

# SASWELL CATALOG

SHENZHEN SASWELL TECHNOLOGY INC.





**SHENZHEN SASWELL TECHNOLOGY INC.** is the major manufacturer in China for thermostats and actuator. Founded in 1999, aimed at developing, producing better performance and better quality products in China, from the year of 2000, we start the export business. Till now we have exported thermostats and valve to UK, USA, UAE, South Asia, Southern Europe, Eastern Europe and Western Europe. SASWELL has won the trust from domestic and international clients for our product quality and services.

**SASWELL CONTROLS (HONGKONG) LIMITED** founded in 1999, designs and manufactures high quality thermostats and actuator. Easy operation, high accuracy and various control options, Saswell always offers the most convenient control solutions and service to our clients from all over the world.

**SIMPLE&SAVING WORK WELL**

# CONTENT

Waterline floor heating .....	03
Electric floor heating .....	08
Radiator TRV .....	12
Boiler control .....	15
Intelligent WIFI Control .....	21



## Thermostat

APP CLIENT

Smarthome control software



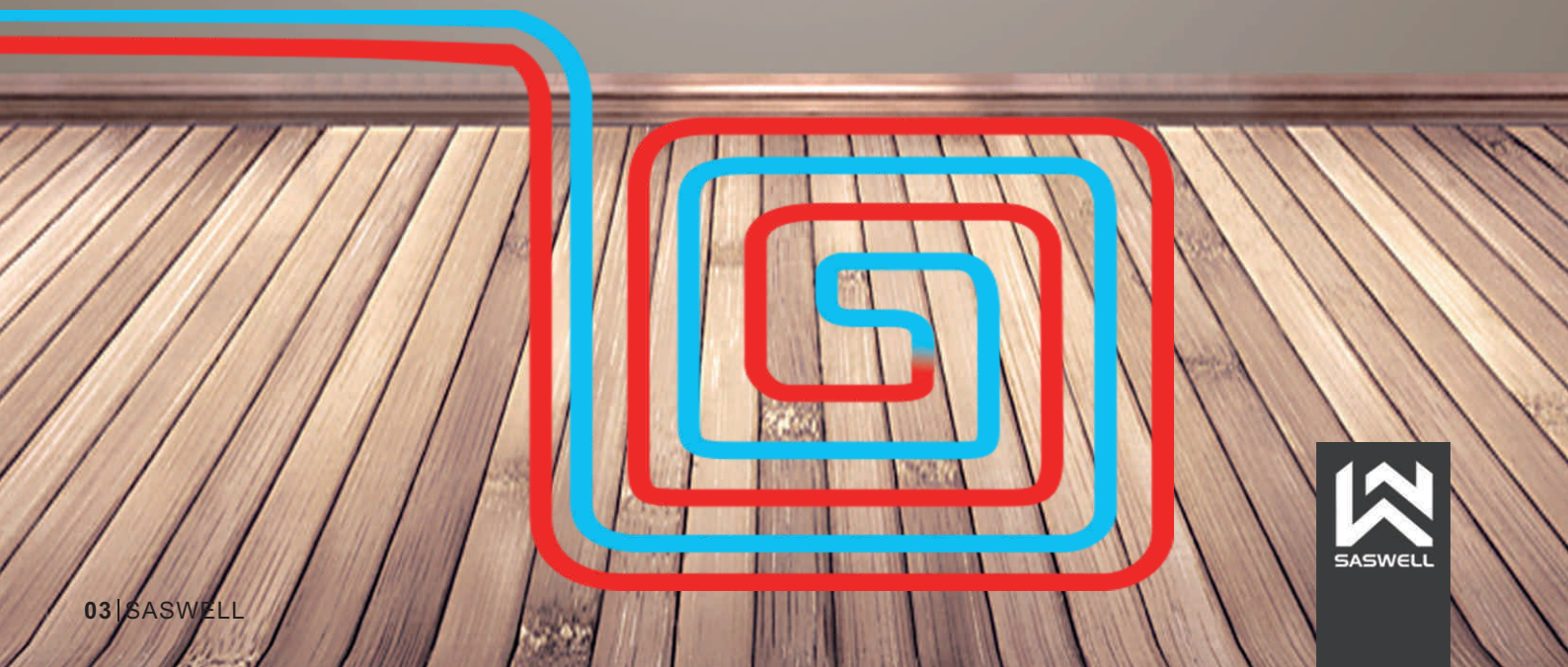
iPhone



Android



## Waterline floor heating series ( WHL series )





## **SAS816WHL-0** 230VAC digital non programmable thermostat

PN: 435-007-05-13

Non programmable digital thermostat for Waterline floor heating application

Power supply	100~240VAC 50/60HZ
Load	3A
Temp. range	5°C to 30°C
Dimension	86x86x32mm

### Features

- \* Wall mount.
- \* Easy use.
- \* Energy saving.



