

MEASURING INSTRUMENTS

Export General Catalogue



ABOUT US



For more than 45 years, Sauer mann Group has designed, manufactured and sold products and services dedicated to the industrial and HVACR markets. The Group specifically focuses on the detection, measurement and control of indoor air quality (IAQ).

sauer mann®



Member of the Verder group, Sauer mann group operates two main brands:

- The **Sauer mann** brand, through condensate removal pumps, instruments and accessories, primarily addresses the needs of Heating, Ventilation, A/C or Refrigeration contractors.
- The **Kimo** brand, through measuring instruments, meets the air management needs in light commercial and industrial installations.

HIGH ACCURACY
UNMATCHED RELIABILITY
MULTIPLE APPLICATIONS

Measurement instruments: Sauer mann measurement instruments monitor a broad spectrum of indoor air quality parameters and serve a wide range of applications, from building ventilation (heating and air conditioning) systems, to cold-chain installations and combustion gas analysis. Backed by our testing laboratories and in-house research and development programme, Sauer mann instruments deliver the accuracy and reliability that HVACR engineers need.

LOW SOUND LEVEL
LOW FAIL RATE
HIGH PERFORMANCE

Condensate management solutions: Safe and effective condensate management for air quality systems can be a challenge. Sauer mann pumps are designed to look good, while our patented piston technology delivers whisper-quiet operation and unrivalled reliability.



North America

● ● Sauer mann N.A. Corp.,
New York City,
Yardley, PA, USA

EMEA – Europe, Middle East & Africa

● Si Invest SA,
Brussels, BELGIUM

● ● Sauer mann Industrie S.A.S.,
Chevry-Cossigny,
Montpon, FRANCE

● Sauer mann GmbH,
Leingarten, GERMANY

● Sauer mann UK Ltd.,
Blackpool, UNITED KINGDOM

● Sauer mann Iberica,
Barcelona, SPAIN

● Sauer mann Italia S.r.l.,
Bologna, ITALY

Asia Pacific

● Sauer mann China,
Shanghai, CHINA

● Sauer mann Australasia,
Sydney, AUSTRALIA

Content

Combustion gas
analysers

04



HVACR portable

08



Data loggers

24



Sensor
transmitters

26



Combustion gas analysers 04

- A new degree of efficiency 04
- Features 05
- Si-CA 030 / 130 / 230 06
- Mobile app 07

HVACR Portable 08

- Classes 50 / 110 / 210 / 310 08
- Multi-function 11
- Thermometers 12
- Infrared 13
- Indoor air quality monitors 14
- Air flow meter 15
- Measurement instruments 16
- Digital refrigerant manifolds 18
- Sauermann Pilot app 21
- Manifolds 22

Data loggers 24

- Mini / USB / Multi-function 25
- Connected 25

Sensor transmitters 26

- Monostats 28
- Class 110 / 210 R 28
- Multi-function 30
- Touch control & mobile app 32

Temperature probes 33

- CRYO 33
- Wire probes 33
- ABS head 33
- Connection 33

Manometers 33

- Inclined 33
- Vertical 33
- Differential pressure switch 33
- Accessories 33

Calibration benches 34

Our expertise 35

Combustion gas analysers

A new degree of efficiency



Sauermann offers a range of compact and intuitive analysers to enhance your performance.

Sauermann's combustion gas analysers feature the latest digital and metrology technologies, making measurements more reliable and cutting the amount of time heating engineers need to spend on-site. A user experience like no other!

Applications

- Boilers
- Water heaters
- Furnaces
- Industrial heating systems
- Burners
- Gas and diesel engines
- Industrial kilns
- Incinerators



Residential



Commercial



Industrial

Warranty



All devices come with a two-year warranty against manufacturing defects (subject to assessment by our after-sales department).

To find out more about our extended warranties and maintenance plans, please visit our website, or contact our Customer Service Department.



Features

Add a digital edge to your combustion analysis



Auto pump cut-off for high CO levels (adjustable)



Predictive maintenance with estimated sensor life & calibration reminders



Draft & differential pressure measurements



Mobile phone app for real-time remote display & control



Calculations for Combustion Efficiency, Excess Air & CO₂%



Data management with automatic logging & report creation



Si-CA 030



Si-CA 130



Si-CA 230

LCD display size	2.8"	4.3"	4.3"
Display resolution	320 x 240 pixels	480 x 272 pixels	480 x 272 pixels
Touch-screen display	No (5 buttons)	Yes (+ on/off button)	Yes (+ on/off button)
Dimensions (H x W x D)	9,9 x 19,4 x 4,9 cm 7.5 x 3.5 x 1.6"	9,9 x 19,4 x 4,9 cm 7.5 x 3.5 x 1.6"	11,2 x 28 x 5,5 cm 11 x 4.3 x 2"
Weight	350 g - 12 oz	350 g - 12 oz	825 g - 30 oz
No. of cells	Up to 3 (O ₂ , CO, NO)	Up to 3 (O ₂ , CO, NO, Low NO)	Up to 6 (O ₂ , CO, NO, Low NO, NO ₂ , Low NO ₂ , SO ₂ , Low SO ₂ , CxHy, H ₂ S)
Max. CO measurement	8000 ppm	8000 ppm	50 000 ppm with dilution
CO dilution	-	-	✓
Field replaceable pre-calibrated sensors	-	✓	✓
Flue gas velocity with Pitot tube	-	✓	✓
Measurement storage	Smartphone	Internal: 2000 data points + Smartphone and PC	Internal: 2000 data points + Smartphone and PC
PC software (wireless & USB)	-	✓	✓
Smartphone app (wireless)	✓	✓	✓
Combustion applications	Residential, Commercial	Residential, Commercial	Commercial, Industrial



