration procedure. The calibration of the reference itself used for the calibration of the transfer standards is performed by an ISO/IEC 17025 accredited laboratory.

The accreditation body is full member of the International Laboratory Accreditation Cooperation (www.ilac.org). Calibration certificates issued by facilities accredited by a signatory to the ILAC Mutual Recognition Arrangement (MRA) are accepted by all signatories to the ILAC MRA.

This provides traceability of measurement to recognized national standards and to units of measurement realized at the "National Physical Laboratory" (NPL) or other recognized national standards laboratories like "Physikalisch-Technische Bundesanstalt" (PTB) or "National Institute of Standards and Technology" (NIST).

Staefa, Dezember 2014

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