

AR250 HUMIDITY TRANSDUCER



- a high class digital relative humidity sensor with a protective filter (ABS material as a standard, slot width 1 mm, and steel wire mesh with mesh size of 0.15 mm)
- a probe integrated with the enclosure, external or on a stainless steel pipe
- a current output 4÷20 mA (2-wire, with power supply from the current loop) or a voltage output 0÷10 V (3-wire)
- temperature compensation of humidity measurement, high measurement stability
- programmable processing ranges for humidity
- configuration of parameters through the PRG port (programmer AR956 or AR955) and free ARsoft-CFG software that enables quick setting and copying of all configuration parameters
- protection rating IP65 provided by the enclosure which improves reliability of operation thanks to high resistance to penetration of water and dust and surface condensation of steam inside of the device, an IP40 probe
- available accessory filter with a metal wire mesh to protect the sensor against dust

Contents of the package:

- a transducer
- a user instruction
- a warranty card

Available accessories:

- an AR956 (or AR955) programmer

Ordering procedure

AR250 / / /

Output	Code
output 4÷20 mA	I
output 0÷10 V	U

Probe installation method	Code
radial (standard)	
back (to pipe, channel)	T

Measurement probe type	Code
integrated with the enclosure (standard)	
external with a 1,5m wire*	2
external in an enclosure with a 1,5m wire*	3
on a stainless steel pipe, 140 mm long*	L150
on a stainless steel pipe, 240 mm long*	L250

* options charged separately

Order example:

Note: for the standard design, only the output type must be stated e.g.:

AR250 / I

AR250, output 4÷20 mA, radially mounted probe and integrated with the enclosure

AR250 / U / L150 / T

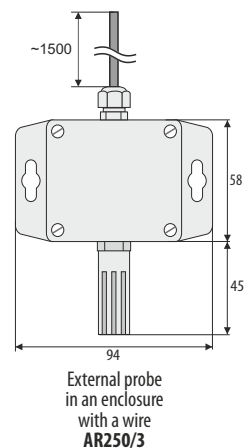
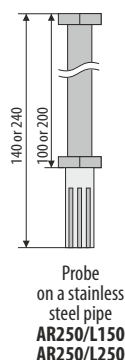
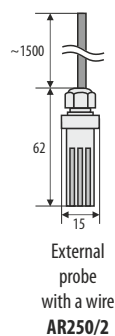
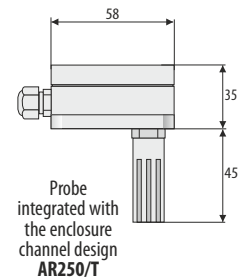
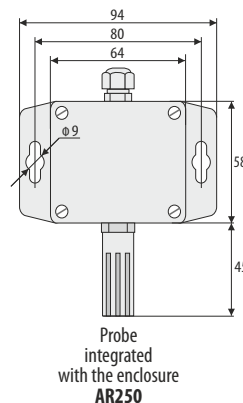
AR250, analog output 0÷10 V, probe on a stainless steel pipe 140 mm long, installed in the back of the enclosure (for channel installations)

TECHNICAL DATA

Sensor	SHT31, an ABS cover (slot width 1mm) and a stainless steel wire mesh (slot width 0,15mm)
Measurement range	0÷100 %RH
Measurement accuracy	±2 %RH in the entire measurement range
Hysteresis and stability	±0,8 %RH, long-term stability < 0,25 %RH / year
Measurement period	1s
Response time (63%)	8s (for air flow > 3,6km/h)
Outputs	current (I _H) 4÷20 mA (2P), load R ₀ < (U _{max} - 12) / 22 mA
	voltage (U _H) 0÷10 V (3P), load I ₀ < 4,5 mA (R ₀ > 2,5 kΩ)
Supply	for the 4÷20 mA 12÷36 Vdc (2-wire) supply from the current loop
	for the 0÷10 V 18÷30 Vdc, current consumption: ~7mA
Operating conditions	air and neutral gases (do not pour water on the measurement probe) -30÷80 °C, <100 %RH (no condensation)

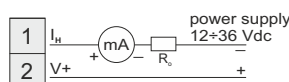
INSTALLATION DATA

Dimensions	58x94x35 mm
Material	polycarbonate



TERMINAL

AR250/I



AR250/U

