



**kintech**  
engineering



**DATASHEET**

# **K846TH**

**TEMPERATURE & HUMIDITY**

The sensor K846TH is a highly accurate and reliable temperature and humidity sensor with short start-up time and low power consumption.

## K846TH | TEMPERATURE & HUMIDITY

### DESCRIPTION

The sensor K846TH is a highly accurate and reliable temperature and humidity sensor with short start-up time and low power consumption. The K846TH is fitted in a small sized polycarbonate housing and supplied together with our 10 plate solar radiation shield.

The radiation shield ensure correct ventilation of the sensor and avoid false measures caused by over heating and excess solar radiation, while offering mechanical protection against impacts as well as corrosive effects of rain.

Ideal sensor for both wind & solar resource assessment.

### APPLICATIONS

Meteorological monitoring and wind and solar resources assessment.

### FEATURES

#### Relative humidity

Working range	0...100% TH
Analogue output	0...1 V
Accuracy at 20°C and 12V DC	±2% RH (0...90% RH) ±3% RH (90...100% RH)
Temperature dependence	typ. 0.03% RH/°C

#### Temperature

Sensor	Pt1000 (DIN A)
Analogue output	0...1 V
Accuracy	+/- 0.2°C at 20°C
Signal	Linear analog voltage
Measurement range	-40...+60 °C

#### General

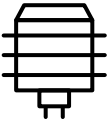















Supply voltage	7...30 V (DC)
Current consumption	Typically < 1.3mA
Housing	Polycarbonate
IP	IP65
Sensor protection	Metal grid filter
Cable recommendation up to 10m cable length more than 10m cable length	Signal cable 4x0.5 mm <sup>2</sup> + shield Signal cable 4x0.5 mm <sup>2</sup> + shield (offset correction: -40 - L*0.003)
Cable length	1 m
Compatibility	All Kintech Engineering data loggers
Manufacturer	Elektronik

#### Radiation shield

Material	Highly resistant thermoplast
Dimension	120 mm x 140 mm
Mounting	Attaches to mast with included support brackets

# K846TH | TEMPERATURE & HUMIDITY

## SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Kintech Cable Colors				Orbit 360			EOL Zenith	
			Cable directly from sensor		Cable extension		Section	Terminal	Type	Section	Terminal
	SIG (-)	Ref		Pink		Brown	Analog Channels	47 51 55 59 64 68 72 76 80 87	(-)	BAT	
	Temp (+)	Temp		Grey		Green	Analog Channels	48 52 56 60 65 69 73 77 81 84 85 86 90 91 92	Signal	Analog Inputs	
	Us (+)	Supply (+)		Red		White	Analog Channels	49 53 57 61 66 70 74 78 82 88	* (+)	BAT	
	RH (+)	RH		Yellow		Yellow	Analog Channels	48 52 56 60 65 69 73 77 81 84 85 86 90 91 92	Signal	Analog Inputs	
		Shield		Yellow Green		Yellow Green	Power Input		BAT		BAT

**Note 1:** (+)\* = Bat+ with limited current (12mA). Only 1 sensor can be connected.

### HOW TO CONFIGURE IN ATLAS

Open Atlas and go to the data logger you are working on. Scroll to the “channels” section and select the following type and model:

- Group: Analog channels
- Sensor Type: Temperature
- Sensor Type: Relative Humidity
- Sensor Model: **K846TH**

### HOW TO CONFIGURE IN EOL MANAGER

Open EOL Manager and go to the data logger you are working on. Open the “inputs” tab and select the following type and model:

- Group: Analog Inputs
- Type: Temperature
- Type: Rel. Humidity
- Model: **K846TH**

Last modified: 05.06.2020

For more information please contact [support@kintech-engineering.com](mailto:support@kintech-engineering.com) or visit our website [www.kintech-engineering.com](http://www.kintech-engineering.com)