



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

Supply voltage (Class III)	
for 0-10 V output:	15-30 VDC or 15-29 VAC
for 4-20 mA output:	10 -35 VDC
Current consumption	
DC supply:	typ. 10 mA
AC supply:	typ. 20 mA
Load resistor (4-20 mA output)	$R_L < [(U_V - 10 \text{ V})/0.02 \text{ A}][Q]$
Connection	Screw terminals, max. wire 16 AWG
Housing material	Cast alloy (AlSi ₉ Cu ₃)
Protection class	IP65/ NEMA 4
Gland fitting	PG9 cable, Ø 4.5-100 mm (0.18-0.39")
Sensor protection	SST mesh
Electromagnetic compatibility	EN61326-1, EN61326-2-3, Industrial environment
Temperature ranges	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 _L < 0.5 mA
0-10 V:	-1 mA < I _L < 1 mA
4-20 mA (2-wire):	R _L < 500 Ω
T dependence of analog outputs	Max. 0.2 mV/°C; Resp. 1 μA/°C

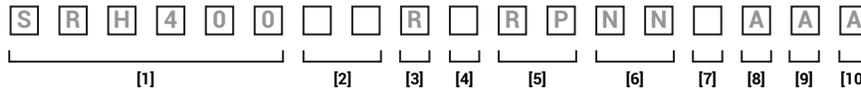
Measured values

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

Ordering information

Example part number (base unit): SRH40011R2RPNNNA

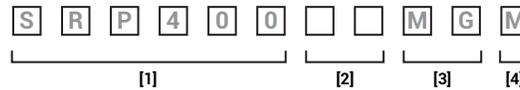
Model SRH400 humidity transmitter, 4-20 mA output, 2 sensor ports, filter type NA, non-metric units, analog unit



[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Model	Output	Type	Number of sensor ports	Probe length	Filter type	Units	Baud rate	Parity	Stop bits
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 and (optional) cables are not included with base units and must be ordered separately.

SRH400 sensor probe:

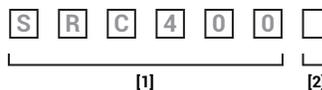


[1]	[2]	[3]	[4]
Model	Measurement	Filter Type	Probe material
SRP400	HT RH and temp TP ¹ Temp only	MG Metal grid filter	M SST



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

SRH400 probe extension cable (optional):



[1]	[2]
Model	Cable length
SRC400	W 2 meters F 5 meters X 10 meters

Accessories

Filters

SRHMF	Membrane filter
SRHSS	SST sintered filter
SRHPG	Plastic grid filter
SRHPF	PTFE filter
SRHMG	Metal grid filter
SRHHP	H ₂ O ₂ filter

Recalibration

SRH400SCAL	SRH400 calibration to ISO standard
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Flanges

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

Probe configuration adapter

SETRAPCA1	Configuration transmitter, RS232/USB connections
SETRAPCA4	Configuration cable



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