



**Smart wireless manifold probes** 





## The Future of HVACR

## The digital manifold revolution

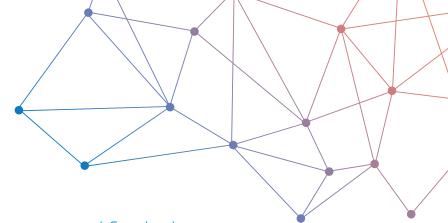
A career in HVACR requires the use of many tools. For many technicians working in the heating and air conditioning trade, this often means carrying around multiple instruments to complete different installation and servicing tasks.

In recent years, digital manifolds are becoming a lot more popular because readings can be done quickly and reliably without the need for manual calculations. With global demands for HVACR technicians expected to rise and regulations requiring closer monitoring of refrigerants, our digital manifolds and vacuometers should be part of every installer's toolbox.



Our line of digital manifold and vacuometer devices combine benefits that were previously available to installers only when they utilised multiple instruments.

With an ergonomic design that is ideal for accessing tight or compact places, the devices are lighter than competitor models and offer all-in-one solutions that make it a valuable addition to installers.



NEW

# Sauermann's manifold

## The ultimate all-in-one solution





Si-RM3

**Smart wireless manifold probes** 



Si-RV3

Smart wireless vacuum probe



Si-RM13

Combined manifold with smart wireless probes and 2-channel by-pass



Si-Manifold Mobile application

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#### **CONNECTED PROBES**

## SI-RM3

## **Smart wireless manifold probes**



Sauermann's Si-RM3 provides installers with an ergonomic tool that fits into tight and compact places, a Si-Manifold App with Bluetooth® up to 30 meters, and the ability to take a number of important readings in an all-in-one device.

It includes two pressure probes that precisely measure high side and low side pressure (from -1 to 60 bar) and instantly display the condensation/evaporation temperatures for up to 126 refrigerants on the Si-Manifold App, including new low global warming potential (GWP) and natural refrigerants.

Two temperature probes are used to accurately and simultaneously provide real-time superheat/subcooling calculations on the Si-Manifold App during the refrigeration process.

A second connector allows for the charging and discharging of the refrigerant, and a built-in Schrader® core avoids leakages when you connect the hose.



#### **Convenient design**



Built-in Schrader® cores



Accurate measurement of high and low pressure



Real time superheat and subcooling calculations



Measurement during charging



Bluetooth® 4.2 up to 30 m / 98 ft



## Accurate measurements of high and low pressure

Two pressure probes make this possible and provide condensation/evaporation temperatures.

## Measurement during charging

A second connection allows charging of the system, and the built-in Schrader® core prevents leaks during connection/disconnects.





## Real time superheat and subcooling calculations

Two temperature probes used with the Si-Manifold App make this possible and eliminate the need for manual calculations.

#### **Technical data**

	Si-RM1
Measuring range	-1 to 60 bar / -14 to 870 psi
Pressure sensing accuracy	$\pm 0.5\%$ of full scale
Overload	65 bar / 943 psi
Burst pressure	150 bar / 2175 psi
Battery life	250 h
Protection	IP54

	Si-RM2
Measuring range	-40 to 150°C / -40 to 302°F
Temperature accuracy	±1.3°C / ±2.4°F
Temperature sensor	High accuracy NTC thermistor
Pipes diameter	6 to 42 mm / 0.2" to 1.7"
Cable	2 m / 6 ft length
Protection	IP54

### VACUUM MEASUREMENT



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

It has an ergonomic design, an excellent Si-Manifold App with Bluetooth® up to 30 m, and a high-precision Pirani® sensor that provides highly accurate deep vacuum measurements and is designed to accurately and quickly measure vacuum levels from 25,000 to 5 microns in eight different scales (micron, Pa, hPa, mbar, Torr, mmHg, inHg, inH<sub>2</sub>O).

It also provides H<sub>2</sub>O evaporation temperature on the Si-Manifold App in real-time.

A second connector allows for the discharging of the refrigerant, and a built-in Schrader® core avoids any gas leakages when you connect the hose.



