sauermann®

THE EASY-TO-USE HVACR MEASURING INSTRUMENTS RANGE

It's all about simplicity

sauermanngroup.com

HVACR measurement instruments

It's all about simplicity

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

Among other applications, the Si-PM3 differential pressure manometer can be used to check air treatment unit filters for clogging.

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

GET IT ON Google Play

Download on the App Store

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

CHECK INLET AND OUTLET TEMPERATURES FOR WATER HEATING SYSTEMS

MEASURE AIR VELOCITY, FLOW RATE AND TEMPERATURE AT GRILLES

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

Remote control; records readings and sends reports

(except Si-CD3 and Si-RD3 models)

CHECK INLET AND OUTLET TEMPERATURES FOR DOMESTIC HOT WATER SYSTEMS

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** - Measure pressure at the gas inlet valve. - Measure pressure drop (draught) at the flue.	**Ventilation circuit** - 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** - Compare the water temperature in the boiler inlet, outlet and return pipes.	**Multifunction** - Ambient air temperature. - Air temperature in the pipes. - Temperature in domestic hot water systems.	**Refrigerators, freezers** - 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** - 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** - 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** - 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** - 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


Si-PM3


Si-HH3


Si-TT3


Si-TI3


Si-VV3

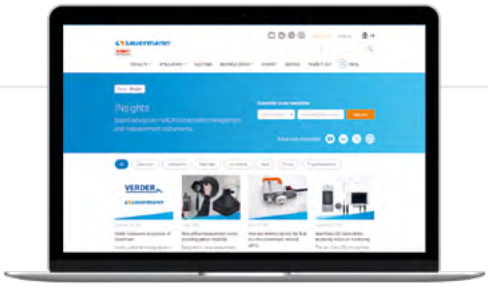

Si-VH3


Si-CD3


Si-RD3

	Si-PM3	Si-HH3	Si-TT3	Si-TI3	Si-VV3	Si-VH3	Si-CD3	Si-RD3
Differential pressure	-150 to +150 hPa -60 to 60 inH_20	-	-	-	-	-	-	-
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

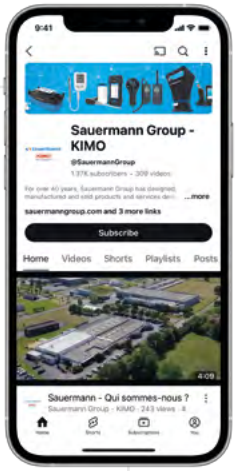
Professional solutions for condensate management and indoor air quality measurement



INsights

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

sauermanngroup.com/en-INT/insights



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