## **SAS803WHL-7** 230VAC digital programmable thermostat

PN:435-001-07-13

7 days programmable digital thermostat for Waterline floor heating application

Power supply	100~240VAC 50/60HZ
Load	3A
Temp. range	5°C to 35°C
Dimension	86x86x18mm

### Features

- \* Flush mount.
- \* Large display.
- \* Energy saving.



## **SAS920WHL-7(P)-S** 230VAC digital programmable thermostat

PN:435-044-13

7 days programmable digital thermostat for Waterline floor heating application.

Power supply	100~240VAC 50/60HZ
Load	3A
Temp. range	5°C to 35°C
Dimension	86x86x13mm

### Features

- \* Flush mount.
- \* Large display.
- \* Energy saving.
- \* TPI function.
- \* Adaptive function.
- \* External sensor option.



## **SAS921WHL-7** 230VAC digital programmable thermostat

PN: 435-046-06-13

7 days programmable digital thermostat for Waterline floor heating application

Power supply	100~240VAC 50/60HZ
Load	3A
Temp. range	5°C to 35°C
Dimension	86x86x13mm

### Features

- \* Fashion black glass effect version.
- \* Flush mount.
- \* Large display.
- \* Energy saving.
- \* Adaptive function.



**SAS922WHL-7W-S**    230VAC digital programmable thermostat

PN: 435-050-03/04

7 days programmable digital thermostat for Waterline floor heating application.

Power supply	100~240VAC 50/60HZ
Load	3A
Temp. range	5°C to 35°C
Dimension	86x86x13mm

**Features**

- \* Flush mount.
- \* Large display.
- \* Touch button.
- \* Energy saving.
- \* Adaptive function.
- \* External sensor option.



**SCU209-LED**    8 Zone underfloor heating wiring centre

PN: 435-020-05-13

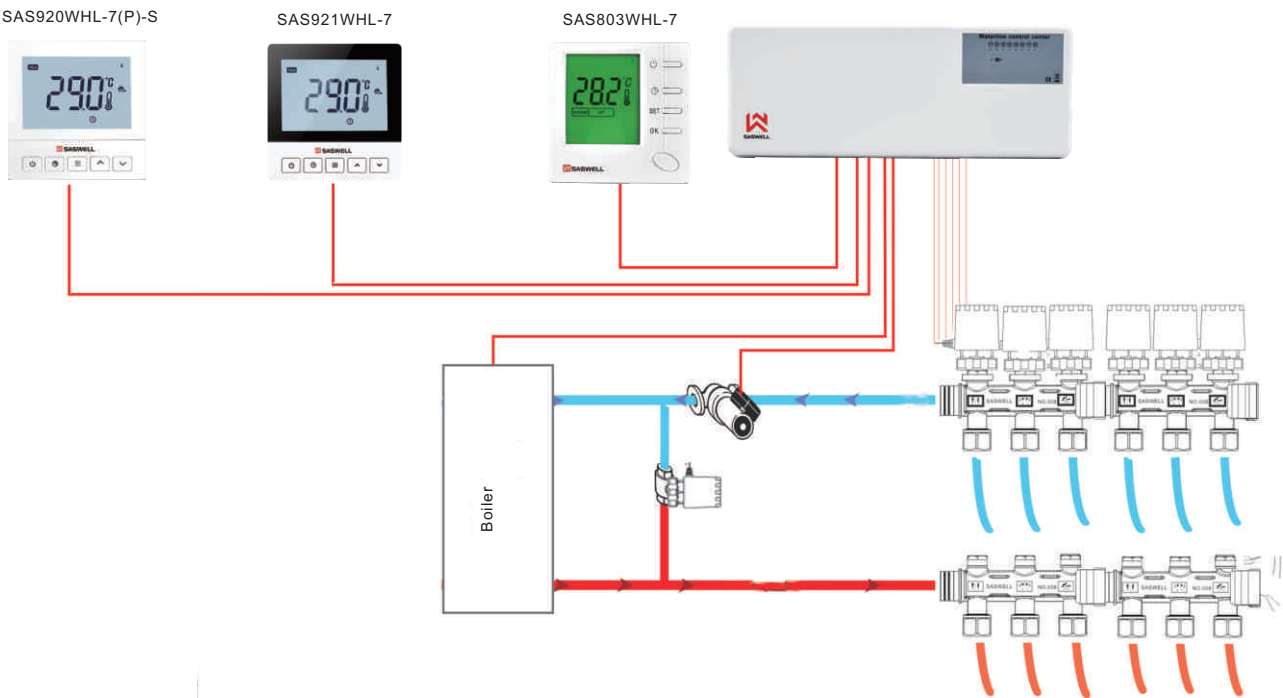
Power supply	100~230VAC 50/60HZ
Max. load	10A
Temp. range	-20°C to 60°C
Dimension	280x110x40mm



**Features**

- \* Each controller can control a maximum of 8 rooms / zones.
- \* The controller contains outputs for the switching of thermal actuators, boilers, pumps, and mixing valves.
- \* Indicator lights show the status of the outputs.