To see our extensive range of other measurement instruments for heating applications, go to www.sauer mann group.com

Combustion gas analysers

A new degree of efficiency




LIGHTWEIGHT
350 g

All the essentials for combustion gas analysis

Si-CA 030

- Calculated CO₂% value
- CO safety monitoring in ambient air
- Combustion efficiency and excess air calculations
- Emissions values adjusted for reference O₂
- NOx capable with NO sensor
- Quick and easy pump On/Off control



Color display



Comprehensive, versatile analyser with touch-screen display


Si-CA 130

- Calculated CO₂% value
- CO safety monitoring in ambient air
- Combustion efficiency and excess air calculations
- Emissions values adjusted for reference O₂
- NOx and low NOx capable (optional)
- One Touch Pump On/Off with Purge
- Graphical data display
- Customisable gas analysis screen




Color display




TOUCH-SCREEN
DISPLAY




TOUCH-SCREEN
DISPLAY

State-of-the-art, industrial emissions analyser

Si-CA 230

- Ergonomic, light weight and durable design
- One touch pump On/Off with purge
- Graphical data display
- Customisable gas analysis screen
- Emissions values adjusted for reference O₂
- CO safety monitoring in ambient air



Total NOx & Low NOx Capable



Mobile app

Sauermann Combustion

The Sauermann Combustion app lets you control your Si-CA analyser remotely, view measurement results in real time, and customise them before exporting in the format of your choice.

- PC software with USB and wireless connectivity
- Fast, easy wireless connection
- Remote live view of combustion analysis data as list or graph
- Remote control to change settings
- Data saving, including automatic logging
- Report creation in PDF, CSV (for Excel) and XML formats




Download Sauermann Combustion app



Accessories

Customize your own analyser

 Our combustion gas analysers are available in many different configurations, with a wide range of accessories to choose from. Contact our Customer Services team for more information about our kits and accessories, and for guidance on choosing the right options for your needs.



Smart air temperature probe with 2 m cable
Ambient CO probe
Ambient CO₂ probe



180 mm flexible probe



180 mm, 300 mm & 750 mm,
and 1 m & 1.5 m probes



Draft probe



Differential pressure kit



Smoke pump



Double tube extension, 3 m



Wireless printer



SCU for condensate removal

HVACR Portable

Instruments

Temperature / Humidity / Pressure / Air velocity / Airflow /
Air quality / Gas detection / Light / Tachometry



Class 50, 110, 210 and 310

The range of portable devices is ideal for technicians responsible for maintaining heating, ventilation, and cooling installations.

- Wireless and Smart+ probes
- Graphical wide screen
- Data recording
- Ergonomic design



Graphical display



Magnetic protective cover



IP54 housing



Interchangeable probes & modules

Datalogger

Configure / Measure / Data processing

- Configuration of instruments
- Instruments management
- Reports creation
- Customized channels
- Insert commands
- Insert legends and statistics
- Add mathematical functions



Class 50, 110 and 210



Hygrometers

HD 50 / 110
HQ 210

- 3 to 98 %RH
- -40 to +180 °C
- -50 to +80 °C_{td}
- CO: 0 to 500 ppm
- CO₂: 0 to 5000 ppm

Luxmeters

LX 50

Illuminance measurement

- 0 to 10 000 lux
- 0 to 929 fc



Tachometers

CT 50 / 110

- Optical: 60 to 60 000 rpm
- Contact: 30 to 3000 rpm



Refrigerant leak detector

Si-RD3

- Detection of all the HCFC and HFC refrigerants
- Detection of mixtures 5% hydrogen - 95% nitrogen (Nidron 5)
- Heated diode sensor
- Flexible hose



Manometers

MP 50 / 51 / 55 / 110 / 111 /
112 / 115 / 120 / 130 / 210

- Differential pressure
- ±500 Pa to ±2000 mbar
- Air velocity with Pitot tube
- 3 to 85 m/s
- Atmospheric pressure
- 800 to 1100 hPa



Anemometers

LV 50 / 110 / 111 / 117 / 130
VT 50 / 110 / 115 / 210

- Hotwire and telescopic hotwire
- 0.15 to 30 m/s
- Vane probes: Ø14, 70, 100 mm
- 0.3 to 35 m/s
- Airflow: 0 to 99 999 m³/h



The + of class 210 and 310

Designed for the field

An overmoulding made of elastomere protects the instrument, guarantees shockproofing.

Expandable memory (AMI 310)

Internal memory of 1000 datasets of 20 000 measuring points. Built-in location for a micro-SD memory card.

Nonstop measurements

This generation of instruments has an interchangeable and rechargeable Li-ion battery.

Interchangeable probes

The probes use a mini-Din connecting cable which is compatible with all probes.

Interchangeable modules

1. Climatic conditions
2. Thermocouple (4 channels)
3. Pressure
4. U Coefficient



Accessories



ABS transport case



Protective housing



Backpack



Measuring cones



Debimo blades



Adjustable wedge for telescopic vane and hotwire probes



Pitot tubes

Multi-function

Class 310

AMI 310

AMI 310 is a multi-probe instrument which can measure up to 6 parameters simultaneously.



