



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 (SRHPCA4).

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	AlSi ₃ Cu ₃ (cast alloy)
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.

NOTE: Probes are not included with units and must be ordered separately

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

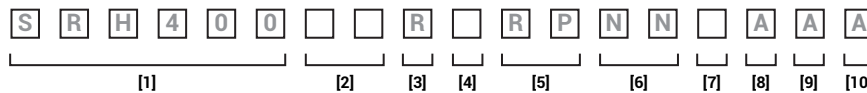
Measured values

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	±1% 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): 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]
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 are not included with base units and must be ordered separately

Remote SRH400 probe:

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



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

Probe order note: Must order a "HT" probe; unit not functional with a sole temperature sensor

Accessories

Filters

SRHMF	Membrane filter
SRHSS	SST sintered filter
SRHPG	Plastic grid filter
SRHPF	PTFE filter, 12mm diameter
SRHMG	Metal grid filter
SRHHP	H ₂ O ₂ filter

Probe configuration adapter

SRHPCA1	Configuration transmitter, RS232/USB connections
SRHPCA4	Configuration cable

Flanges

SRHSMF	SST mounting flange, 12mm
SRHPMFG	Plastic mounting flange, grey
SRHWMC	Wall mounting clip, 12mm probe diameter
SRHPMFB	Plastic mounting flange, 12mm, black

Probe extension cables

SRC4001	1.5 meter cable
SRC4002	2 meter cable
SRC4003	3 meter cable
SRC4004	4 meter cable

Humidity/temperature probe

SRP400HT RH/T probe, stainless steel
(for clean rooms, food and pharmaceutical industry)



Temperature probes

SRP400TP T probe, stainless steel
(for clean rooms, food and pharmaceutical industry)





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