

The SAMSON logo consists of the word "SAMSON" in a white, sans-serif font, centered within a solid black circle. This circle is itself centered within a white square frame.

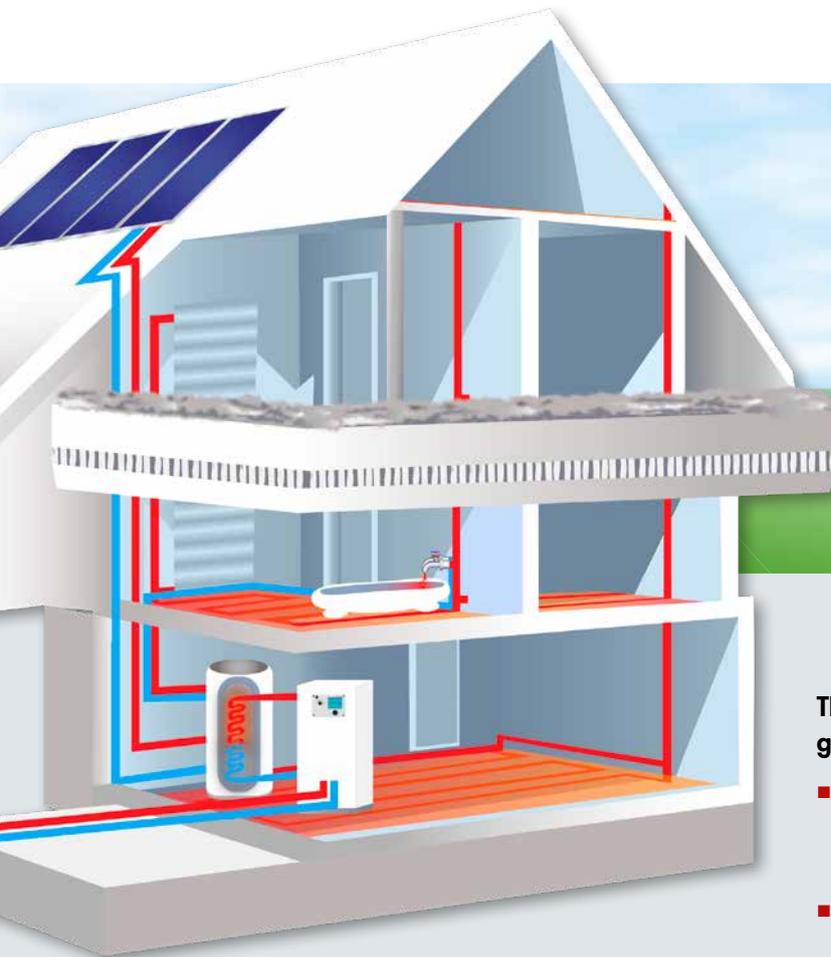
# TROVIS 5500 AUTOMATION SYSTEM

Communication at a Competitive Price  
for Local and District Heating

**SAM**<sup>®</sup>  
DIGITAL

SMART IN FLOW CONTROL

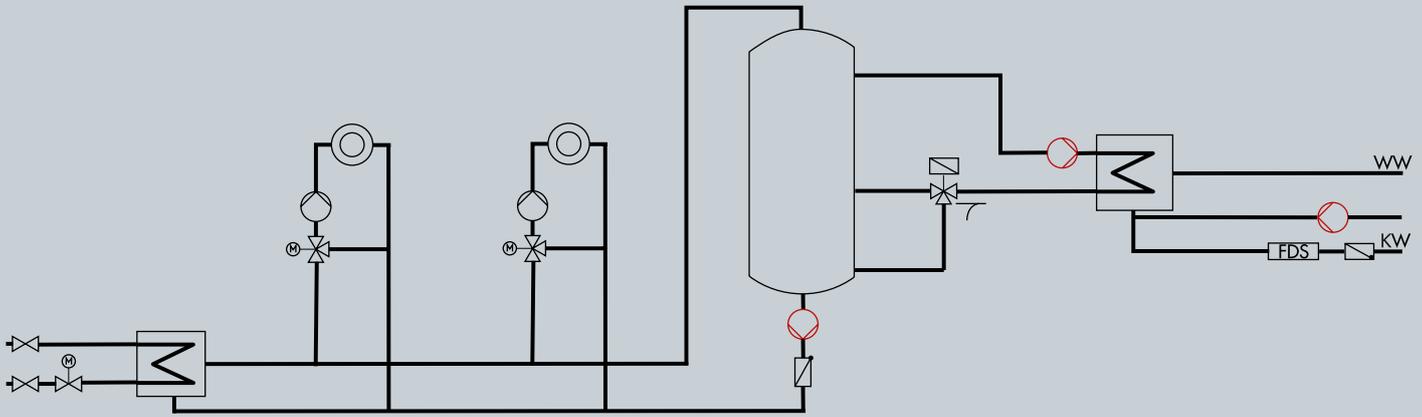
# DEVICES AND POSSIBLE FIELDS OF APPLICATION



**TROVIS 5573-0 with icon display, TROVIS 5573-1 with graphical display**

- 1x heating circuit distributor control circuit, 1x direct heating circuit, 1x supplementary heating circuit and DHW storage tank
- 1x outdoor-temperature-controlled buffer storage tank control circuit and 1x supplementary heating circuit
- 1x DHW circuit and 1x heating circuit
- 2x heating circuit
- 1x heating circuit distributor control circuit, 1x direct heating circuit and DHW storage tank with solar heating





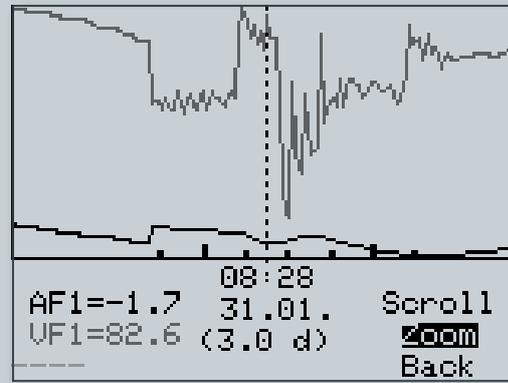
### TROVIS 5578-E with Ethernet

- 1x heating circuit distributor control circuit, 1x direct heating circuit, 2x supplementary heating circuit and DHW storage tank
- 1x outdoor-temperature-controlled buffer storage tank control circuit and 2x supplementary heating circuit
- 1x outdoor-temperature-controlled buffer storage tank control circuit, 1x supplementary heating circuit and 1x continuous flow hot water module