**System chart**



## SCU209DE 8 Zone wireless underfloor heating wiring centre

PN: 435-020-01-13

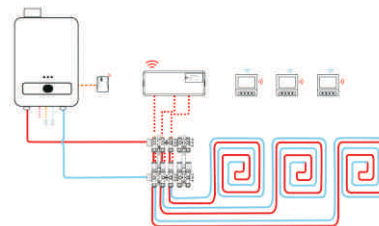
Power supply	100~230VAC 50/60HZ
Max. load	10A
Temp. range	-20°C to 60°C
Frequency band	868MHZ (FSK)
Valid receiving distance	100m
Dimension	280x110x40mm

### Features

- \* Wireless control 8 loops room thermostats.
- \* Relay for both boiler control and pump control.
- \* Indicator lights show the status of the outputs.



System chart:



## SCU210 5 Zone underfloor heating wiring centre

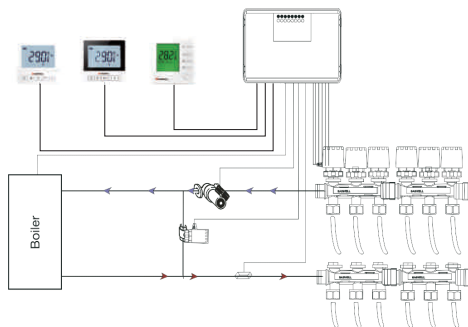
PN: 435-021-01-13

Power supply	100~230VAC 50/60HZ
Max. load	10A
Temp. range	-20°C to 60°C
Dimension	160x110x35MM

### Features

- \* Each controller can control a maximum of 5 rooms / zones.
- \* The controller contains outputs for the switching of thermal actuators, boilers, pumps, and mixing valves. Indicator lights show the status of the outputs.

System chart:



## SCU210DE 5 Zone wireless underfloor heating wiring centre

PN: 435-021-02-13

Power supply	100~230VAC 50/60HZ
Max. load	10A
Temp. range	-20°C to 60°C
Frequency band	868MHZ(FSK)
Valid receiving distance	100m
Dimension	160x110x35mm

### Features

- \* Wireless control 5 loops room thermostats.
- \* Relay for both boiler control and pump control.
- \* Indicator lights show the status of the outputs.



## SA91 Electro-thermal actuator

PN: 405-004-01-00

Power supply	100~230VAC/24V 50/60HZ
Power consumption	2W
Stroke	$\geq 3 \pm 0.5\text{mm}$
Force	$130\text{N} > F \geq 80\text{N}$
Valve interface	M30×1.5mm

### Features

- \* Normal close
- \* Long life span
- \* Easy installation



## SA93 Electro-thermal actuator

PN: 405-004-08-17

Power supply	100~230VAC 50/60HZ
Power consumption	2W
Stroke	$\geq 4.5 \pm 0.5\text{mm}$
Force	$130\text{N} > F \geq 80\text{N}$
Valve interface	M30×1.5mm

### Features

- \* Normal close
- \* Long life span
- \* Easy installation



## SA95 Electro-thermal actuator

PN: 405-004-11-00

Housing	Material	Nylon
	Color	White
Working force intensity(F) & direction		$80\text{N} \leq F < 130\text{N}$ Direction: upward
Control element(T)		Electro-thermal wax sensor
connector		M30X1.5
Ambient temperature		-10°C to 60°C
Full stroke		$4.5 \pm 0.5\text{MM}$
Protection class		IP 45
Power consumption		1.1VA
Max impact current	24v	2w
	220v/230v	2w
Lead wire		0.8M length (2-core)
Net weight		180g

### Features

- \* The electro thermal actuator can indicate the valve open and close by the wax core up or down.
- \* It is flexible, convenient, reliable performance, durable and energy saving.







# Electric floor heating series (FHL series)

## SAS816FHL-0    Non-programmable electric underfloor heating thermostat

PN: 435-007-02-13

Power supply	100~240VAC 50/60HZ
Maximum load electric current	16A/250VAC
Room temperature setting range	5°C to 30°C
Floor temperature setting range	5°C to 40°C
Dimension	86mm X 86mm X32mm

### Features

- \* Non-programmable thermostat designed electric heating cable system.
- \* Optional economic operation or comfort operation.
- \* Optional detective sensor: Build in sensor or external floor sensor.
- \* Mechanical thermostat easy to operation.



