# WALL TYPE

# T&H Transmitter

**4-20mA,0-5VDC, 0-10VDC, RS485 OUTPUT**

**Model No.: SR300S**

# General Specifications

# SR300S

## ■ Overview

SR300S is high quality wall type temperature and humidity sensor, adopting Switzerland advanced sensor module and high performance single chip designed for temperature humidity measurement indoor room, widely used in agriculture: greenhouse, mushroom house, farm, seeding room, poultry house; refrigerated storage, Warehouse, cold room Medicinal, HAVC; Building Automation **high humidity environment application.** High Humidity Environment:

## ■ Feature

- High Accuracy, High Stability; Anti-Interference dealing on PCB
- High sealing technology and excellent three-proof coating protection
- **Range: T: -20 to 80°C, 0-50°C, -40 to 60°C; H: 0-100%**
- **Temperature range can be set by inner DIN switch**
- **With offset function by built-in keys**
- **Output: 4-20mA,0-5VDC,0-10VDC, RS485 output**
- Probe can be with dust-proof, water-proof type, optional
- **Accuracy: T:±0.3°C, H:±3%;** Resolution: T:0.01, H:0.1%RH
- Protection: Electrical housing: IIP65; Probe: IP54
- Wide power supply: 12-36VDC; 15-36VDC (4-20mA only)

## ● Size （mm）



**SR300S Wall Type Temperature Humidity Transmitter With Indicator**
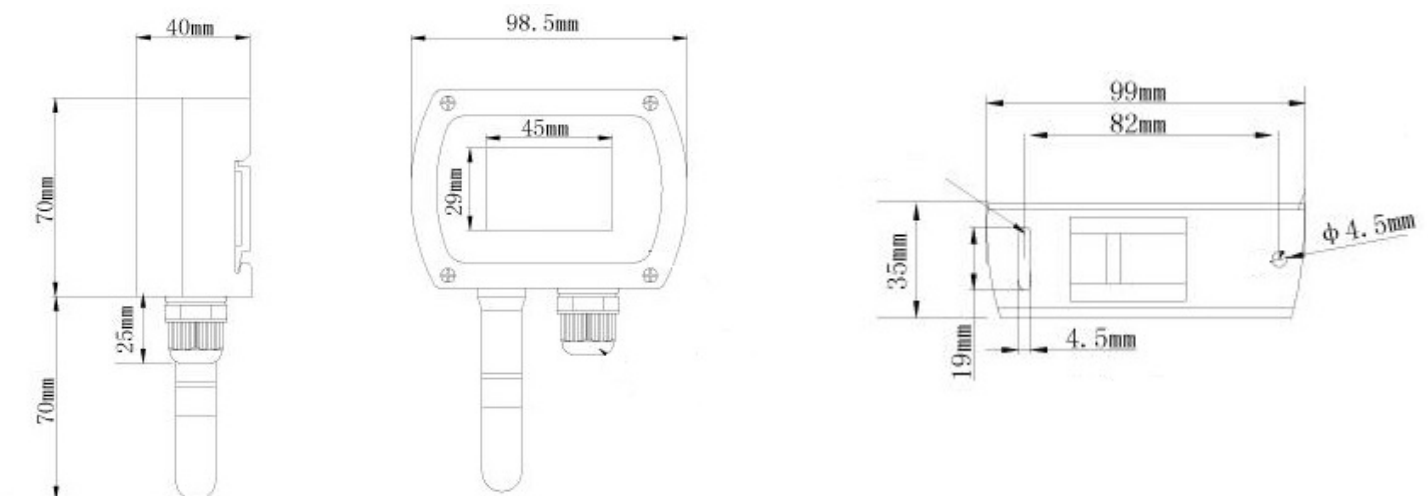
## ■ Specification

| Accuracy | T:±0.3℃ (Full range in average); RH:3%RH (including non-linear, repeatability, hysteresis) | Power Supply | 15-36VDC (4-20mA Output); 12-36VDC (0-5VDC, 0-10VDC; RS485 Output) |
|---|---|---|---|
| Long Stability | T: ＜0.04℃/year; | Power consumption | 60mA |
| | RH: ＜0.05%RH/year | Housing Material | ABS |
| Range | T: -40+125ºC swith adjustable | Probe Type | Dust-proof (standard); water-proof |
| | RH:0-99.9% | Installation | Wall Type |
| Resolution | T: 0.1℃, RH:0.1%RH | Case Size | 80mmx65mmx38mm (LXD) |
| Response time | T: 6t(63%): min=5s, max=30s; | Probe Size | 42mmx 16mm (LXD) |
| | H (90% static air): 8second | Terminals Size | 1x2.5 mm² or 2x1.5 mm² |
| Load resistor | ＜500ohm | Entry connector | M16x1.5mm |
| Output | 4-20ma, 0-5VDC, 1-5VDC; RS485 output | Protection | Electrical Case: IP65; Probe: IP54 |
| RS485 Protocol | Standard MODBUS-RTU protocol | Working Ambient | T:-40 to 80℃, H:0-99.9%, no dew |
| Baud rate | 9600; customized | Storage Temperature | 10-50℃ (0-125℃ at peak) |

