

NLII-RH | Combined sensor humidity/temperature

Room sensor NLII-RH is used to continuously monitor the air quality inside buildings and then control ventilation (HVAC) systems according to current levels of air pollution. The sensor measures the relative humidity (RH) and temperature (T). It is suitable for living rooms, bathrooms, warehouses, ateliers etc.

- > measures RH and temperature
- > 2x analog voltage/current output
- > 2x output relay – 2x NO/C
- > option for cascade relay switching
- > maintenance during operation is not required
- > long life and stability



Type of sensor	RH output	T output	Relay
NLII-RH-R	0-10 V/0-20 mA/4-20 mA ¹⁾	-	1x NO/C/NC
NLII-RH+T	0-10 V/0-20 mA/4-20 mA ¹⁾	0-10 V/0-20 mA/4-20 mA ¹⁾	-
NLII-RH+T-R	0-10 V/0-20 mA/4-20 mA ¹⁾	0-10 V/0-20 mA/4-20 mA ¹⁾	2x NO/C

¹⁾ It is possible to select by jumper type of analog output.

Measurement of the relative humidity is based on the principle of capacitive polymer sensor.

The sensor has built-in two separate analog outputs - one for the actual temperature and the other for the actual relative humidity. If the sensor contains 2 relays, it can be set to two switching modes: standard (each relay switches according to its assigned quantity), a cascade mode (both relays switch according to one selected quantity and each one can be set to different switching level). Cascade switching, for example, can be used to two-step switching of ventilation units output power. Relay trigger levels can be set independently by two rotary elements. So the sensor efficiently manages ventilation and heat recovery units, based on current room air quality. The current air quality can easily be determined by looking at the three LED indicators.

The **eco** level means good indoor air quality necessary to achieve a sense of well-being and at the same time optimal energy costs for heating, ventilation or air conditioning.

Explanation of abbreviations and technical terms can be found on our website in the [Glossary](#) section.

Parameter	Value	Unit
Supply voltage range	12 – 35	V DC
	12 – 24	V AC
Average consumption	0,5	W
RH measuring range	0 – 100 %	RH
RH accuracy 0 – 90 %	± 5 %	RH
RH accuracy 90 – 100 %	± 6 %	RH
RH switching hysteresis	5 %	RH
T measuring range	0 – 50	°C
T accuracy	± 0,4	°C
T switching hysteresis relay	0,5	°C
Max. switching voltage	250/30	V AC / V DC
Max. switching current	5/5	A AC / A DC
Working humidity non condensing	0 – 90 %	RH
Working temperature	0 to +50	°C
Storage temperature	-20 to +60	°C
Expected lifetime	min. 10	years
Ingress protection	IP20	
Dimensions	90x80x31	mm