---

## SAS920FHL-7    Programmable controller used to control heating material in electric heating system

PN: 435-044-04-03

Power supply	100~240VAC 50/60HZ
Maximum load electric current	16A/250VAC
Room temperature setting range	5°C to 35°C
Floor temperature setting range	5°C to 70°C
Dimensions	86x 86x13mm

### Features

- \* 3.1 inch large screen display.
- \* Can control 16A high power heating facilities.
- \* Permanent user setting retention during power loss.
- \* Display temperature recalibrates.
- \* Optional types of control for different heating application including room thermostat; floor thermostat or room thermostat with floor limitation.
- \* Optional programming Period: 7 individual day programming.



## SAS921FHL-7 Programmable controller used to control heating device in electric heating system

PN: 435-046-08-03

Power supply	100~240VAC 50/60HZ
Maximum load electric current	16A/250VAC
Room temperature setting range	5°C to 35°C
Floor temperature setting range	5°C to 70°C
Dimension	86x 86x13mm

### Features

- \* 3.1 inch large screen display.
- \* Can control 16A high power heating facilities .
- \* Permanent user setting retention during power loss .
- \* Display temperature recalibrates.
- \* Optional types of control for different heating application including room thermostat; floor thermostat or room thermostat with floor limitation.
- \* Optional programming period:7 individual day programming.



## SAS922FHL-7 Programmable controller used to control heating device in electric heating system

PN: 435-050-02-13

Power supply	100~240VAC 50/60HZ
Maximum load electric current	16A/250VAC
Room temperature setting range	5°C to 35°C
Floor temperature setting range	5°C to 70°C
Dimension	86x 86x13mm

### Features

- \* 4 inch large screen display.
- \* Can control 16A high power heating facilities.
- \* Permanent user setting retention during power loss.
- \* Display temperature recalibrates.
- \* Optional types of control for different heating application including room thermostat; floor thermostat or room thermostat with floor limitation.
- \* Optional programming Period: 7 individual day programming.
- \* Touch button.



## T38FHL-7 Programmable controller used to control heating material in electric heating

PN: 435-042-01-13

Power supply	100~240VAC 50/60HZ
Relay contact	16A/250VAC
Room temperature setting range	5°C(41°F) to 35°C(95°F)
Floor temperature setting range	5°C(41°F) to 45°C(113°F)
Dimension	86x86x32mm



### Features

- \* Large LCD display with clock.
- \* Two pole isolate power switch that can cut off the Live wire and Neutral wire connection between power and load.
- \* Permanent user setting retention during power loss.
- \* Optional economic operation or comfort operation.
- \* Optional type of control for different heating application including room thermostat; floor thermostat or room thermostat with floor limitation.
- \* Optional programming Period: 7 individual day or Separate 5-day (weekday) and 1-day/1-day (Saturday/Sunday) programming with 6 or 4 separate time/temperature periods per day.
- \* Display temperature recalibrates.

---

## T70-7 Programmable electric floor heating thermostat

PN: 435-012-02-13

Power supply	100~240VAC 50/60HZ
Maximum load	16A
Temperature range, room sensor	5°C to 35°C
Temperature range, floor sensor	5°C to 40°C
Control modes	Floor sensor, room sensor or room sensor with floor sensor as a limiter
Terminals	Max. 2.5 mm <sup>2</sup>
Dimension	82x 82x 56mm
Color	Polar white RAL 9010