Wireless probes



Data processing software



Interchangeable probes & modules



Micro-SD card



Graphical display



Colour wide screen



- Pressure: ± 500 Pa / ± 2500 Pa / $\pm 10\,000$ Pa / ± 500 mbar / ± 2000 mbar
- Thermocouple: -200 to $+1760$ °C
- Pt100: -200 to $+600$ °C
- Humidity: 3 to 98 %RH

- CO: 0 to 500 ppm
- CO₂: 0 to 5000 ppm
- Air velocity: -5 to 35 m/s
- Airflow: 0 to 99 999 m³/h
- Gas detection: 0 to 10 000 ppm
- Tachometry: 30 to 60 000 rpm

- Dew-point: -50 to $+100$ °C_{td}
- Wet temperature: -50 to $+100$ °C_{tw}
- Enthalpy: 0 to 10 000 kJ/kg
- Combination ratio: 0 to 10 000 g/kg
- Calculation of U coefficient and WBGT index



Thermometers

Portable instruments

Temperature

Class 210

TM 210

The differential thermometer TM 210 allows the temperature of 4 thermocouple probes to be taken simultaneously and the differential value to be displayed.

This instrument is suitable for any process where it is necessary to control the temperature at several points.

- Temperature: -200 to +1760 °C
- 2 Pt100 channels
- 1000 datasets storage
- Calculation of U coefficient
- 4 thermocouple inputs



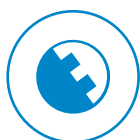
Wireless probes



Elastomere overmoulding



Data processing software



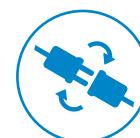
Interchangeable measurement modules



Thermocouple module
4 inputs



U coefficient module



SMART+ probes



TR 61/62

- 1 or 2 inputs
- Pt100
- -100 to +400 °C



TK 61/62

- 1 or 2 inputs
- Thermocouple K, J, T, S
- -200 to +1760 °C



Hold/Min/Max functions



Large choice of probes



General use

- -20 to 40 °C
- Penetration probe



Infrared

KIRAY 100 / 200 / 300

- Diagnose, inspect and check any temperature, with the advantage of using "no-contact" technology
- From -50 to +1850 °C



Indoor air quality monitors

Service, Residential & Commercial Applications

IAQ analysis



CO meters

CO 50

- CO: 0 to 500 ppm
- Temperature: -20 to +80 °C
- Hold function
- 2-line display



CO 110

- CO: 0 to 500 ppm
- Temperature: -20 to +80 °C
- CO max display, two configurable alarm thresholds
- 4-line display



Thermo-hygrometer - Air quality

HQ 210

- Hygrometry, temperature, CO₂ & CO gases and air velocity measurement (depending on models)
- Up to six measurements simultaneously
- Two inputs for Pt100 temperature (-200 to +600°C)
- Large graphic display
- Interchangeable measurement modules:
1 device = several possible ranges & parameters
- Supplied with calibration certificate



Air quality

AQ 110

- CO₂: 0 to 5000 ppm
- Temperature: -20 to +80 °C
- Hold function and min-max values, selection of units
- 4-line display

Air flow meter

Air flow / Air velocity / Pressure



Air flow meter

DBM 620

Compatible with all air vent types.

- Interchangeable hoods
- Quick and easy mounting
- Simultaneous display of airflow and temperature
- Automatic airflow direction (extraction or air blast)
- From 35 to 4,250 m³/h (11 to 1181 L/s)
- Supplied with 610 x 610 mm hood and transport case



Easily edit your reports with the SmartKap application



Switch between hoods quickly and easily



Patented folding frame & space-saving hoods storage



Transport case: compact storage system



Remote velocity grid

Designed for air velocity measurements on any type of large ceiling vent or diffuser.

4 optional hoods are available:

- 2.36 x 2.36 ft (720 x 720 mm)
- 2.36 x 4.33 ft (720 x 1320 mm)
- 1.38 x 4.99 ft (420 x 1520 mm)
- 3.35 x 3.35 ft (1020 x 1020 mm)

- Average air velocity from 24 points
- Telescopic and articulated pole: maximum length 2.05 m, 0 to 90°, positioning strut
- Backpack

HVACR range

It's all about simplicity

Digital differential pressure manometer

Si-PM3 (ref. [SIPM3](#))

This pocket-sized manometer can take two pressure measurements simultaneously, and you can connect a Pitot tube to measure air velocity and flow rate in a pipe.



Air velocity and air flow with Pitot tube (optional)



Measuring range:
-150 to +150 hPa
(-60 to 60 inH₂O)



Dual input thermocouple thermometer

Si-TT3 (ref. [SITT3](#))

This instrument uses thermocouple technology to take two temperature readings at once (between -200 °C/-328 °F and 1 300 °C/2 372 °F). Ideal for checking the inlet and outlet temperatures of water heating systems.



Dual channel K thermocouple (2 probes included)



Accessory : 1 x K thermocouple wire probe class 2, between -40 and +260 °C (40 to 500 °F) (reference : SIACCTC)

Thermo-hygrometer

Si-HH3 (ref. [SIHH3](#))

This thermo-hygrometer is a turnkey solution for measuring temperature and relative humidity, while dew point and wet bulb temperature are calculated via the accompanying mobile app.



