

# THP-W

## Temperature Humidity Probe

### Specifications

#### Temperature

Parameter	Conditions	Typical	Max	Units
<b>Range:</b>		-20 to 100	-40 to 120	°C
		-13 to 212	-40 to 248	°F
<b>Accuracy:</b>		±0.4	See Fig. 1	°C
		±0.8		°F
<b>Repeatability:</b>		±0.1		°C
		±0.2		°F
<b>Output:</b>		10		mV/°C
<b>Offset:</b>	0.5V = 0°C	0.50		Vdc

#### Relative Humidity

Parameter	Conditions	Typical	Max	Units
<b>Range:</b>	0 to 100			%RH
<b>Accuracy:</b>	20 to 80	±3	See Fig 2.	%RH
	10 to 90	±4	See Fig 2.	%RH
<b>Repeatability:</b>		±0.1		%RH
<b>Response:</b>		10		Sec
<b>Output:</b>		10		mV/%RH
<b>Offset:</b>		0		Vdc

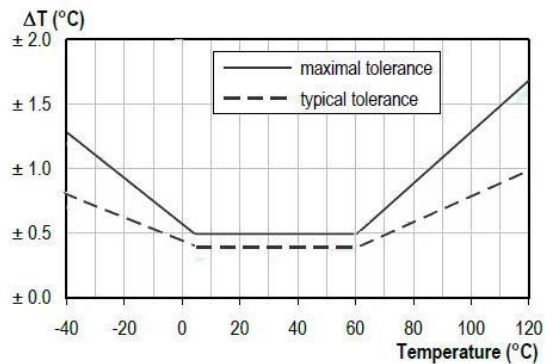
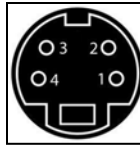


Fig 1. Typical and maximum tolerance for temperature.

#### Connection

Connector Pin	Cable	Function
1	Green	Power Supply Common (0 Volts)
2	Red	Power Supply Input (5 to 12Vdc)
3	White	Temperature Out (10mV/°C)
4	Black	Humidity Out (10mV/%RH)
	Braid	Shield or Screen



The output connector is a standard 4 pin DIN socket. The supplied connector has an 8 foot high temperature cable attached with 4 conductors and a shield. Connection details above.

#### Input Power

Parameter	Conditions	Typical	Units
<b>Supply Voltage:</b>		5 to 12 ± 10%	Vdc
<b>Supply Current:</b>	5Vdc	5	mAdc

Temperature in C = (mV out -500)/10  
Relative Humidity in %RH = mV out/10

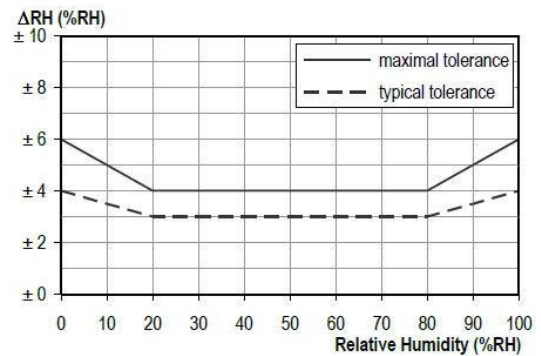
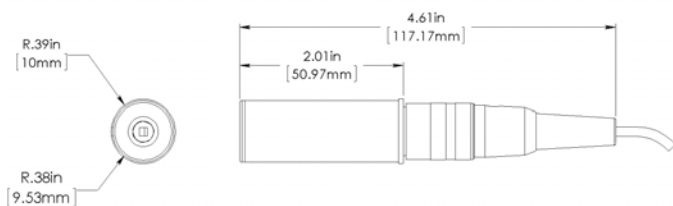


Fig 2. Typical and maximum tolerance for humidity at 25°C.

#### Dimensions:



#### Ordering Information

Item	Description	Part No.
THP-W	Temperature Humidity Probe with Connector and 8 foot (2.4m) cable	5380-505



# EMPIRE INSTRUMENT

1-800-682-0177