





### **DATA SHEET**

# TEMPERATURE AND TEMPERATURE/ HYGROMETRY PROBES

## For Si-RM350 and Si-RM450 Manifolds

#### **Temperature probes**

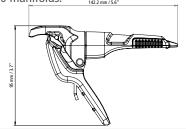
Designation: Si-RT2 Sales reference: 28140

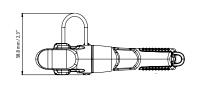


This wired probe provides accurate temperature measurement to enable the calculation of superheat and subcooling values in air conditioning, refrigeration and heat pump installations. Its parrot-shaped clamp ensures perfect contact with pipes from 6 to 42 mm.

The Si-RT2 allows all types of refrigerant-based installations to be serviced quickly, thanks to the excellent responsiveness of its NTC sensor. It connects easily to the Si-RM350 and Si-RM450 manifolds.







Temperature sensors	NTC	
Temperature sensor range	-50 to 120°C (-58 to 248°F)	
Temperature accuracy*	From -20 to 85°C (-4 to 185°F): ±1°C (±1.8°F)	
Maximum operating temperatures	Jaws: 150°C (302°F) - Handle: 90°C (194°F)	
Available units	°C, °F	
Resolution	0.1°C, 0.1°F	
Pipes diameter	6 to 42 mm (0.2" to 1.7")	
Cable	2 m (6 ft) length with strengthened 3-point jack connector, Ø3.2 mm, in PVC, max. temperature 105°C (221°F)	
Storage temperature	From -20 to 50°C (-4 to 122°F)	

<sup>\*</sup>All accuracies specified in this document were conducted under laboratory conditions & can be guaranteed for measurement carried out in the same conditions, or carried out with calibration compensation.

# Designation: Si-RT5 Sales reference: 28141

This wired probe provides accurate temperature measurement to enable the calculation of superheat and subcooling values in air conditioning, refrigeration and heat pump installations. Its hook-and-loop fastener makes it particularly suitable for large pipes up to 100 mm diameter.

The Si-RT5 allows all types of refrigerant-based installations to be serviced quickly, thanks to the excellent responsiveness of its NTC sensor. It connects easily to the Si-RM350 and Si-RM450 manifolds.



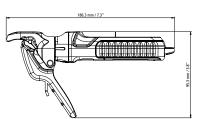
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Temperature sensors	NTC
Temperature sensor range	-20 to 85°C (-4 to 185°F)
Temperature accuracy*	-20°C to 70°C (-4 to 158°F): ±0.3°C (±0.6°F) 70°C to 85°C (158 to 185°F): ±0.5°C (±0.9°F)
Available units	°C, °F
Resolution	0.1°C, 0.1°F
Pipes diameter	max 100 mm (max. 3.9")
Cable	2 m (6 ft) length with strengthened 3-point jack connector, Ø3.2 mm, in PVC, max. temperature 105°C (221°F)
Storage temperature	From -20 to 50°C (-4 to 122°F)

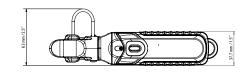
## Designation: Si-RT7 Sales reference:28142

**European directives** 

This wireless probe provides accurate temperature measurement to enable the calculation of superheat and subcooling values in air conditioning, refrigeration and heat pump installations. Its parrot-shaped clamp ensures perfect contact with pipes from 6 to 42 mm. The Si-RT7 allows all types of refrigerant-based installations to be serviced quickly, thanks to the excellent responsiveness of its NTC sensor. It connects easily to the Si-RM350 and Si-RM450 manifolds, as well as to the mobile application Sauermann Pilot.