Measuring range:
from 0 to 100%RH



Hotwire thermo-anemometer with telescopic probe

Si-VH3 (ref. SIVH3)

Sauermann's palm-sized Si-VH3 hotwire thermo-anemometer comes with a highly sensitive and accurate telescopic probe that easily measures air flow rate, velocity and temperature.



80 cm (31.5") telescopic probe with double graduation



Vane thermo-anemometer with built-in vane probe

Si-VV3 (ref. SIVV3)

This thermo-anemometer, which features a vane probe with a long cable, can be used to measure air velocity and temperature at an air vent. Air flow rate is calculated via the accompanying mobile app.



Air velocity and air flow meter



Large vane probe with 2 m (78.74") cable

Infrared thermometer

Si-TI3 (ref. SITI3)

Sauermann's Si-TI3 infrared thermometer is the ideal solution for contactless diagnosis, inspection and checking of surface temperatures.



Optical: D.S. 12:1



Adjustable emissivity



NEW

Digital refrigerant manifolds

Refrigerant handling, maintenance and commissioning



2-way manifold
Si-RM350 (ref. 28138)

4-way manifold
Si-RM450 (ref. 28139)

These manifolds can be used to commission and service all types of refrigerant-based installations: heat pumps, air conditioning, refrigeration and reversible systems, from domestic systems to complex industrial machines.

Very easy to operate, this equipment features the latest technologies for fast, comprehensive system diagnostics. Its smart digital assistant guides the operator in every situation to help him achieve his objectives in the best possible way.



**A1 / A2L / A3
refrigerants compatible**



**Durable anti-reflective
glass screen**



**Safe and rugged
for long data logging**



**High-speed NTC temperature
sensors**



**User-friendly troubleshooting
with diagnostics**



**New smart assistant app:
Sauermann Pilot**



Wireless vacuum probe

Si-RV4 (ref. 28143)

- High accuracy Pirani® sensor, 50 microns deep vacuum
- A1, A2L and A3 refrigerants compatible
- Quick & Strong wireless auto connection (100 m range)
- Real time readings on manifold and mobile app
- IP54 dust & rain proof probe



Wireless pressure probe

Si-RP4 (ref. 28144)

- A1, A2L and A3 refrigerants compatible
- Light and curved design for easy plug-in
- Quick & Strong wireless auto connection (100 m range)
- Real time readings through direct connection to mobile app
- IP54 dust & rain proof probe

Wireless temperature clamp

Si-RT7 (ref. 28142)

- Innovative "Parrot" shape to handle 6 to 42 mm pipes
- High-speed NTC temperature sensor with high accuracy
- Quick & Strong wireless auto connection (100 m range)
- Real time readings on manifold and mobile app
- Measurement range: -20 to 85°C
- IP54 dust & rain proof probe



Wired temperature clamp

Si-RT2 (ref. 28140)

- Innovative "Parrot" shape to handle 6 to 42 mm pipes
- High-speed NTC temperature sensor with high accuracy
- Wide measurement range: -50 to 120°C



Wired temperature probe for large diameter pipe

Si-RT5 (ref. 28141)

- Easy grip for large pipes up to 100 mm diameter
- High-speed NTC temperature sensor with high accuracy
- Measurement range: -20 to 85°C



Wireless temp-hygrometer (psychrometer)

Si-TH4 (ref. 28145)

- Fast and accurate Dry Bulb and Wet Bulb temperatures
- Outdoor, indoor and in-ducts measurements
- Flexible probe with sliding magnet for easy positioning
- Quick & Strong wireless auto connection (100 m range)
- Real time readings on manifold and mobile app



Digital refrigerant scale

Si-RS1 (ref. [28153](#))

- Extra Large Back-lit LCD Display
- 3 Display Modes (kg, lb, oz)
- 243 lb (110 kg) Capacity
- Strong Aluminum Base
- Rugged, Non-Slip Platform
- Accuracy $\pm 0.05\%$ of Reading








Two stage Vacuum pump






Si-RVP1 (110V : ref. [28155](#) / 220V : ref. [28154](#))

Si-RVP3 (ref. [28156](#))

- Motor: 1/3 HP (Si-RVP1) and 1/2 HP (Si-RVP2 and Si-RVP3)
- Free air displacement (50/60 Hz) : 85/70 lit/min (Si-RVP1) and 170/142 lit/min (Si-RVP2 and Si-RVP3)
- Spark free, A2L & A3 refrigerant (Si-RVP3 - Europe only)
- Refined cartridge machining process creates an improved surface finish extending the longevity of the pump life
- Expanded internal oil path creates less friction and ultimately less heat
- Upgraded seals insure maximum vacuum

Available kits and references

	 Si-RM350 (x1)	 Si-RT2 (x2)	 Si-RT7 (x2)	 Si-RV4 (x1)	 Hoses (x3)
Kit 1 : 28146	●	●			
Kit 2 : 28159	●	●			●
Kit 3 : 28147	●		●		
Kit 4 : 28160	●		●		●
Kit 5 : 28161	●	●		●	

	 Si-RM450 (x1)	 Si-RT2 (x2)	 Si-RT7 (x2)	 Si-RV4 (x1)	 Hoses (x4)
Kit 1 : 28162	●	●			
Kit 2 : 28163	●	●			●
Kit 3 : 28164	●		●		
Kit 4 : 28165	●		●		●
Kit 5 : 28148	●		●	●	
Kit 6 : 28149	●		●	●	●

