

THE EASY-TO-USE HVACR MEASURING INSTRUMENTS RANGE

It's all about simplicity



HVACR measurement instruments

It's all about simplicity

Pressure / Temperature / Humidity / Air velocity / Air flow rate



Our portable HVACR instruments cover a broad spectrum of measurements, from temperature, relative humidity and pressure, to air velocity and air flow rate.

We offer a full range of easy-to-use instruments: dual input thermometer (Si-TT3), infrared thermometer (Si-TI3), thermo-hygrometer (Si-HH3), digital differential pressure manometer (Si-PM3), vane thermo-anemometer (Si-VV3), hotwire thermo-anemometer (Si-VH3), gas leak detector (Si-CD3) and refrigerant leak detector (Si-RD3).

What's more, our user-friendly Si-HVACR Measurement MobileApp displays measurement data right on your smartphone or tablet.



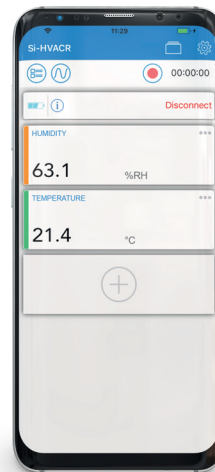
Mobile app

Si-HVACR Measurement MobileApp

With the Si-HVACR Measurement MobileApp, users can view and record measurements in real time.

Key features:

- View parameters in user-friendly format
- Access previously saved measurements and charts (average, min. & max. values, etc.)
- Generate reports (PDF, CSV or XML) and add up to four photos



Backlit LCD screen



Low consumption device



Magnetic backing for easy fixing



Carrying bag



Calculated values on mobile app

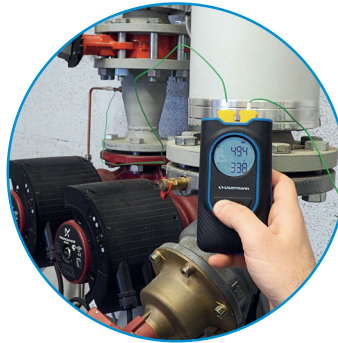
Applications

Our devices provide everything HVACR engineers need for their routine operations

MEASURE AIR VELOCITY, FLOW RATE
AND TEMPERATURE AT GRILLES



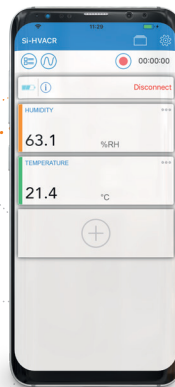
CHECK INLET AND OUTLET TEMPERATURES
FOR WATER HEATING SYSTEMS



MEASURE DIFFERENTIAL PRESSURE BETWEEN THE FILTER
INLET AND OUTLET ON AN AIR TREATMENT UNIT



CHECK INLET AND OUTLET
TEMPERATURES FOR DOMESTIC HOT
WATER SYSTEMS



Remote control; records readings
and sends reports
(except Si-CD3 and Si-RD3 models)



MEASURE AIR VELOCITY, FLOW RATE AND
TEMPERATURE IN A PIPE



MEASURE AMBIENT AIR TEMPERATURE AND RELATIVE
HUMIDITY (DEW POINT AND WET BULB TEMPERATURE ARE
CALCULATED)



