



# Model SRH400

Humidity and Temperature Transmitter

## Features

- Interchangeable probes
- Outstanding accuracy and long term stability
- Easy loop calibration
- Wide temperature working range

## Applications

- HVAC
- Cleanrooms
- Operating rooms
- Patient isolation rooms
- Pharmaceutical labs
- Industrial manufacturing
- Compounding pharmacies

The innovative, modular SRH400 humidity (RH) and temperature (T) transmitter consists of a base unit and pluggable, interchangeable probes. The base unit can accommodate one combined RH and T probe or two separate probes – one for RH and one for T. The stainless steel remote probes can be plugged onto the base unit either directly or with extension cables up to 10 m (32.8 ft) long. An optional kit facilitates the mounting of the probes in a duct. The SRH400 basic unit is available with a metal enclosure suitable for wall mount (SRHDMK).

## Easy configuration & setup

The measured values are available on two analog voltage or current (2 wire, 4-20 mA) outputs. One or two point adjustment for RH and T of the transmitter can be easily performed with push buttons by removing SRH400 faceplate. Alternatively, the SRH400 probes can be adjusted individually with a Part Configuration Adapter (SETRAPCA4).

## Fit for harsh environments

The SRH400 is fully gasketed with a powder-coated finish and die cast construction for aggressive environments. All external hardware is stainless steel.



## Ordering information

### General

<b>Supply voltage (Class III)</b>	
for 0-10 V output:	15-30 VDC or 15-29 VAC
for 4-20 mA output:	10 -35 VDC
<b>Current consumption</b>	
DC supply:	typ. 10 mA
AC supply:	typ. 20 mA
<b>Load resistor (4-20 mA output)</b>	$R_L < [(U_V - 10 \text{ V})/0.02 \text{ A}][Q]$
<b>Connection</b>	Screw terminals, max. wire 16 AWG
<b>Housing material</b>	Cast alloy (AlSi <sub>9</sub> Cu <sub>3</sub> )
<b>Protection class</b>	IP65/ NEMA 4
<b>Gland fitting</b>	PG9 cable, Ø 4.5-100 mm (0.18-0.39")
<b>Sensor protection</b>	SST mesh
<b>Electromagnetic compatibility</b>	EN61326-1, EN61326-2-3, Industrial environment
<b>Temperature ranges</b>	Operating: -40 to 140°F (-40 to 60°C) Storage: -40 to 140°F (-40 to 60°C)

Specifications subject to change without notice.

### Outputs

0-1 V:	-0.5 mA < I <sub>L</sub> < 0.5 mA
0-10 V:	-1 mA < I <sub>L</sub> < 1 mA
4-20 mA (2-wire):	R <sub>L</sub> < 500 Ω
<b>T dependence of analog outputs</b>	Max. 0.2 mV/°C; Resp. 1 μA/°C

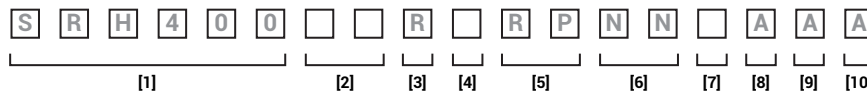
### Measured values

<b>Working range (RH)</b>	0-100% RH
<b>Accuracy including non-linearity, hysteresis, and repeatability at:</b> -40 to 140°F (-40 to 60°C); 0-90% RH	±2% RH
<b>Accuracy including non-linearity, hysteresis, and repeatability at:</b> -40 to 140°F (-40 to 60°C); 90-100% RH	±3% RH
<b>Temperature accuracy at 70°F</b>	±0.18°F

## Ordering information

Example part number (base unit): SRH40011R2RPNNAAA;

Model SRH400 humidity transmitter, 4-20 mA output, 2 sensor ports, filter type NA, non-metric units, analog unit.



[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
<b>Model</b>	<b>Output</b>	<b>Type</b>	<b>Number of sensor ports</b>	<b>Probe length</b>	<b>Filter type</b>	<b>Units</b>	<b>Baud rate</b>	<b>Parity</b>	<b>Stop bits</b>
SRH400	11 4 to 20 mA 2C 0-10 V	R Remote	1 One 2 Two	RP Remote probe	NN NA, remote probe	M Metric N Non-metric	A Analog unit	A Analog Unit	A Analog Unit

**Ordering note:** Probes are not included with base units and must be ordered separately

### Remote SRH400 probe:

[1]	[2]	[3]	[4]	[5]
<b>Model</b>	<b>Measurement</b>	<b>Filter Type</b>	<b>Probe material</b>	<b>Cable length</b>
SRP400	HT RH and temp TP <sup>1</sup> Temp only	MG Metal grid filter	M SST	W 2 meters F 5 meters X 10 meters N No cable



<sup>1</sup> Only available if two (2) sensor ports are selected on base unit.

## Accessories

### Filters

<b>SRHMF</b>	Membrane filter
<b>SRHSS</b>	SST sintered filter
<b>SRHPG</b>	Plastic grid filter
<b>SRHPF</b>	PTFE filter
<b>SRHMG</b>	Metal grid filter
<b>SRHHP</b>	H <sub>2</sub> O <sub>2</sub> filter

### Probe configuration adapter

<b>SETRAPCA1</b>	Configuration transmitter, RS232/USB connections
<b>SETRAPCA4</b>	Configuration cable

### Flanges

<b>SRHSMF</b>	Stainless steel mounting flange
<b>SRHPMFB</b>	Plastic duct mounting flange, black
<b>SRHPMFG</b>	Plastic duct mounting flange, grey
<b>SRHVMC</b>	Plastic wall mounting clip
<b>SRHDMK</b>	Stainless duct mounting kit

### Probe extension cables

<b>SRC400W</b>	2 meter cable
<b>SRC400F</b>	5 meter cable
<b>SRC400X</b>	10 meter cable

### Humidity/temperature probe

**SRP400HT** relative humidity and temperature probe, stainless steel



### Temperature probes

**SRP400TP** temperature probe, stainless steel





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