Mobile app

Sauermann Pilot

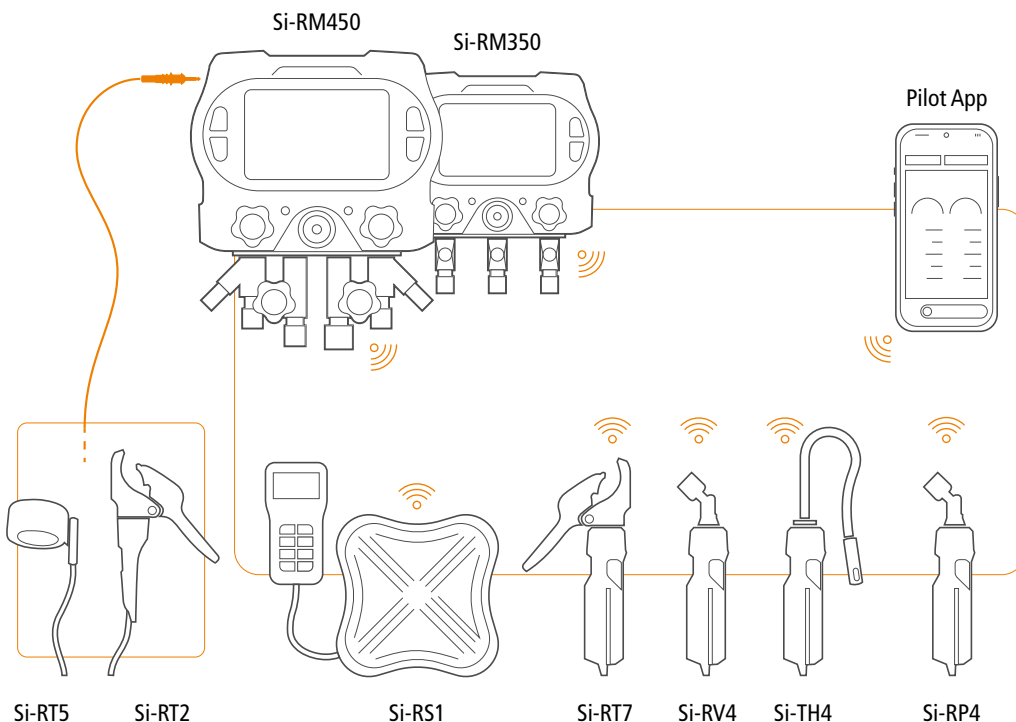
The Si-RM350 and Si-RM450 manifolds, their probes and accessories can be interconnected independently. Additional functionalities can also be accessed via the new Sauermann Pilot mobile application.

Available on iOS and Android, this app provides invaluable assistance with a precise purpose: **to simplify and speed up the work of HVACR professionals.**

Digital tech leveraged to help technicians

- Real time control, readings display and recordings
- Create, sign and send reports with pictures
- Internal detailed customer database management

Download the app
Sauermann Pilot



Manifolds

100% mobile application

Smart wireless manifold probes with dual valves Si-RM3 (ref. 25555)

The Si-RM3 manifold comes with two pressure probes (Si-RM1) that accurately measure high side and low side pressure and two temperature probes (Si-RM2) that are used to accurately and simultaneously provide real-time superheat/sub cooling calculations.



**Built-in Schrader®
core**



**Wireless connectivity
(range up to 30 metres)**



Smart wireless vacuum probe with dual valves Si-RV3 (ref. 25554)

Sauermann's Si-RV3 vacuum probe supports the quick, safe evacuation of refrigeration systems and heat pumps with highly accurate measurements.



**High accuracy
Pirani® sensor**

Combined manifold with smart wireless probes and 2-channel by-pass Si-RM13 (ref. 25558)

This Si-RM13 combines the sturdiness of the analog manifold with digital smart wireless temperature (Si-RM1) and pressure probes (Si-RM2). This premium package includes a traditional 2-channel analog manifold body (by-pass type) with flexible hoses and a durable block made of anodised aluminum.



**Built-in Schrader®
core**



**Wireless
connectivity (range
up to 30 metres)**



All-in-one mobile app

Si-Manifold

The **Si-Manifold app** for iOS and Android provides wireless connectivity up to a range of 30 metres. It has the ability to store and update up to 126 refrigerants, including environmentally-friendly low global warming potential (GWP) and natural refrigerants.

Pressure, condensation/evaporation, pipe, and ambient temperatures are instantly provided on the Si-Manifold app, as are vacuumeter measurements. Providing these measurements eliminates the need for manual calculations.



Wireless connectivity (range up to 30 metres)



Stores up to 126 refrigerants



Gauge, table and graphic visualisations



Export reports

Download Si-Manifold



Refrigerant leak detector

Si-RD3 (ref. **SIRD3**)

The Si-RD3 refrigerant leak detector uncovers leaks of most common refrigerant gases to a high degree of sensitivity, including all HCFC and HFC refrigerants, R1234yf, R1234ze, R290, R600a, and 5% hydrogen–95% nitrogen mixtures (Nidron 5 and Trace-A-Gas).



30 cm flexible probe



Visual and audio alarm

Data loggers

Kistock

Temperature / Humidity / Pressure / Air quality / Light / Current / Voltage / Pulse / Water pressure




Up to 5 YEARS
battery life


Anti-theft system

With the range of Kistock stand-alone data loggers and Kilog software, you can collect and analyse all the metrics of industrial climate control engineering processes, monitor the climatic environment of a chamber and respond to the traceability requirements of agri-food and pharmaceutical industries during transport.