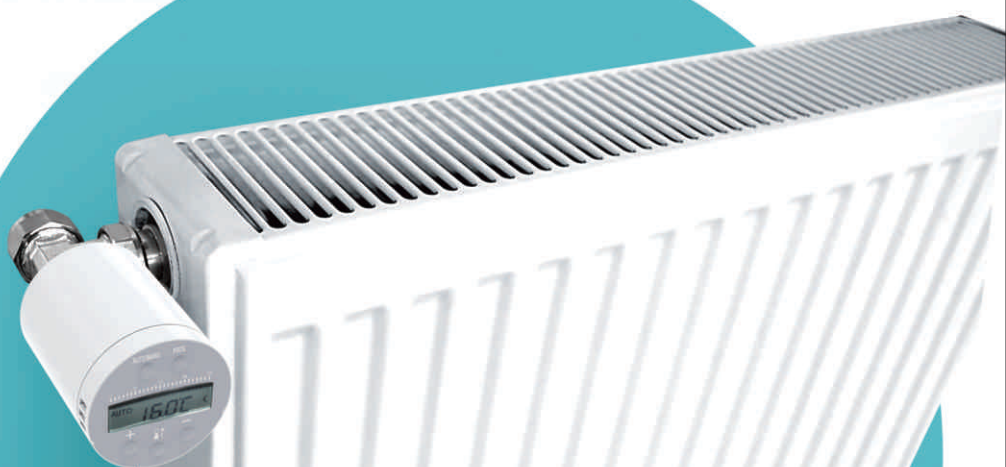
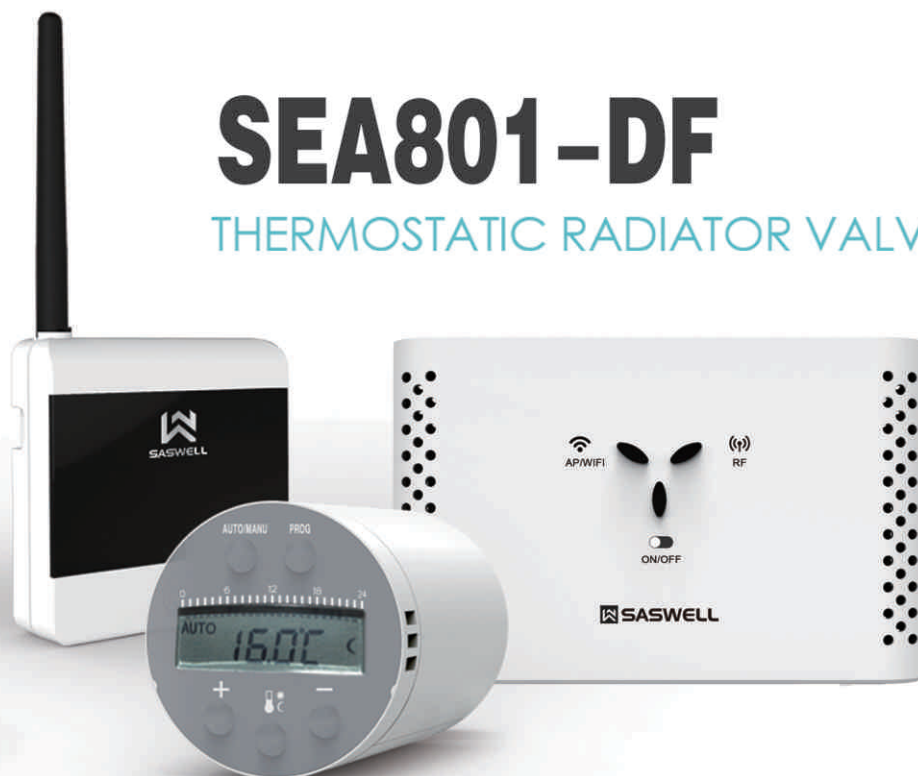
### Features

- \* Equipped with matrix dot display.
- \* Can control 16A high power heating facilities.
- \* Permanent user setting retention during power loss.
- \* Display temperature recalibrates.
- \* Optional types of control for different heating application including electric heating cable, electric film, carbon crystal plate and the other heating material.
- \* Optional programming Period: 7 individual day programming.



# SEA801-DF

THERMOSTATIC RADIATOR VALVE



**SMART  
HOME**



## SEA801 TRV programmable WIFI controller

PN: 435-030-01-11

A stylish and accurate TRV programmable controller has been designed for independent control heating radiators.

Power supply	2x1.5V AA alkaline
Battery life	Up to 1 year
Temp. range	0°C to 50°C
Dimension	L:88.6mm, Ø:50mm
Frequency	70N≦F≦120N

### Features

- \* PID control.
- \* 7 days independent programming.
- \* Child lock function.
- \* Open window function.
- \* Lime scale protection.
- \* Frost protection.
- \* Temporary hold function.
- \* Low battery indicator.



## SEA801-DF TRV programmable WIFI controller

PN: 435-030-02-13

Low-power and accurate TRV programmable WIFI controller has been designed for independent control heating radiators.

Power supply	2 AA battery
Battery life	Up to 1 year
Temp. range	0°C to 50°C
Wireless transmit range	Open distance 100M
Frequency	868MHz
Spring force	70N≦F≦120N

### Features

- \* PID control.
- \* 7 days independent programming.
- \* Child lock function.
- \* Open window function.
- \* Lime scale protection.
- \* Frost protection.
- \* Temporary hold function.
- \* Low battery indicator.



# SASWG-03    Smart Home Gateway

PN: 435-039-03-13

This is a device base on TCP/IP and RF868, which supported standard Ethernet port and able to connect thermostat to LAN or internet, user could easily remote to control thermostat via the connection of gateway.

Power supply	DC5.1V 2A
Communication protocol	TCP/IPMQTT
Hardware interface	DC power interface
Wi-Fi frequency	2.412GHz-2.484GHz
Radio frequency	868MHz
Dimension	80(L)*125(W)*26(H) (mm)

## Features

- \* Gateway connected to router via WIFI.
- \* The gateway has two modes: wifi mode and hot point mode.
- \* Can connect with 10 pcs TRV thermostat and 1 pcs receiver SAS2011DE refere to page 25.







## Boiler Control ( WHB series )

## SAS816WHB-0 Digital gas boiler thermostat

PN: 435-007-01-13

Power supply	2 AA battery
Load current	250VAC 8A
Ambient temperature-operation	0°C(32°F) to 50°C(122°F)
Accuracy	±1°C or ±1°F
RF distance	100M in open air
Dimensions	86×86×32mm



### Features

- \* LCD display shows room temperature.
- \* Optional economic operation or comfort operation.
- \* Optional temperature display of Celsius or Fahrenheit scale.

