

Model SRH200

Humidity and Temperature Transmitter

Features

- Excellent long-term stability
- BACnet MS/TP and Modbus RTU compatible
- Sensor coating protects sensing element and enables long term stability
- Wall and duct mount options available

Applications

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

Specially designed for HVAC, the SRH200 sensor by Setra is a cost effective, highly accurate and reliable solution for measuring relative air humidity and temperature.

Proprietary sensing element

The SRH200 employs a capacitive sensing element which exhibits excellent long term stability and resistance against pollutants. The SRH200 provides a measurement accuracy of ± 2.5 % RH and is available for wall or duct-mounting with current, voltage, BACnet MS/TP or Modbus RTU output.

Hassle-free configuration

Optional configuration accessories (SETRAPCA1 and SETRAPCA2), and user-friendly software makes it possible to readily set RS485 interface parameters, customize output scaling, and perform one or two-point adjustment of RH and temperature on any SRH200 unit.

Product design

The SRH200's form factor and thoughtful design allow for a simple and efficient installation. The quarter-turn bayonet screws and the easily accessible electrical connections enable a hassle-free setup, greatly reducing installation cost. The IP65/NEMA 4 faceplate also provides incredible protection against contaminants and condensation, prolonging the products life and ensuring reliable operation.



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Ordering information

General

Power Supply

for 4-20 mA, 2-wire:	$10\text{ V} + R_L \times 20\text{ mA} < U_V < 30\text{ VDC}$
for 0-10 V, RS485:	15-30 VDC or 24 VAC $\pm 20\%$

Current consumption

Analog:	w/ DC power supply typ. 5 mA w/ AC power supply typ. 13 mA
Digital:	w/ DC power supply typ. 15 mA w/ AC power supply typ. 25 mA

Connection Screw terminals, max. wire 16 AWG

Housing material Polycarbonate, UL94V-0 approved

Protection class IP65/ NEMA 4

Gland fitting PG9

Electromagnetic compatibility EN61326-1
EN61326-2-3

Temperature ranges Operating: -40 to 140°F (-40 to 60°C)
Storage: -40 to 140°F (-20 to 60°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) $\pm 2.5\%$ RH

Temperature dependency typ. $\pm 0.03\%$ RH/°C

T-accuracy at 20°C $\pm 0.3^\circ\text{C}$

Outputs

Analog output

0-10 V: $-1\text{ mA} < I_L < 1\text{ mA}$

4-20 mA (2-wire): $R_L < 500\ \Omega$

Digital output

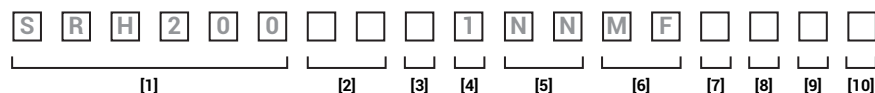
RS485 (BACnet MS/TP or Modbus RTU),
max. 32 SRH200 units on one bus

Specifications subject to change without notice.

Ordering information

Example part number: SRH20011D1NNMFNAAA;

Model SRH200 humidity transmitter, 4-20 mA output, duct mount, probe length fixed, membrane filter, non-metric units, 38400 baud rate, 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
SRH200	11 4 to 20 mA 2C 0 to 10 V A2 BACnet M3 Modbus	W Wall mount D Duct mount	1 One	NN Fixed length	MF Membrane filter	M Metric N Non-metric	A Analog unit 1 9600 2 19200 3 38400 4 ¹ 51600 5 ¹ 76800 6 ¹ 115200	A Analog unit B BACnet unit 1 Odd 2 Even N No parity	A Analog unit B BACnet unit 1 1 stop bit 2 2 stop bits

¹ Only available with output option "A2".

² Configuration codes [6] through [10] can be reconfigured after purchase

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

Probe configuration adapter

SETRAPCA1	Configuration transmitter, RS232/USB connections
SETRAPCA2	Configuration cable, SRH200 analog
SETRAPCA3	Configuration cable, SRH200 digital

Flanges

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

Recalibration

SRH200SCAL	SRH200 calibration to ISO standard
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