



Temperature and Humidity Sensors

				
Room sensor	Room sensor	Duct sensor	Immersion sensor	Outside sensor
HL-SR	HL-SR...-L	HL-SD	HL-SW	HL-SO
Temperature Humidity	Temperature Humidity	Temperature Humidity	Temperature	Temperature Humidity

General

The HL-S Series Transmitters devices house both a temperature or/and a humidity sensor in a wall, duct-mount, Immersion-mount(No RH) or outside style. The humidity sensor is capable of measuring Relative Humidity(RH) over the entire range of 5 to 95%, and its all-Polymer construction provides improved resistance to chemical corrosion.

The HL-S series product line delivers devices with RH accuracy of either $\pm 3\%$ or $\pm 5\%$ RH. HL-S series temperature and humidity elements produce voltage or current output signals proportional to measured temperature and humidity for temperature and humidity indication. Temperature sensors are available in thin-film nickel and thin-film platinum. The elements are powered with 13.5 to 30 VDC or 20 to 30 VAC and feature a user-selectable humidity output of 0~10VDC or 0~5 VDC.

Specifications

- Temperature accuracy: $\pm 0.5\%$ FS
- Humidity accuracy : ± 3 or $\pm 5\%$ RH
- Temperature sensor: Platinum resistance、NTC
- Humidity sensor: Humidity sensitive capacitance
- Wire: $2 \times 1.0 \text{ mm}^2$ or $2 \times 1.5 \text{ mm}^2$
- Power supply: DC13.5–35V
- Load capacity: Voltage: $\leq 1 \text{ mA}$
Current: $\leq 600 \Omega$

Order Guide

	Type reference	Temperature Output						Range	Humidity Output			Range	Power supply		Length		Protection	Remark
		PT100	PT1000	NTC10K	0-5V	0-10V	4-20mA		Display	°C	0-5V		0-10V	4-20mA	AC24V	DC13.5-35V		
Room	HL-SRT1	●															IP30	
	HL-SRT2		●														IP30	
	HL-SRT3			●													IP30	
	HL-SRT4				●								●	●			IP30	
	HL-SRT5					●							●	●			IP30	
	HL-SRT6						●						●	●			IP30	
	HL-SR□H1							●			5 ...95%		●	●			IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	HL-SR□H2		T1	T2	T3	T4	T5	T6	●		5 ...95%		●	●			IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	HL-SR□H3								●		5 ...95%		●	●			IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	HL-SRT4-L																IP30	
	HL-SRT5-L																IP30	
	HL-SRT6-L																IP30	<input type="checkbox"/> incl. type T4,T5,T6
	HL-SR□H1-L								●		5 ...95%		●	●			IP30	<input type="checkbox"/> incl. type T4,T5,T6
	HL-SR□H2-L								●		5 ...95%		●	●			IP30	<input type="checkbox"/> incl. type T4,T5,T6
HL-SR□H3-L								●		5 ...95%		●	●			IP30		
Duct	HL-SDT1	●															IP30	Incl. mounting flange
	HL-SDT2		●														IP30	Incl. mounting flange
	HL-SDT3			●													IP30	Incl. mounting flange
	HL-SDT4				●								●	●			IP30	Incl. mounting flange
	HL-SDT5					●							●	●			IP30	Incl. mounting flange
	HL-SDT6						●							●			IP30	Incl. mounting flange
	HL-SD□H1							●		5 ...95%			●	●			IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	HL-SD□H2		T1	T2	T3	T4	T5	T6	●		5 ...95%			●	●		IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	HL-SD□H3								●		5 ...95%			●	●		IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	Immersion	HL-SWT1R5-100	●												100 ⁽¹⁾		IP51	Optional length: 100,150,200
HL-SWT2R5-100			●											100 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT3R5-100				●										100 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT4R5-100					●								●	100 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT5R5-100						●							●	100 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT6R5-100							●							100 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT1R5-150		●												150 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT2R5-150			●											150 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT3R5-150				●										150 ⁽¹⁾		IP51	Optional length: 100,150,200	
HL-SWT4R5-150					●									●	150 ⁽¹⁾		IP51	Optional length: 100,150,200
HL-SWT5R5-150						●								●	150 ⁽¹⁾		IP51	Optional length: 100,150,200
HL-SWT6R5-150							●								150 ⁽¹⁾		IP51	Optional length: 100,150,200
Outside	HL-SOT1R2	●															IP30	
	HL-SOT2R2		●														IP30	
	HL-SOT3R2			●													IP30	
	HL-SOT4R2				●								●	●			IP30	
	HL-SOT5R2					●							●	●			IP30	
	HL-SOT6R2						●							●			IP30	
	HL-SO□H1							●		5 ...95%			●	●			IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	HL-SO□H2		T1	T2	T3	T4	T5	T6	●		5 ...95%			●	●		IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6
	HL-SO□H3								●		5 ...95%			●	●		IP30	<input type="checkbox"/> incl. type T1,T2,T3,T4,T5,T6

Note: (1) See remark