## SAS919WHB-0 Digital gas boiler thermostat

PN: 435-040-01-13

Application : Non-programmable, with back light.  
Can control boiler in waterline heating system.

Power supply	2 AA battery
Maximum load	230VAC 2A
Temperature range	5°C to 35°C
Ambient temperature-operation	0°C to 50°C
Ambient temperature-transport	-10°C to 60°C
Accuracy	±1°C
Dimension	85(L)x75(W)x23(H)(mm)
Color	White
RF distance	100M in open air



### Features

- \* Smart shape, easily to operate.
- \* Built-in battery, convenient to change.
- \* Anti-blocking function.
- \* Be suitable to multifarious application system: such as boiler, water heating, floor heating.



## SAS920WHB-7-RF Programmable wireless room Thermostat with elegant black

PN: NEW

Wall mount, 7 days programmable, it can apply for water heating system to control valve and boiler.

Power supply	2 AA battery
Maximum load	250VAC 3 (2) A
Temperature range	5°C to 35°C
Ambient temperature-operation	0°C to 50°C
Ambient temperature-transport	-10°C to 60°C
Accuracy	±1°C
Dimensions	86x86x23mm
Color	White with elegant black

### Features

- \* Large LCD display with backlight.
- \* Permanent user setting retention during power loss.
- \* Can control valve and boiler at the same time.
- \* Link with the Receiver via RF. Control distance 100M open site.
- \* Optional programming Period: 7 individual day programming with 48 separate time to select economic or comfort mode.(Every half hour as a period of time) /cancel the programming function.
- \* Display temperature recalibrates.



## SAS908XWHB-7 Large LCD display weekly programmable gas boiler heating thermostat designed for water boiler and hot water radiant heating system

PN: 435-013-01-13

Power supply	2 AA battery
Room temperature setting range	5°C to 35°C or 41°F to 95°F
Accuracy	0.5°C or 1°F
Ambient temperature-operation	0°C to +50°C(32°F~122°F)
Ambient temperature-transport	-10°C to +60°C(14°F~140°F)
Dimension	115x90x32mm
Color	White

### Features

- \* Large LCD display.
- \* The screen displays the set temperature and the room temperature also time simultaneously.
- \* Permanent user setting and program setting retention during power loss.
- \* Optional temperature display of celsius or fahrenheit scale.
- \* Both Vacation mold and hold duration mode available for comfort and energy saving.
- \* Optional programming Period: 7 individual day or Separate 5-day (weekday) and 1-day/1-day (Saturday/Sunday) programming with 6 or 4 separate time/temperature periods per day.
- \* Display temperature recalibrates.
- \* Anti-freezing protection.





## **T19WHB-7** Fashion large screen programmable gas boiler heating thermostat

PN: 435-048-15-14

It is designed to be for electric, gas or oil heating control system or hot water radiant heating system.

Power supply	2 AA battery
Room temperature setting range	5°C to 50°C
Accuracy	0.1°C
Operating temperature	0°C to 50°C
Shipping & storage temperature	-20°C to 65°C
Dimension	124x88x21mm
Color	Elegant black



### Features

- \* Can be placed anywhere in the home to detect and control the temperature of an area of the user's choice.
- \* Fashion Large LCD display.
- \* The screen displays the set temperature and the room temperature also time simultaneously.
- \* Permanent user setting and program setting retention during power loss.
- \* Both Vacation mode and hold duration mode available for comfort and energy saving.
- \* Optional programming Period: 7 individual day or Separate 5-day(weekday) and 1-day/1-day (Saturday/Sunday) programming with 4 or 6 separate time/temperature periods per day.
- \* Display temperature recalibrates.
- \* Low battery indication.
- \* Anti-freezing protection.
- \* Pump protection available.

## **SAS816WHB-0-RF** Wireless non-programmable boiler dial thermostat

PN: 435-007-03-13

Traditional dial face, easy operation, it can replace most common residential thermostat and designed to be used with electric, gas ,water radiant or oil heating control system or cooling system.

Thermostat supply	2 AA battery
Receiver supply	250VAC 16A
Temp. range	5°C to 30°C
Thermostat size(mm)	86x86x32mm
Receiver size(mm)	86x86x16mm



### Features

- \* LCD display shows room temperature.
- \* Economic or comfort operation.
- \* Optional temperature display of Celsius or Fahrenheit.
- \* User friendly dial.

## SAS908XWHB-7-RF 7 days programmable RF digital room thermostat

PN: 435-013-04-10

SAS908XWHB waterline master controller can use as on off the thermo actuator for adjust the room temperature, or control water boiler system and radiant heating system.