DETECTS REFRIGERANT LEAKS
FROM A COOLING UNIT



DETECTS LEAKS OF COMBUSTIBLE GASES
UPSTREAM OF A BOILER BURNER







Heating



Ventilation Air conditioning



Refrigeration

 Si-PM3 Digital differential pressure manometer	Gas-fired boilers	Ventilation circuit	
	<ul style="list-style-type: none">- Measure pressure at the gas inlet valve.- Measure pressure drop (draught) at the flue.	<ul style="list-style-type: none">- Check filter fouling.- Measure extractor fan pressure and air flow rate.- Measure air flow in a pipe.	
Tip : connect a Pitot tube to the instrument to measure air flow in a pipe. Use the smartphone app to calculate air flow rate by entering the pipe coefficient.			
 Si-TT3 Dual input thermocouple thermometer	Hot water boilers	Multifunction	Refrigerators, freezers
	<ul style="list-style-type: none">- Compare the water temperature in the boiler inlet, outlet and return pipes.	<ul style="list-style-type: none">- Ambient air temperature.- Air temperature in the pipes.- Temperature in domestic hot water systems.	<ul style="list-style-type: none">- Measure superheat and sub-cooling of the refrigerant gas circuit.
Tip : a vital add-on for working on refrigeration systems if your manifold does not include a temperature probe.			
 Si-TI3 Infrared thermometer	Radiators		
	<ul style="list-style-type: none">- Measure radiator hot and cold spots to determine if venting is required.		
Tip : vastly improves speed and convenience (measurements delivered remotely in real time). Can measure ambient temperature (via app). Capable of checking various temperature increases, including electrical heating. Affix a black strip on non-black surfaces and adjust the emissivity of the surface (as per the manual) for accurate measurement.			
 Si-HH3 Thermo-hygrometer		Ventilation	
		<ul style="list-style-type: none">- Measure ambient air temperature and relative humidity.	
Tip : extreme relative humidity values (too high or too low) can pose hazards (allergies, germs, dust, mould, etc.). The app displays psychometric parameters such as dew point and wet bulb temperature.			
 Si-VV3 Vane thermo-anemometer		Air conditioning circuit	
		<ul style="list-style-type: none">- Measure air flow through system inlet and outlet grilles.	
Tip : input the pipe cross-section in the app to calculate average air flow rate in addition to air velocity.			
 Si-VH3 Hotwire thermo-anemometer		Air conditioning circuit	
		<ul style="list-style-type: none">- Measure air flow in pipes (and temperature).	
Tip : input the pipe cross-section dimensions in the app to calculate average air flow rate in addition to air velocity. Use the hotwire thermo-anemometer instead of a vane thermo-anemometer for low-velocity or laminar air flows.			
 Si-CD3 Gas leak detector	Gas-fired boilers		
	Detects leaks of combustible gases upstream of the boiler, at the inlet and inside the unit.		
Tip : a flexible probe keeps the device's sensor in contact with gas pipes in even the hardest-to-reach places. Pay special attention to joints in the circuit. Check the condition of the filter and replace it if necessary. Follow the manufacturer's recommendations for replacing the sensor.			
 Si-RD3 Refrigerant leak detector	Heat pumps	Air-conditioning units	Refrigerators, freezers
	Detects refrigerant leaks in every part of the cooling circuit.		
Tip : a flexible probe keeps the device's sensor in contact with gas pipes in even the hardest-to-reach places. Pay special attention to joints in the circuit. Check the condition of the filter and replace it if necessary. Follow the manufacturer's recommendations for replacing the sensor.			

Technical information



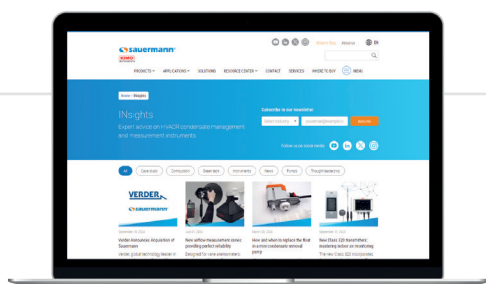
	Si-PM3	Si-HH3	Si-TT3	Si-TI3	Si-VV3	Si-VH3	Si-CD3	Si-RD3
Differential pressure	✓	-	-	-	-	-	-	-
Air velocity and air flow rate with Pitot tube (optional)	✓	-	-	-	-	-	-	-
Relative humidity	-	✓	-	-	-	-	-	-
Dew point	-	✓	-	-	-	-	-	-
Absolute humidity	-	✓	-	-	-	-	-	-
Enthalpy	-	✓	-	-	-	-	-	-
Mixing ratio	-	✓	-	-	-	-	-	-
Wet bulb temperature	-	✓	-	-	-	-	-	-
NTC temperature	-	✓	-	-	✓	✓	-	-
K thermocouple temperature	-	-	✓	-	-	-	-	-
Infrared temperature	-	-	-	✓	-	-	-	-
Ambient temperature	-	✓	-	✓	-	-	-	-
Air velocity	-	-	-	-	✓	✓	-	-
Air flow	-	-	-	-	✓	✓	-	-
Combustible gases	-	-	-	-	-	-	✓	-
Refrigerant gases	-	-	-	-	-	-	-	✓
Carrying bag	✓	✓	✓	✓	✓	✓	✓	✓
Magnet at backside	✓	✓	✓	-	✓	✓	-	-
Auto shut-off	10 min	10 min	10 min	15 sec	10 min	10 min	0 to 120 min	15 min
Battery life	170 h	250 h	400 h	14 h	120 h	20 h	20 h	> 12 h
Mobile app	✓	✓	✓	✓	✓	✓	-	-
Warranty	2-year	2-year	2-year	2-year	2-year	2-year	2-year	2-year