## ■ Diagram

| SR300S: 4-20ma(standard), 0-5vdc,1-5vdc output Terminals |
|---|



V+ — Power +
GND — Power-
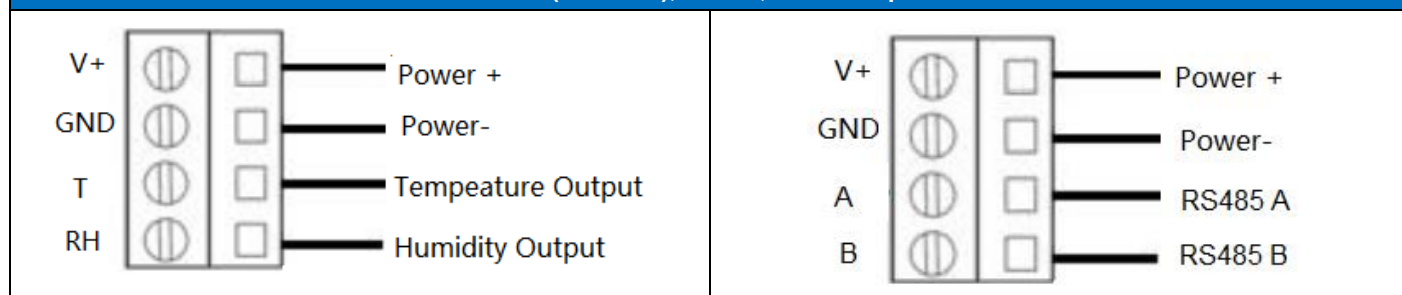T — Tempeature Output
RH — Humidity Output

V+ — Power +
GND — Power-
A — RS485 A
B — RS485 B

| Diagram: 4-20mA,0-5VDC, 0-10VDC Terminals |
|---|



Power Supply: 15-35VDC
24VDC suggested
V+ 1
GND 2
T 3
RH 4
mA   mA

Power Supply: 12-35VDC
24VDC suggested
V+ 1
GND 2
T 3
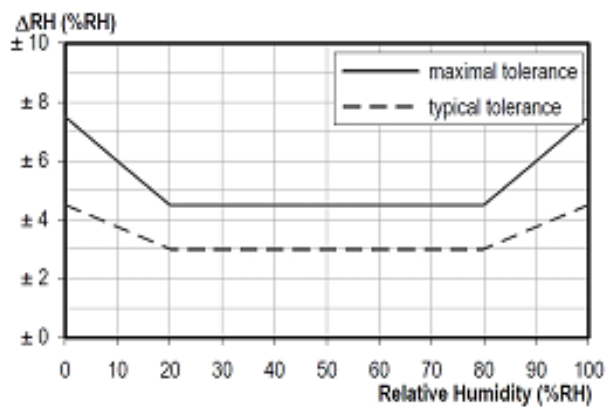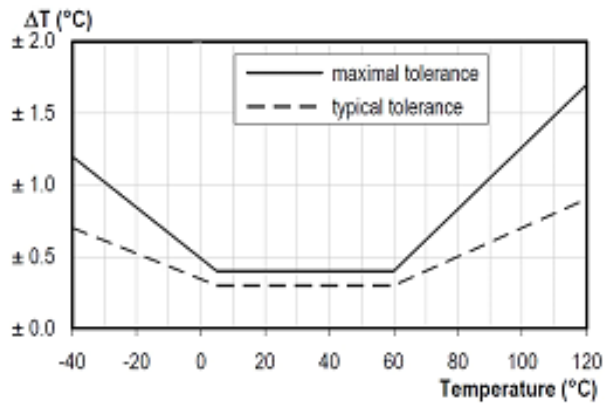RH 4
V   V
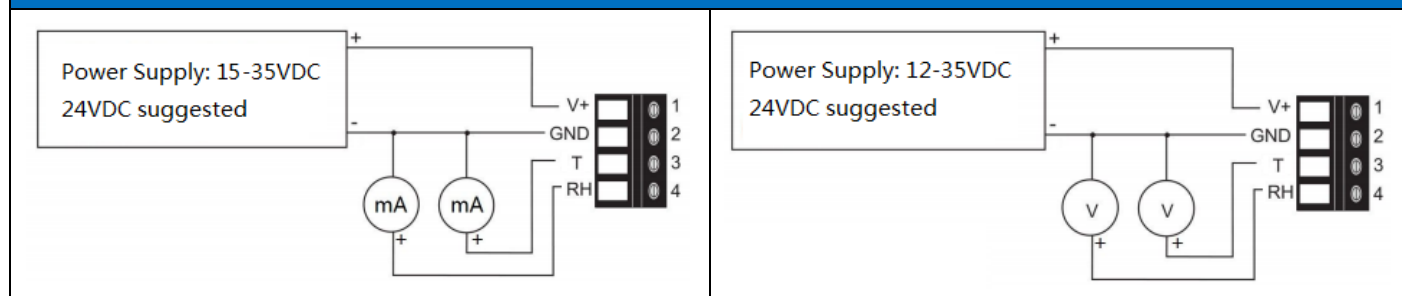
| SR300S: RS485 Communication, Standard MODBUS-RTU Protocol |
|---|
| Configurable with PLC, DCS, HMI, SCADA, OPC flexibly |