Thermostat supply	2 AA battery
Receiver supply	100~240VAC
Temp. range	5°C to 50°C
Thermostat size(mm)	115x90x32mm
Receiver size(mm)	113x82x30mm



### Features

- \* Large LCD display.
- \* Start heating mode.
- \* 7 days programmable with 4 period or 6 period.
- \* Intelligent Recovery Option.
- \* Low battery indication.
- \* Setting temperature, room temperature and time display simultaneously.

---

## SAS918WHB-0-RF Desk stand RF digital room thermostat

PN: 435-038-02-10

Stylish desk stand digital room thermostat is comprised of SAS2010DE and SAS918WHB-0-DF1. It's mainly applied to water-heating system by wireless control or floor heating, achieving the comfortable environment by controlling the on-off of electric-thermal actuator.

Thermostat supply	2 AA battery
Receiver supply	100~240VAC
Temp. range	5°C to 35°C
Thermostat size(mm)	85x75x23mm
Receiver size(mm)	113x82x30mm



### Features

- \* Smart shape, easily to operate.
- \* Built in battery, change convenient.
- \* ECO mode.
- \* Anti-blocking function.
- \* Frequency 868 MHz with 100 metres range.

## T19WHB-7-RF    Snow white programmable digital room thermostat

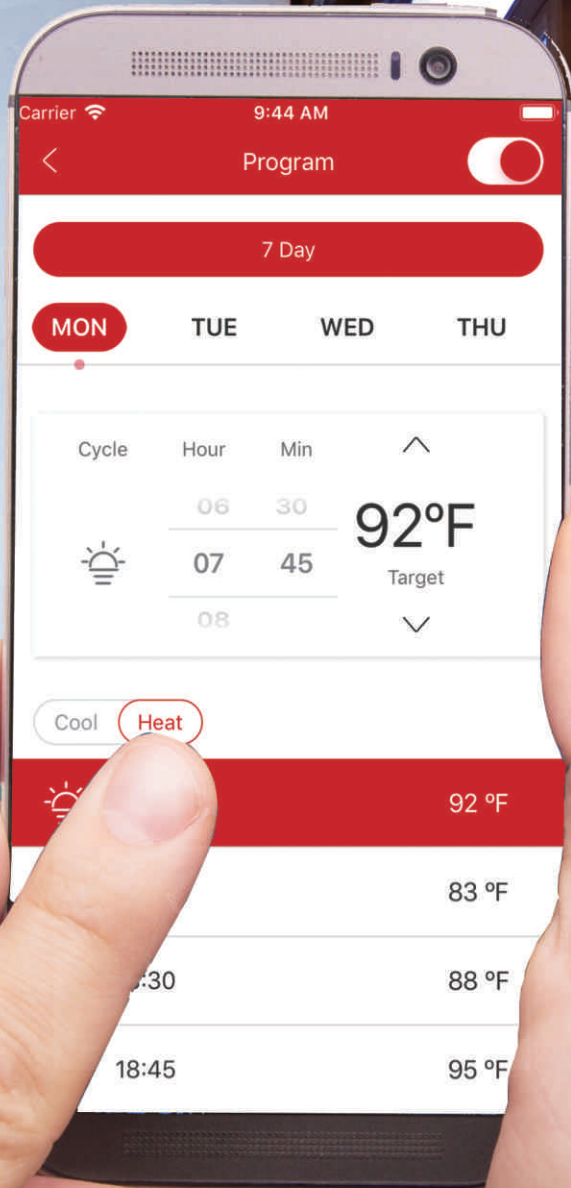
PN: 435-048-17-14

T19WHB-7-RF can replace most common residential thermostat and is designed to be used with gas or oil heating control system. Unlike ordinary single unit design thermostat, this unit is a new type of thermostat separating the thermostat function into two units.

### Features

- \* Wireless control that you can put transmitter anywhere.
- \* Large LCD display with touch key button control.
- \* Permanent user setting and program setting retention during power loss.
- \* Vacation mode and hold duration mode available for comfort and energy saving.
- \* 7 individual day or Separate 5-day (weekday) and 1-day/1-day (Saturday/Sunday) programming with 4 or 6 separate time/temperature periods per day.
- \* Low battery indication.
- \* Anti-freezing protection.
- \* Pump protection available.





**WIFI control, Remote control.**

## SAS920WHL-7W-WIFI 230VAC digital Programmable WIFI Thermostat

PN: 435-044-03-10

7 days programmable digital wifi thermostat for Waterline floor heating application.

Power supply	240VAC 50/60HZ
Load	3A 600W
Temp. range	5°C to 35°C
Dimension	86x86x13mm

### Features

- \* 4 even per day programmable.
- \* Big LCD display with backlight.
- \* External sensor (dual sensor).
- \* TPI function.
- \* Remote control by mobile phone.
- \* 3A valve and pump voltage output, and with 3A passive linkage output.