- 1x DHW circuit and 1x heating circuit distributor control circuit, 1x direct heating circuit and 1x supplementary heating circuit
- 1x DHW circuit and 2x heating circuit
- 3x heating circuit
- 1x heating circuit distributor control circuit, 1x direct heating circuit and DHW storage tank with solar heating
- DHW temperature control by instantaneous water heating using a speed-controlled pump to circulate the heating medium
- Control of the charging flow rate to the buffer storage tank using a speed-controlled pump to circulate the heating medium
- Control of the DHW circulation flow rate depending on the circulation return flow temperature using a speed-controlled circulation pump

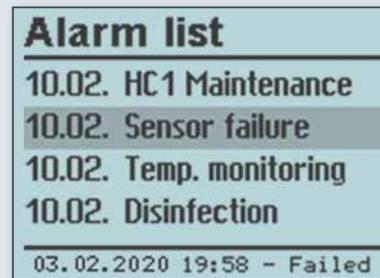




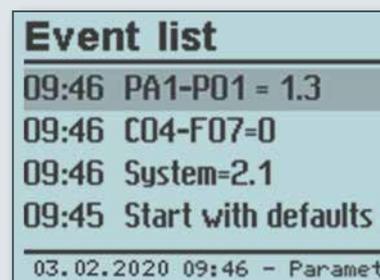
# USER FRIENDLY AND TRANSPARENT



- Maximum transparency is granted on the customer level, e.g. when viewing the weekly usage schedule.
- Trend-Viewer to simultaneously display max. three selectable operating values recorded over the past 14 days (in steps of one minute). Move along the graphs using the rotary pushbutton to look up the associated values and states.
- Historical data can be transferred to a computer for analysis using the Data Logging Viewer software
- The alarm and event lists, which can contain a maximum of 100 entries each, provide detailed information on the last malfunctions and changed settings



