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Please visit our website for pricing and availability at www.hestore.hu.

SLHT5

SONBEST®

http:// sonbest.com

Soil temperature and humidity sensor



Product Overview

SLHT5（including SLHT5-1、SLHT5-2、SLHT5-3、SLHT5-4、SLHT5-5） is special sensor of soil temperature and humidity sensor series。The sensing element and the sensor signal processing integrated up, output full calibration of the digital signal。Sensor using patent technology of CMOSens® (http://www.CMOSens.cn/) to ensure that products with high reliability and excellent long term stability。It includes a capacitive moisture sensitive components, it has been revealed polymerization with energy gap material made of temperature measuring element, and in the same chip, and 14 A/D converter and serial interface circuit to realize seamless connection 。So The product has excellent quality, super fast response, strong anti-jamming ability, high performance-to-price ratio etc。Each sensor chip are extremely accurate humidity chamber of calibration, the calibration coefficient to program stored in the form of OTP memory, using in the process of calibration。Sensor in the test signal processing process to call these calibration coefficient。

Two wire serial interface and internal voltage regulation, make the peripheral system integration becomes rapid and simple。Tiny body active low power consumption, make sensor become the first choice of of all kinds of application. This product is a perishable product, quality assurance is the premise of not affect secondary use.

The sensor provide four core wire package, and sensor and lead between the connector form, is easy to replace and replace.

Features

- **relative humidity and temperature measurement**
- with dew point
- all calibration, digital output
- excellent long term stability
- waterproof package, and can be used for measurement of soil
- low energy consumption

Interface specifications

Identification	lead	Name	Comment
S	yellow	SCK	clock signal
+	red	VDD	power
-	Black or green	GND	ground electrode
D	blue	DATA	data output

Technical parameters

parameters	value
Power supply voltage	3-5.5V
Temperature range	-40 +123.8℃
Temperature measurement accuracy	±0.3-0.5℃@ 25 °C
Moisture range	0-100%RH
Humidity measurement precision	±1.8-4.5%RH
power	80μW(12 measurement，1time/s)

ORDERING INFORMATION

Part Number	Humidity accuracy [%RH]	Temperature accuracy [K]@ 25 °C	Inside chip
SLHT5-1	±4.5	±0.5	Sht10
SLHT5-2	±3.0	±0.4	Sht11
SLHT5-3	±2.0	±0.3	Sht15
SLHT5-4	±3.0	±0.4	Sht71
SLHT5-5	±1.8	±1.8	Sht75

Detailed use see
http://www.sensirion.cc/product/Smallclass2_1.html