Multi Application


2 programmable alarm thresholds


Up to 2,000,000 measuring points


Kilog software (option)

ACCESSORIES



Probes



KNT 320



Kilog and Kilog-Lite



Anti-theft kit

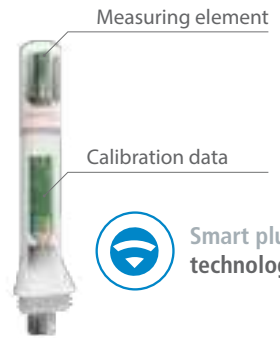


Key benefits



Mobile application

- Wireless pairing
- Data visualisation
- Free download



Smart plug technology

Smart and interchangeable probes (class 320)

- Advanced technology
- Integrated calibration data



NEW

Mini wireless KH 30

Temperature, humidity

- -40 to +70 °C
- 0 to 100 %RH
- IP68
- Up to 8 years battery life
- Android & iOS app



Mini KH 50 / KT 50

Temperature, humidity

- -40 to +70 °C
- 5 to 95 %RH
- USB connection
- KH 50: IP20
- KT 50: IP65



USB KH 120 / KT 120

Temperature, humidity

- -40 to +70 °C
- 5 to 95 %RH
- Integrated software
- USB connector



KT 50 / KT 120
EN 12830



Multi-function KH 220 / KT 220 / KTT 220

Temperature, humidity, water pressure, light, current, voltage, pulse

- -200 to +1760 °C
- 5 to 95 %RH
- 0 to 10 000 lux
- 0 to 20 bar
- 0 to 20 mA, 0 to 600 A
- 0 to 10 V



Interchangeable probes



Connected

KT 320 / KTT 320 / KCC 320
KPA 320 / KP 320-321

Temperature, humidity, pressure, atmospheric pressure, air quality, current, voltage, pulse



Mobile application

- -200 to +1,760 °C
- 5 to 95 %RH
- 0 to 5000 ppm
- 800 to 1100 hPa
- -10 000 to +10 000 Pa
- 0 to 20 mA, 0 to 600 A
- 0 to 10 V



Wireless pairing

Transmitters

Regulation and monitoring of HVAC

Pressure / Temperature / Humidity / Air velocity and air flow / Air quality / Solar / Light / Atmospheric pressure



Designed and manufactured in France, Sauermann and Kimo's range of transmitters can be used in all industries, in the service sector or in OEM.

From the simplest to the most elaborate, these advanced measuring instruments can be adapted to any type of application thanks to their configuration and calculation possibilities.