\* sensors (code 44): SF1 VF1

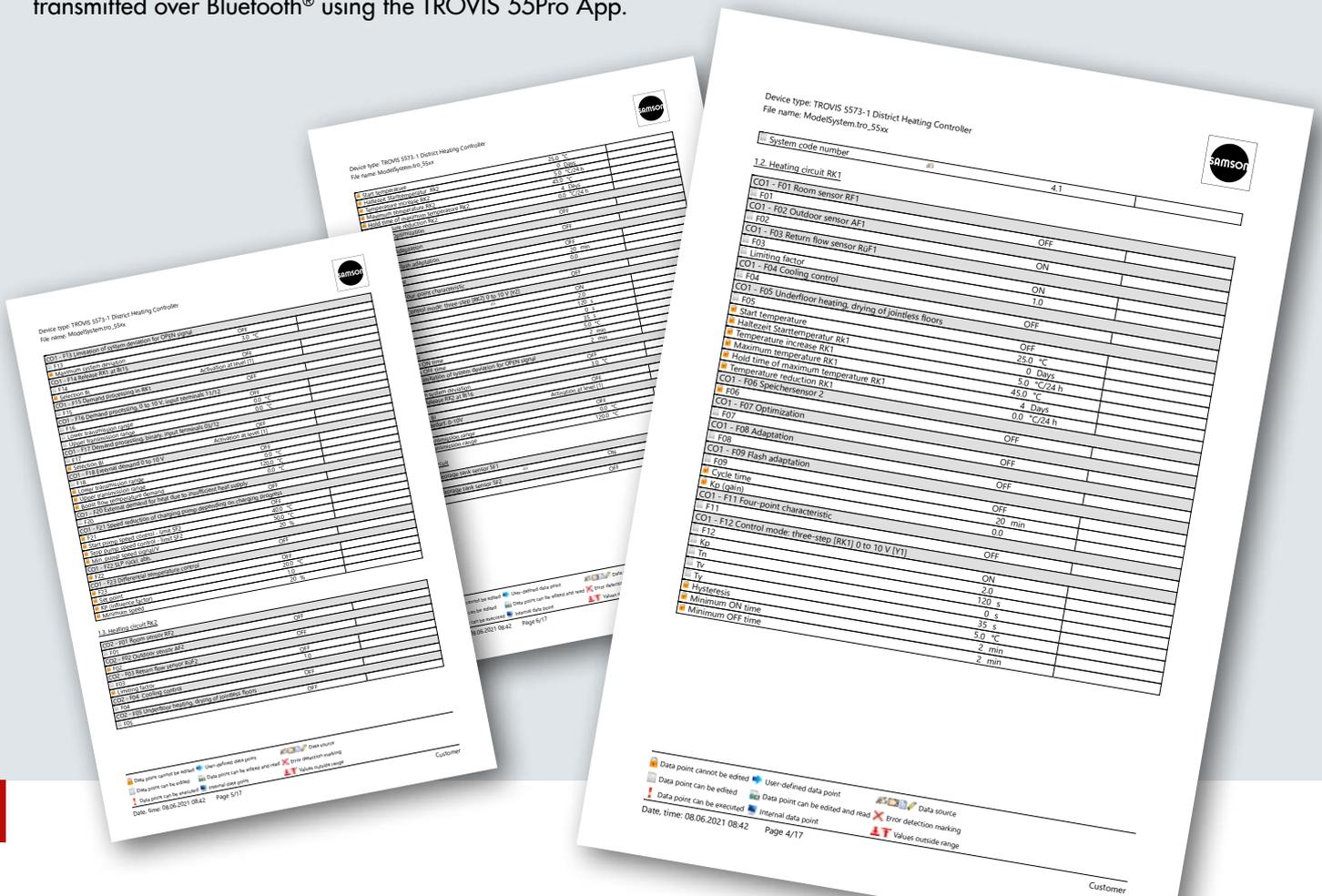


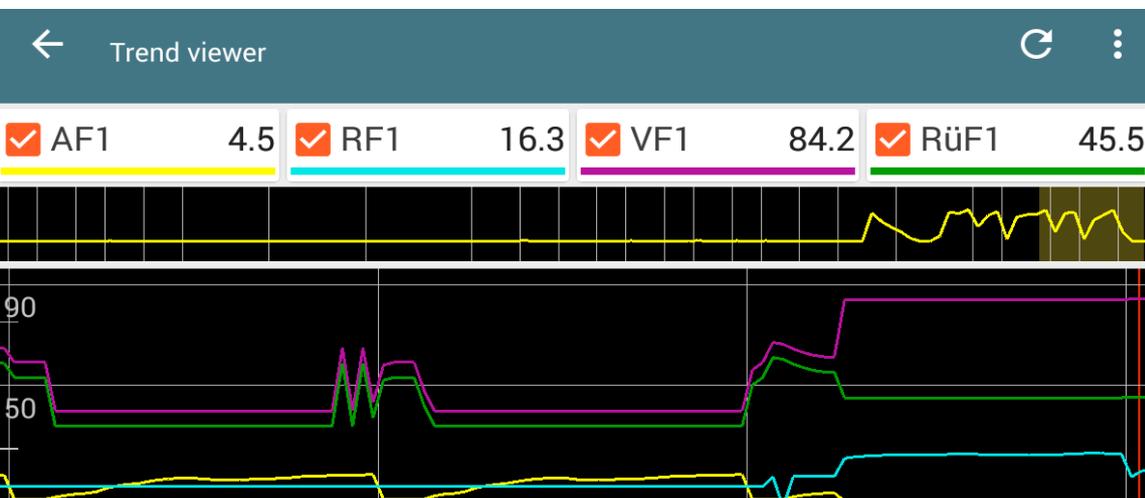
\* er PA1-P01 changed from 1.8 to 1.3 (flow gradient)

# DOCUMENTABLE AND TRANSPARENT



- All controller settings can be read using the TROVIS-VIEW software and printed out for documentation purposes (start-up protocol). This helps keep track of any changes.
- In the TROVIS 5578-E Controller, data are transmitted using the TROVIS-VIEW Software over Ethernet. As an alternative to TROVIS-VIEW, controller settings can also be transmitted over Bluetooth® using the TROVIS 55Pro App.





- The TROVIS 55Pro app (Android and iOS) is available for TROVIS 5578-E Heating Controllers with Bluetooth®.
- Lists can be customized in the TROVIS 55Pro app, which enables you to put together all controller data points from different levels that you consider important on your personalized home screen.
- The trend viewer function makes it possible to visualize the data logged by the controller in color graphs.
- When the controller configuration is read, a TROVIS-VIEW file is created on a smart device. When writing the controller configuration, the data are transmitted to the controller. This function is similar to the previously available options when using a memory module. As a benefit, it enables you to save and manage an almost unlimited number of controller configurations and transmit them to your colleagues.
- The TROVIS 55Pro app includes a controller update function to enable the wireless updating of controllers. It also enables the downloading of language files.

# SMART DIGITALIZATION SOLUTION



**TROVIS 5578-E with integrated Ethernet interface and SAM HOME function**

- Direct connection to SAM DISTRICT ENERGY using an on-site Internet router
- Modbus TCP/IP (AES-256 encryption)
- TLS 1.3 encryption



# VERSATILE COMMUNICATION

## Integrated M-bus interface for max. three M-bus units

- Standard in TROVIS 5578-E, option in TROVIS 5573 (version TROVIS 5573-11)
- Heat meter data polled using M-Bus, which are relevant for invoicing, can be accessed using Modbus.
- Capacity and/or flow rate limitation can be configured in up to two (TROVIS 5573-11) or three (TROVIS 5578-E) control circuits.
- Dynamic ZBD files allow the targeted measurement and read-out of heat meters (e.g. monthly or billing day values).