## SAS920WHB-7-RF-APP WIFI thermostat for boiler control

PN: 435-158-14-14

7 days programmable digital thermostat for boiler application.

SWG-03 INTERNET GATEWAY

Power supply	2 AA battery
Communication protocol	TCP/IPMQTT
Hardware interface	DC power interface
Wi-Fi frequency	2.412GHz - 2.484GHz

SAS920XWHL-7(P)-DF-APP Thermostat

Power	100~240VAC 50/60HZ
Load	3A
Temp. range	5°C to 35°C
Dimension	86x86x13mm

SAS2010DE Receiver (Relay box)

Power source	100~240VAC 50/60HZ
Wireless signal frequency	868MHZ (FSK)
Wireless signal effective range	100m
Dimension	113x83x30mm



### Features

- \* Gateway SWG-03 2.4G WIFI .
- \* RF 868MHZ between gateway and 920WHB-0-DF and Receiver.
- \* Open area 100m (40-60m inner room).
- \* Transmitter 2AA battery power supply.
- \* 7 day programmable, 4 event per day.
- \* Hot spot local control & Remote WIFI control.
- \* External sensor option.
- \* TPI function.



## SAS922WHL-7W-S-WIFI Underfloor heating thermostat with semi-colorful screen

PN: 435-050-05-13

Power supply	100~230VAC 50/60HZ
Load	3A/250VAC
Temp. range	5°C to 35°C
Dimension	86x86x13mm

### Features

- \* Wifi remote control.
- \* Colorful screen and touch button.
- \* 7 days programmable.
- \* External sensor option.



---

## SAS921FHL-7-WIFI 16Amp electric underfloor heating thermostat with wifi option

PN: 435-046-09-13

Power supply	100~230VAC 50/60HZ
Load	16A/250VAC
Temp. range	5°C to 35°C
Dimension	86x86x13mm

### Features

- \* Classic fashion style.
- \* Large LCD screen.
- \* Internal and external temperature sensor.
- \* Wifi remote control function.



SAS908XWHB-7-APP

Wifi Combine boiler control room thermostat supported by battery

PN: 435-013-12-13

Power supply	100~240VAC 50/60HZ
Load	8A/250VAC
Temp. range	5°C to 35°C
Dimension	115x90x32mm

Features

- \* Anti-freezing protection.
- \* Large LCD screen.
- \* 2 AA battery supply.
- \* Power-off memory function.



SAS908XWHB-7-RF-APP

Combine boiler thermostat controlled by wifi and wireless

PN: 435-013-14-13

Power supply	2 AA battery (Transmitter) 100-240VAC 50/60MHZ(Receiver)
Load	<16A/250VAC
Temp. range	5°C to 35°C
Dimension	115x90x32mm (Transmitter) 113x83x30mm (Receiver)

Features

- \* 868MHZ wireless communication.
- \* 2AA battery supply.
- \* IOS and Android mobile phone control.
- \* 7 days programmable.



## T19WHB-7-RF-APP Fashionable wifi and wireless gas boiler thermostat

PN: 435-048-06-10

Power supply	4 AAA battery/USB (Transmitter) 100-240VAC 50/60MHZ(Receiver)
Load	<16A/250VAC
Temp. range	5°C to 35°C
Dimension	124x88x21mm(Transmitter) 86x86x24mm(Receiver)

### Features

- \* Fashionable design style.
- \* Passive linkage output.
- \* 868MHZ wireless communication.
- \* Touch button design.
- \* 1 year working life of battery.



## SAS2011DE Thermostat for Wireless Receiver

PN: 435-018-02

Power supply	100~240VAC 50/60HZ
Accuracy	±1°C
Temp. range	0°C to 50°C
Wireless transmit range	Open distance 100M
Wireless frequency	868MHz
Dimension	86x86x24.4mm

### Features

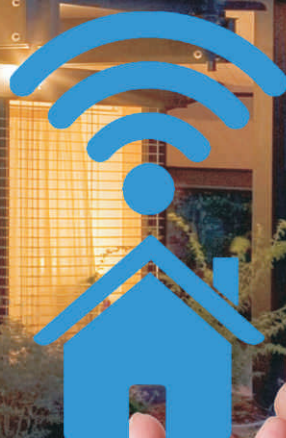
- \* The description of thermostat working condition: standby, shutdown, working, power failure memory, forced output, communication signals
- \* Select the limit of temperature value.
- \* Code match.
- \* Check thermostat operation.







Easy Operation, High Accuracy,  
Various Control Options.





Address : 6/F,4/F,3/F, Building A , No. 8 East Region , ShangXue Science & Technology Industry Park,  
Buji , ShenZhen, China 518120

EMAIL : [info@saswell.com](mailto:info@saswell.com)

TEL: 8675561218391/2/3/4/5

FAX: 0086-755-61218396

[WWW.SASWELL.COM](http://WWW.SASWELL.COM)