Configurable outputs



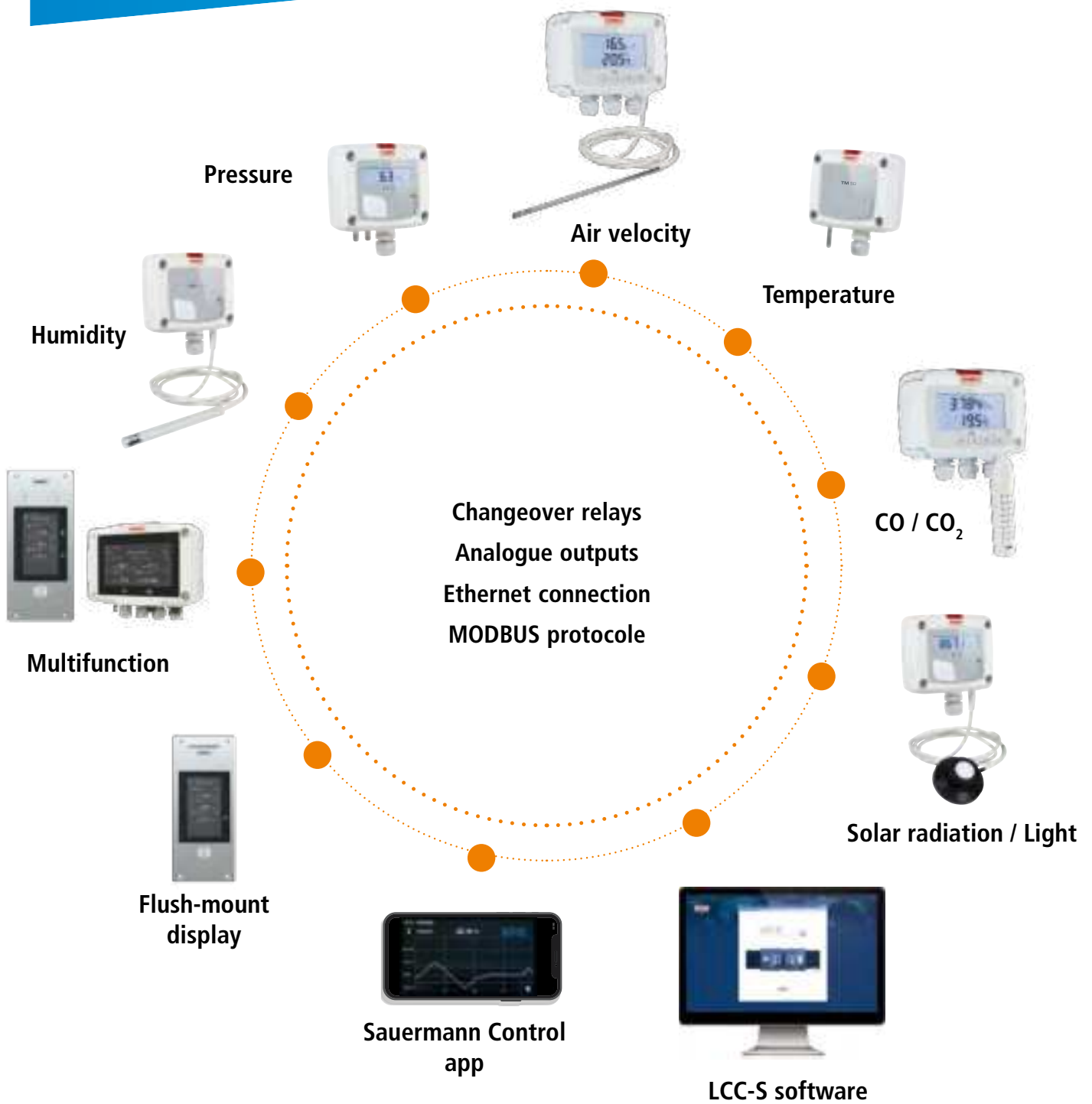
Visual and audible alarm



Tightness ABS housing

Overview

Transmitter sensors



Monostats & classes 110/210

Transmitter sensors

Pressure

PST / CP 110 / CP 116 / CP 210-R

- ± 100 Pa to $\pm 10\,000$ Pa
- 3 to 85 m/s
- 800 to 1100 hPa (CP 116)
- -100 to +400 °C (CP 210-R)



Humidity

HST / TH 110 / HM 110 / TH 210-R

- 0 to 100 %HR
- -40 to +180 °C



Air velocity

CTV 110 / CTV 210-R

- 0 to 30 m/s
- 0 to 99 999 m³/h
- 0 to +50 °C



Simplified calibration

Electronic board and measuring element connected to the front side of the sensor, which allows to configure and calibrate your device without causing any damage.



Temperature

TST / TM 50 / TM 110 / TM 210-R

- -100 to +400 °C
- IP65 protection



CO / CO₂ transmitters

Kimo designed CO / CO₂ transmitters in order to meet with requirements of new standards and decrees on air quality.

CO

CO 110 / COST-S

- 0 to 500 ppm

CO₂

CO 112 / COT 212-R / CO2ST-S

- 0 to 5000 ppm
- 0 to +50 °C



Solar radiation / Light

CR 110 / LR 110

- 0 to 1500 W/m²
- 0 to 10 000 Lux



LCC-S software

Configuration software for monostats, class 110, 210 and 310 transmitters

- Compatible with the whole range
- Configure your devices
- Save data
- View your measurements in real time
- Protection
- Adjustable alarm thresholds
- Save a configuration to apply it to other devices



Multi-function

High-precision transmitters



Multi-function transmitter

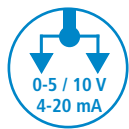
Si-C320

Graphical touch screen
Display and measure 4 parameters simultaneously
IP66 housing, VHP resistant
4 RCR relays (option)
4 analogue outputs
Wireless communication with mobile application (option)

- -10 000 to +10 000 Pa
- 0 to 100 %HR
- -80 to +150 °C
- 0 to 30 m/s
- 0 to 99 999 m³/h
- 800 to 1100 hPa
- CO: 0 to 500 ppm
- CO₂: 0 to 10 000 ppm
- COVT: 0 to 1000 ppb
- CO₂eq: 400 to 2000 ppm
- 800 to 1100 hPa



**Multifunction
for VAC and IAQ
applications**



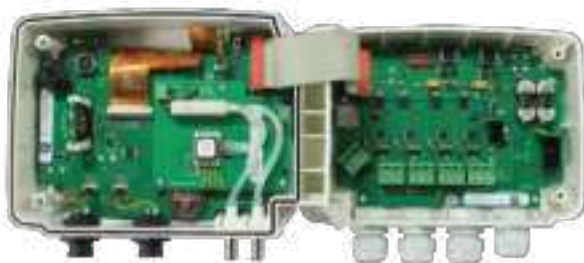
**4 analogue
outputs**



**RS-485 interface
for Modbus RTU
protocol**



**4 visual and
audible alarms**



24 V_{DC} / 24 V_{AC} power supply

Other calculated parameters

- Absolute humidity, dew point, specific humidity, humidity temperature, enthalpy and freezing point.



Interchangeable probes

Si-C320 and Si-CPE320

Temperature / Humidity / Air velocity / CO / CO₂ / Pressure



Flush-mount multi-function transmitter

Si-CPE320

Special for clean room
 Front calibration
 Simultaneous display of 1 to 3 parameters
 ABS IP66 housing, vaporized hydrogen peroxide resistant
 3 configurable analogue outputs
 MODBUS Output

- Measuring range:
 from -250 to +250 Pa



3 visual and audible alarms



Brushed 316L stainless steel front panel



Touch screen



Connection to a computer at the front

Flush-mount display

Si-ATE320

Special for clean room
 Simultaneous display of 1 to 3 parameters
 ABS IP66 housing, vaporized hydrogen peroxide resistant
 MODBUS Output



Large display transmitter



Multi-function transmitter

CA 310

1 SPI-2 or MVA card input
 3 RCR relays
 Digital output (option)
 Supplied with adjusting certificate

- From -10 000 to +10 000 Pa
- From 0 to 100 %HR
- From -50 to +180 °C
- From 3 to 85 m/s
- From 0 to 99 999 m³/h
- CO : from 0 to 500 ppm
- CO₂ : from 0 to 5000 ppm
- From 800 to 1100 hPa
- From 0 to 10 V
- De 0 à 20 mA



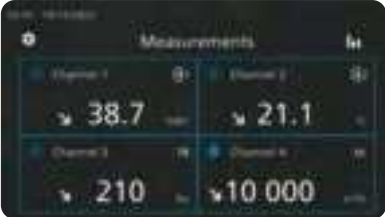
Probes for CA 310

Temperature / Humidity / Air velocity / CO / CO₂ / Pressure...

