Atmospheric pressure, humidity and temperature transmitter AR253

Technical data

Sensor & Probe:	Digital sensor, ABS housing, probe integrated, on wire, or stainless steel tube
Measurement Range:	Humidity: 0–100 %RH Temperature: -30–80 °C Pressure: 300–1100 hPa
Accuracy:	Humidity: ±2.5%RH (0–90 %RH), ±3.5%RH (90–100 %RH) Histeresis: ±0,8%RH Temperature: ±0.5 °C Pressure: ±2 hPa
Repeatability:	±0.1 %RH, ±0.1 °C
Long-term stability:	<0.25 %RH/year, <0.03 °C/year, ±1 hPa/year
Outputs:	Current: 2 × 4–20 mA (2-wire) Voltage: 2 × 0–10 V (3-wire) Digital: RS485 MODBUS-RTU
Response time (63%):	8s (airflow > 3.6 km/h)
Power Supply:	4...20 mA: 12–36 VDC 0...10 V: 18–30 VDC, ~8 mA RS485: 9–28 VAC / 9–36 VDC, ~6 mA
Protection:	Housing IP65, Probe IP40
Calculated Values:	Dew/frost point and absolute humidity (g/m³) at 1013 hPa can be linked to analog outputs; all values via MODBUS (RS485)
Operating Conditions:	Standard: -30–80 °C, <95 %RH (non-condensing) With LCD: -20–70 °C, <95 %RH (non-condensing)

*For full details visit our website: www.aplisens.com

Model	Code	Description
AR253		Atmospheric pressure, humidity and temperature transmitter

CO_2, humidity and temperature transmitter AR257

Technical data

Sensor & Probe:	Digital, ABS housing
Measurement Ranges:	CO_2: 0–10000 ppm Humidity: 0–95 %RH Temperature: -10...60 °C
Accuracy:	CO_2: typical in range 400...5000ppm: ±(40 ppm + 5%) CO_2: typical in range 0...399ppm: ±75 ppm ±10 % in other range Humidity: ±2.5%RH (0–90 %RH), ±3.5%RH (90–100 %RH) Histeresis: ±0,8%RH Temperature: ±0.5 °C
Repeatability:	±10 ppm, ±0.1 %RH, ±0.1 °C
Long-Term Stability:	±(5 ppm + 0,5%)/year, <0.25 %RH/year, <0.03 °C/year
Response Time (63%):	Humidity/Temperature: 10 s CO_2: 60 s (air velocity >3.6 km/h or 1 m/s)
Outputs:	Current: 2 × 0/4–20 mA, load R < (Usup–5)V / 22 mA Voltage: 2 × 0/2–10 V, load I < 4.5 mA (R > 2.5 kΩ) Digital: RS485, MODBUS-RTU (slave, not isolated)
Power Supply:	For 0/4–20 mA: 12–36 VDC, max. ~45 mA + (IO1+IO2) For 0/2–10 V: 18–30 VDC, max. ~35 mA (no load) RS485 version: 9–28 VAC or 9–36 VDC, max. ~60 mA
Operating Conditions:	Air and neutral gases (no water on probe) Temperature/Humidity: 0–50 °C, <95 %RH (non-condensing)

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Ordering code