Convenient design



Built-in Schrader® cores



Vacuum measurement during evacuation



Bluetooth® 4.2 up to 30 m / 98 ft



High accuracy Pirani<sup>®</sup> sensor



### Impressive resolution

- 1 micron from 0 to 1,000 microns
- 10 microns from 1,000 to 2,000 microns
- 100 microns from 2000 to 10,000 to microns
- 500 microns from 10,000 to 25,000 microns

## High Precision Pirani® sensor for vacuum measurement

Enables the quick, safe evacuation of refrigeration systems and heat pumps. Designed to accurately measure vacuum levels from 25,000 to 5 microns in eight different scales.





## Vacuum measurement during evacuation

A second connection allows flow through the probe and the built-in Schrader® core prevents leaks during connection/disconnects.

#### **Technical data**

	Si-RV3
Measuring range	25,000 to 5 microns
Pressure sensing accuracy	$\pm 10\%$ of the measured value $\pm 10$ microns
Overload	10 bar / 145 psi
Burst pressure	27.5 bar / 400 psi
Battery life	250 h
Duataction	IDE 4

Protection IP5



Download Si-Manifold App

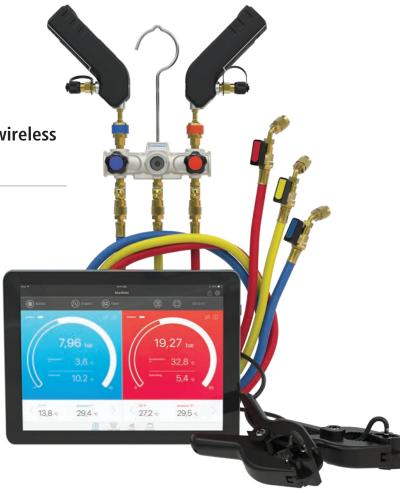




### **COMBINED MANIFOLD**

SI-RM13

Combined manifold with smart wireless probes and 2-channel by-pass



Sauermann's Si-RM13 combines the sturdiness of the analog manifold with the Si-RM3's smart wireless manifold probes.

A number of HVAC professionals have used analog manifolds for their entire careers and feel comfortable with their proven mechanical design. They want a combination of analog sturdiness with the digital advantages of the Si-RM3.

In this premium package, installers can take advantage of both. It includes a traditional 2-channel analog manifold body (by-pass type) with flexible hoses and a durable block made of anodized aluminum.

Installers can also utilize the numerous benefits from the smart wireless manifold probes for pressure and temperature measurements, as well as the Si-Manifold App.



**Convenient design** 



Built-in Schrader® cores



Accurate measurement of high and low pressure



Real time superheat and subcooling calculations



Measurement during charging



Bluetooth® 4.2 up to 30 m / 98 ft



### **Extra durability**

Built to offer extra durability with an analog manifold containing a sturdy block made of anodized aluminum.

## Accurate measurements of high and low pressure

Two pressure probes make this possible and provide condensation/evaporation temperatures.





## Real time superheat and subcooling calculations

Two temperature probes used with the Si-Manifold App make this possible and eliminate the need for manual calculations.

#### Accessories for the manifold range



### R410 gas connector

 Adaptation connector for R410 gas



#### **Flexible hoses**

- Set of 3 flexible hoses
- 1 m length (39")
- With stop valves



### **Velcro® temperature probe**

- Temperature probe for large diameter pipe
- -40 to 150 °C



**Extension cable** 

• Length: 5m



## Si-Manifold

## All-in-one mobile application



The Si-Manifold App for iOS and Android provides Bluetooth® technology up to 30 meters. 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 vacuometer measurements. Providing these measurements eliminates the need for manual calculations.



Bluetooth® 4.2 up to 30 m / 98 ft



Stores up to 126 refrigerants



Gauge, table and graphic visualisations



Report exportation



## **Everything you need in one app**

- Data logging
- Tightness test
- Pressure target settings
- Vacuum function
- Heating and cooling functions
- etc

## **User friendly**

Easy-to-read digital gauge, table and graphic visualisations.





## Save and export

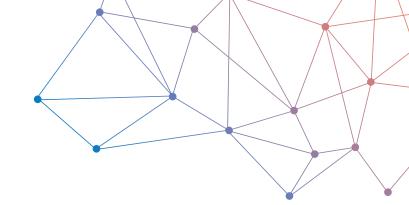
- Report exportation in PDF, CSV and XML formats that can be sent by email.
- Dataset can be saved and restarted. This function is very useful for long interventions.



### **Download Si-Manifold**









More information sauermanngroup.com