NEW TECHNOLOGIES

Touch control and mobile application

Full Si-C320 and Si-CPE3220 setup



Trend indicator: up to 4 parameters displayed simultaneously



History: chart display



Touch screen
No physical buttons: better sealing and less mechanical failure



Simultaneous display of up to 4 measurements
Chart form display



Full device setup



Indicator lights
blue light: wireless connection
green light: power on



Sauer mann Control app

It is also possible to control and configure the class 320 transmitters with a computer, a smartphone or a tablet via the Sauer mann Control application, which allows the user to manage all the device's parameters via its wireless connection module (USB wired for computers). This app can also easily update the firmware of the instrument and its probes.

- Wireless connection with iOS and Android
- Full device control
- Downloading recorded measurements
- One-click firmware update
- Remote measurement viewing

Temperature

Probes

Thermocouple / Pt100
Head / Cable / ABS probes



CRYO and
Wire probes



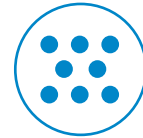
ABS head



Connection head



Measuring range
-200 to +1150 °C



Calibration
-200 to +1500 °C



Pt100
probes



Thermocouple
probes

Liquid column manometers

Differential pressure



Inclined

- 0-5 to 0-80 mmH₂O
- Units: Pa, daPa...



Vertical

- 0-100 mmH₂O to 0-2.6 bar
- Units: mbar, Pa...



Differential pressure switch
Si-DPMS

- Setting ranges in Pa:
20-200, 50-500, 200-1000, 500-2500,
1000-5000

ACCESSORIES

To fit any installation with
proper connections

- Liquid for manometer
- Tubes, junctions
- Pressure connections, wall-crossing
connection...



Our expertise

Manufacturing / Laboratories / R&D



Customer service portal

For all requests concerning repair, returns or calibration, connect to our Customer Service Portal.



Accessible
24h/7



Quick and
simple



Real-time
tracking

[Sauermann.site/Help](https://www.sauermann.com/site/Help)

State-of-the-art facilities and highly skilled staff

The Sauermann Group relies on cutting edge expertise, with more than 20 experts working in 1500 m² of testing and calibration laboratories around the world, with production lines in France, the United States and China. Our re-

search and development is conducted in-house by a young team of 20 engineers and 10 forward-thinking technicians. Their quest for innovation and patents is focused on ergonomics, digitalisation and connected devices, along with the constant improvement of the electronic and mechanical quality of our measuring instruments and condensate pumps.

Our in-house laboratories offer testing, adjustment and calibration services for a wide range of measuring instruments.

They are also one of the pillars of our high quality after-sales service. Our after-sales service covers multiple state-of-the-art activities to address all parameters related to indoor air quality.



Calibration
and adjustment



Repair /
maintenance



Hotline

Since more than 45 years, Sauermann has been developing its expertise in metrological services in many fields:

- Temperature
- Hygrometry
- Air flow rate
- Air velocity
- Pressure
- Gas analysis
- Weighing
- Radiometry
- Tachymetry
- Luxmetry
- Electricity



Storage of sensitive products: ambient monitoring

Indoor air quality is of prime importance in enclosed spaces such as commercial and public buildings. The accuracy and reliability of the instruments used to monitor the status of air handling unit (AHU) filters is therefore essential.

Air handling unit filters act as protective shields for the comfort and health of users, but they can also become clogged. To prevent clogging, protect the air handling system and save energy, it is essential to monitor the differential pressure across these filters.

Parameters to be monitored : Temperature / Hygrometry

CONTINUOUS MONITORING

The climatic stability of the enclosures is influenced by external factors and door openings. It therefore requires precise temperature and hygrometry monitoring, provided by Kimo instruments that alert operators to any deviation.

Kimo's extensive range of transmitters can be positioned outside the enclosure with a remote sensor combining temperature and humidity. Data is displayed and transmitted in real time to the monitoring system, via analog or digital signals or programmable electrical contacts.

DATA LOGGING

Data recording and archiving are essential for audits, as well as for observing and studying the behaviour of climatic chambers. They help

minimise incidents linked to variations in temperature or humidity.

The Sauermann and Kimo recording solutions offer autonomous monitoring of these parameters over long periods, with alerts in the event of variations. They provide a complete history in the form of graphs or tables of values, to create detailed reports on their operation.

METROLOGICAL SERVICES

Strict metrological monitoring and calibration of temperature and humidity sensors are essential to ensure measurement accuracy. Regular recalibration detects the slightest drift and preserves the traceability required by quality audits.

Sauermann's teams visit sites throughout France to work on all types and brands of sensors. Our highly qualified technicians carry out these

calibration services on state-of-the-art test benches linked to national standards, guaranteeing optimum calibration accuracy.



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



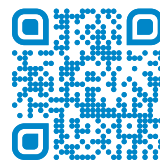
Sauermann on YouTube

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

youtube.com/sauermanngroup



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