kintech engineering

DATASHEET

K307T

TEMPERATURE SENSOR

The K307T Temperature sensor is developed and manufactured by Kintech Engineering specifically for wind & solar resource assessment applications.

K307T | TEMPERATURE SENSOR

DESCRIPTION

The K307T Temperature sensor is developed and manufactured by Kintech Engineering specifically for wind & solar resource assessment applications with a power consumption below 0.3mA. It's a solid and highly reliable PT1000 (Class A) sensor offering a measurement accuracy of ±0.3ºC at 20ºC / ±0.5ºC at -35..70ºC and a temperature operating range from -35ºC to +70ºC. The K307T sensor is built into a strong aluminum housing and has the same physical design as our K307TH Temperature & Humidity sensor which means that both sensors can be used with our 10 plate solar radiation shield.

APPLICATIONS

Wind resource assessment, solar resource assessment, solar monitoring. The sensor output is used for energy density calculations; monitoring air temperature; calculating atmospheric stability conditions; identifying icing conditions in cold climates.

FEATURES

Temperature	
Sensor	Pt1000 RTD element (DIN A)
Analogue output	0...5 V
Accuracy	±0.3ºC at 20ºC / ±0.5ºC at -35..70ºC
Signal	Linear analog voltage
Measurement range	-35...+70 ºC
Transfer function	Slope = 22.12729 ºC/V Offset = -39.057 ºC

General	
Supply voltage	5—30V (DC or Pulsating)
Current consumption	5V DC: Typically < 2.5mA / 5V pulsating: Typically < 0.3mA
Housing	Aluminum
IP	IP65
Sensor protection	Sintered porous metal filter
Cable recommendation	Signal cable 4x0.5 mm2 + shield
Cable lenght	3 m
Compatibility	All Kintech Engineering data loggers
Manufacturer	Kintech Engineering

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

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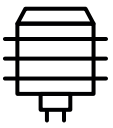
SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Kintech Cable Colors		Orbit 360			EOL Zenith	
					Section	Terminal	Type	Section	Terminal
	Us (-)	Supply (-)		Brown	Analog Channels	47 51 55 59 64 68 72 76 80 87	(-)	Analog Inputs	– –
	Temp (+)	Temperature		White	Analog Channels	48 52 56 60 65 69 73 77 81 84 85 86 90 91 92	Signal	Analog Inputs Extra Analog	1 2 3 4 5 1 2 3 4 5 6 7 8
	Us (+)	Supply (+)		Green	Analog Channels	50 54 58 62	5П	Analog Inputs	+ +
	Ref.	Reference		Yellow	Analog Channels	47 51 55 59 64 68 72 76 80 87	(-)	Analog Inputs	– –
	Shield			Yellow Green	Power Input	BAT	⏚	BAT	⏚

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 Model: **K307T**

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
- Model: **EOL 307**
- Slope: 22,12729
- Offset: -39,057

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For more information please contact **support@kintech-engineering.com**
or visit our website **www.kintech-engineering.com**

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