Temperature			
Temperature sensors	NTC		
Temperature sensor range	-20 to 85°C (-4 to 185°F)		
Temperature accuracy*	±1°C (±1.8°F)		
Maximum operating temperatures	Jaws: 85°C (185°F) - Handle: 50°C (122°F)		
Available units	°C, °F		
Resolution	0.1°C, 0.1°F		
Pipes diameter	6 to 42 mm (0.2" to 1.7")		
Probe			
Power supply	3x LR03 AAA 1.5 V alkaline batteries		
Battery life	150 h @ 20°C / 68°F		
Wireless frequency	Range frequency from 2402 MHz to 2480 MHz with a transmission power of 8 dBm.		
Wireless range	Range between manifold and wireless probes up to 100 m (328 ft). App connection: depends on smartphone radio strength, range up to 100 m (328 ft).		
Compatibility	Smartphone minimum required versions: Android 11.0, iOS 15, BLE 5.0**		
Connections	1x 1/4 FFL female		
Storage temperature	From -20 to 50°C (-4 to 122°F)		
Environmental conditions of use	In non-condensing condition Altitude: from 0 to 2000 m (0 to 6561')		

Non-corrosive gases

2011/65/EU RoHS II; 2012/19/EU WEEE; 2014/30/EU EMC; 2014/53/EU RED

<sup>\*</sup>All accuracies specified in this document were conducted under laboratory conditions & can be guaranteed for measurement carried out in the same conditions, or carried out with calibration compensation. \*\* Can work with BLE4.0 but the wireless range will be downgraded

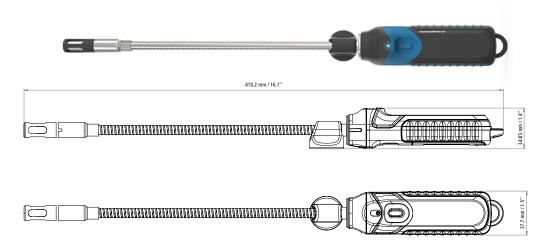
#### **Hygrometry / temperature probe**



Designation: Si-TH4
Sales reference: 28145

This wireless psychrometric probe provides accurate indoor and outdoor temperature and hygrometry measurements to work on air conditioning, refrigeration and heat pump installations.

The Si-TH4 calculates dry and wet bulb temperatures quickly and easily, using a flexible probe with a sliding magnet for convenient positioning. It connects easily to the Si-RM350 and Si-RM450 manifolds, as well as to the mobile application Sauermann Pilot.



	Temperature	Humidity
Type of sensors	CMOS	CMOS
Measuring range	-20 to 60°C (-4 to 140°F)	0 to 100%RH
Accuracy*	-20 to 0°C (-4 to 32°F): ±0.3°C (0.6°F) 0°C to 60°C (32 to 150°F): ±0.5°C (0.9°F)	±2 %RH (from 15°C to 25°C and from 10 to 90 %RH) ±5 %RH (from 15°C to 25°C and from 0 to 10 %RH and from 90 to 100 %RH) Temperature dependence: ±0.04 x (T-20)%RH (if T<15°C or T>25°C)
Available units	°C, °F	%RH
Resolution	0.1°C, 0.1°F	0.1%RH
Response time T <sub>90</sub>	60 s	60 s

Probe			
Power supply	3x LR03 AAA 1.5 V alkaline batteries		
Battery life	50 h @ 20°C / 68°F		
Wireless frequency	Range frequency from 2402 MHz to 2480 MHz with a transmission power of 8 dBm.		
Wireless range	Range between manifold and wireless probes up to 100 m (328 ft).  App connection: depends on smartphone radio strength, range up to 100 m (328 ft).		
Compatibility	Smartphone minimum required versions: Android 11.0, iOS 15, BLE 5.0**		
Storage temperature	From -20 to 50°C (-4 to 122°F)		
Environmental conditions of use	In non-condensing condition Altitude: from 0 to 2000 m (0 to 6561') Non-corrosive gases		
European directives	2011/65/EU RoHS II; 2012/19/EU WEEE; 2014/53/EU RED		

<sup>\*</sup>All accuracies specified in this document were conducted under laboratory conditions & can be guaranteed for measurement carried out in the same conditions, or carried out with calibration compensation. \*\*Can work with BLE4.0 but the wireless range will be downgraded



#### New smart assistant app: Sauermann Pilot

Digital tech leveraged to help technicians

- Free app for iOS & Android mobile devices
- Real time control, readings display and recordings
- Create, sign and send reports with pictures
- Report creation in PDF and CSV (for Excel)
- Internal detailed customer database management