## TROVIS 5578-E with two separate RS-485 interfaces:

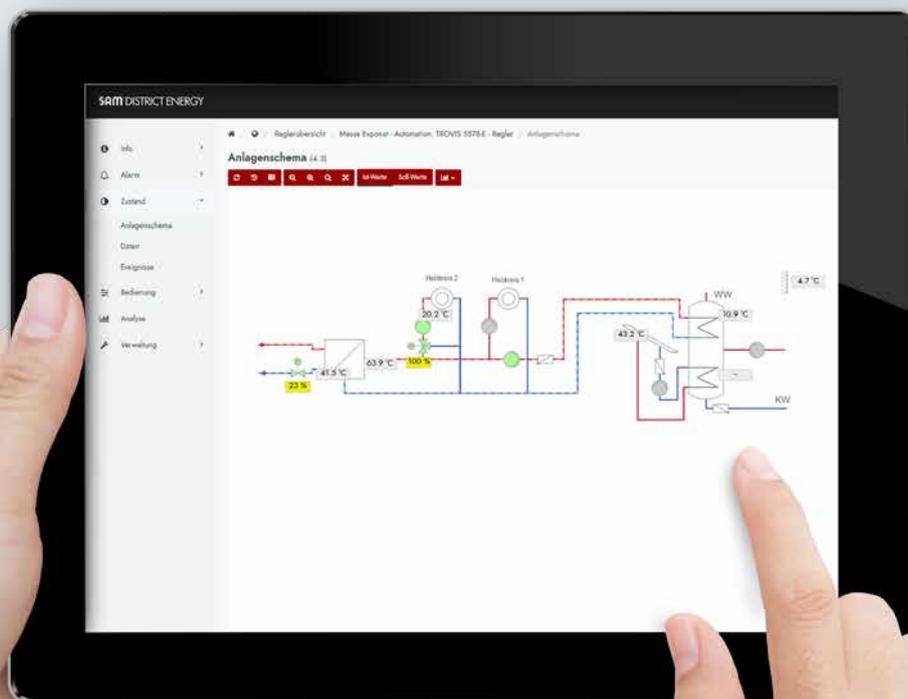
- Modbus RTU
- Device bus communication

## Integrated Bluetooth® interface for wireless communication:

- Comes as standard to TROVIS 5578-E to support the use of the TROVIS 55Pro app

## Extensive analog inputs and outputs for signal input and control of heating and DHW circuits:

- 3x 0 to 10 V input
- 4x 0 to 10 V or PWM output (individually configurable analog output assignment)





**TROVIS 5573**



Communication module  
RS-485 (8812-2002)



Surge protection  
SA5000 (1400-9868)



**TROVIS 5578-E**



Surge protection  
SA5000 (1400-9868)



RS-485 2-wire Modbus RTU

# SAMSON AT A GLANCE



## STAFF

- Worldwide 4,500
- Europe 3,600
- Asia 600
- Americas 200
- Frankfurt am Main, Germany 1,900

## INDUSTRIES AND APPLICATIONS

- Chemicals and petrochemicals
- Food and beverages
- Pharmaceuticals and biotechnology
- Oil and gas
- Liquefied Natural Gas (LNG)
- Marine equipment
- Power and energy
- Industrial gases
- Cryogenic applications
- District energy and building automation
- Metallurgy and mining
- Pulp and paper
- Water technology
- Other industries

## PRODUCTS

- Valves
- Self-operated regulators
- Actuators
- Positioners and valve accessories
- Signal converters
- Controllers and automation systems
- Sensors and thermostats
- Digital solutions

## SALES SITES

- More than 50 subsidiaries  
in over 40 countries
- More than 200 representatives

## PRODUCTION SITES

- SAMSON Germany, Frankfurt, established in 1916  
Total plot and production area: 150,000 m<sup>2</sup>
- SAMSON France, Lyon, established in 1962  
Total plot and production area: 23,400 m<sup>2</sup>
- SAMSON Turkey, Istanbul, established in 1984  
Total plot and production area: 11,100 m<sup>2</sup>
- SAMSON USA, Baytown, TX, established in 1992  
Total plot and production area: 20,000 m<sup>2</sup>
- SAMSON China, Beijing, established in 1998  
Total plot and production area: 47,000 m<sup>2</sup>
- SAMSON India, Pune district, established in 1999  
Total plot and production area: 28,000 m<sup>2</sup>
- SAMSON AIR TORQUE, Bergamo, Italy  
Total plot and production area: 27,000 m<sup>2</sup>
- SAMSON CERA SYSTEM, Hermsdorf, Germany  
Total plot and production area: 14,700 m<sup>2</sup>
- SAMSON KT-ELEKTRONIK, Berlin, Germany  
Total plot and production area: 1,100 m<sup>2</sup>
- SAMSON LEUSCH, Neuss, Germany  
Total plot and production area: 18,400 m<sup>2</sup>
- SAMSON PFEIFFER, Kempen, Germany  
Total plot and production area: 20,300 m<sup>2</sup>
- SAMSON RINGO, Zaragoza, Spain  
Total plot and production area: 19,000 m<sup>2</sup>
- SAMSON SED, Bad Rappenau, Germany  
Total plot and production area: 10,400 m<sup>2</sup>
- SAMSON STARLINE, Bergamo, Italy  
Total plot and production area: 27,000 m<sup>2</sup>
- SAMSON VDH PRODUCTS, the Netherlands  
Total plot and production area: 12,000 m<sup>2</sup>
- SAMSON VETEC, Speyer, Germany  
Total plot and production area: 27,100 m<sup>2</sup>

## SAMSON AKTIENGESELLSCHAFT

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