T&RH   T&RH   T&RH   DC12-36V Power Supply

MSC820
RS485-USB
RS485-RS232
CONVERTER
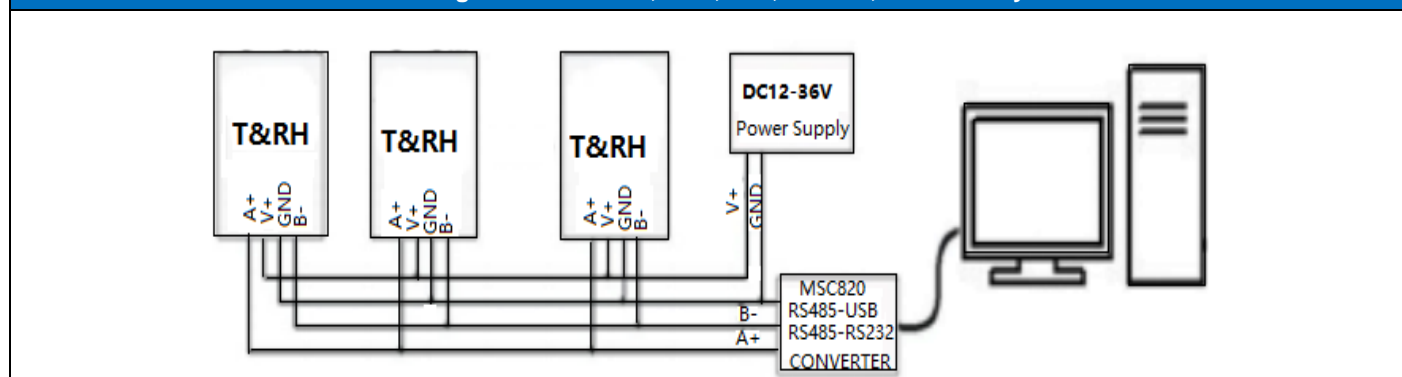
# ■ Accuracy

**Analog Output: 4-20mA, 0-5VDC, 0-10VDC**



**RS485 Output**
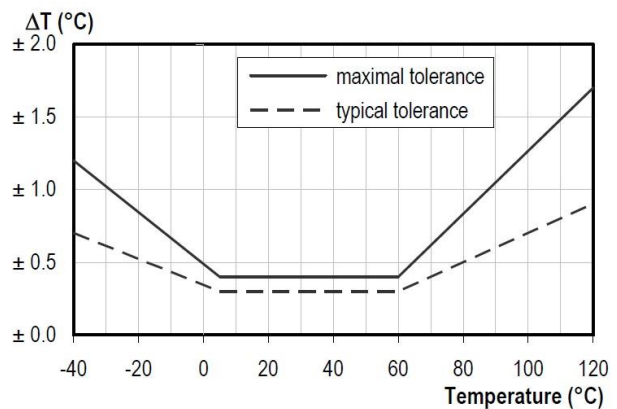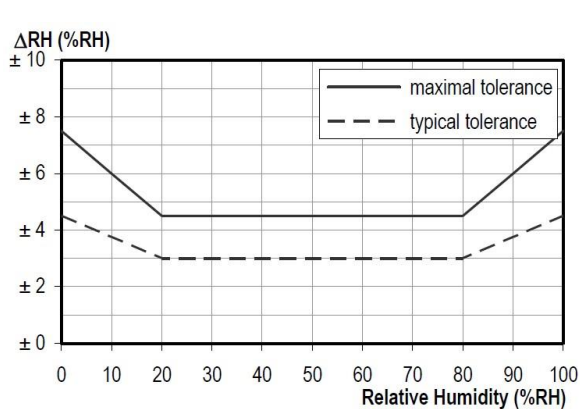


# ■ Order Code

| SR300S temperature and humidity sensor | | | | |
|---|---|---|---|---|
| Order Code: SR300S-NAN | | | | Description |
| SR300S | -X | X | X | **SR300S Wall Type temperature and humidity sensor** |
| Indicator | -N | | | None |
| | -D | | | Yes, with indicator |
| Output Type | | A | | 4-20mA (standard) |
| | | A2 | | 4-20mA (2 wire, special), when temperature measured, humidity should be measured |
| | | V | | 0-5VDC |
| | | V2 | | 0-10VDC |
| | | R | | RS485 output |
| Probe Type | | | N | Standard type, dust-proof |
| | | | W | Water-proof (special) |