Measuring ranges



Differential pressure	-150 to +150 hPa -60 to 60 inH ₂ O	-	-	-	-	-	-	-
Air velocity with Pitot tube (optional)	2 to 80 m/s 394 to 15,748 fpm	-	-	-	-	-	-	-
Air flow rate with Pitot tube (optional)	0 to 9,999 m ³ /h	-	-	-	-	-	-	-
Relative humidity	-	0 to 100 %HR	-	-	-	-	-	-
Dew point	-	-40 to +60 °C _{td} -40 to 140 °F _{td}	-	-	-	-	-	-
Absolute humidity	-	0 to 600 g/m ³	-	-	-	-	-	-
Enthalpy	-	0 to 10,000 kJ/kg	-	-	-	-	-	-
Mixing ratio	-	0 to 10,000 g/kg	-	-	-	-	-	-
Wet bulb temperature	-	0 to 60 °C _{tw} 32 to 140 °F _{tw}	-	-	-	-	-	-
NTC temperature	-	-20 to +60 °C -4 to 140 °F	-	-	-10 to +60 °C 14 to 140 °F	-10 to +60 °C 14 to 140 °F	-	-
K thermocouple temperature	-	-	-200 to +1,300 °C -328 to 2,372 °F	-	-	-	-	-
Infrared temperature	-	-	-	-40 to +500 °C -40 to 932 °F	-	-	-	-
Ambient temperature	-	-20 to +60 °C -4 to 140 °F	-	0 to 50 °C 32 to 122 °F	-	-	-	-
Air velocity	-	-	-	-	0,4 to 30 m/s 78.7 to 5,905 fpm	0 to 30 m/s 0 to 5,905 fpm	-	-
Air flow rate	-	-	-	-	0 to 9,999 m ³ /h 0 to 9,999 m ³ /min 0 to 9,999 m ³ /s 0 to 9,999 cfm	0 to 9,999 m ³ /h 0 to 9,999 m ³ /min 0 to 9,999 m ³ /s 0 to 9,999 cfm	-	-
CH ₄	-	-	-	-	-	-	0 to 10,000 ppm 0 to 1% vol 0 to 20% LEL	-
Refrigerant gases	-	-	-	-	-	-	-	0 to 3 g/year 0 to 30 g/year 0 to 300 g/year

Professional solutions for condensate management and indoor air quality measurement



INsights

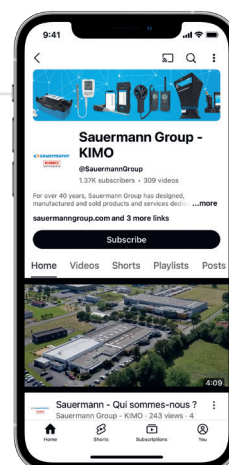
Case studies, useful information and practical advice for HVACR and indoor air quality professionals.

sauermanngroup.com/en-INT/insights

Sauermann on YouTube

Head to our YouTube channel for tutorials, webinars and product guides.

youtube.com/sauermanngroup



Scan me to view all our Sauermann and Kimo catalogues online



To learn more, please visit:
sauermanngroup.com