Rti-Tek PRODUCT CATALOG

Smart Home Energy Saving & Comfortability



Rti-Tek

Smart Energy-Saving Solutions Supplier

Rti-Tek is a trusted innovator in the HVAC industry, utilizing Internet of Things (IoT) and Artificial Intelligence (AI) technologies to improve building energy efficiency. We are committed to contributing to a more comfortable and sustainable future for homes and businesses around the globe.

About us

Advanced Technology

We hold over 70 patents that support our R&D efforts.

Trusted Quality

Our facilities maintain ISO9001, ISO14001, and BSCI certifications, while our products comply with CE and RoHS standards to ensure quality assurance.

Tailored Services

We provide flexible OEM and ODM solutions tailored to your specific needs.

Reliable Connectivity

We integrate low-power protocols like Zigbee, BLE, Wi-Fi, and Matter with smart algorithms for efficient applications.

Global Reach

Rti-Tek serves over 50 countries and millions of users, leading innovations in energy management.

Partners























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Smart Thermostats for Underfloor Heating

This smart thermostat is designed for underfloor heating systems, offering options for electric, water, and gas boiler heating. It is suitable for recessed mounting in both homes and offices.

Specifications

Power Supply: AC100~240V; 50/60Hz Current Load: 16A (Mode 716) / 3A (Mode 703/723) Power Consumption: 1.5W Max Display Accuracy: 0.1°C Temperature Control Accuracy: 0.5°C Temperature Control Range: 5~95°C Ingress Protection: IP20 Materials: PC + ABS Sensor: NTC, B=3380, R25=10KΩ±1% (external NTC optional) Safety Certification: CE, RoHS

Model: V8W

Dimensions(W×H×D): 86 × 86 × 43 mm Installation: Flush-mounted Panel Standard: 86-type Hole Distance: 60 mm





Zero-Crossing Detection

Precision

Extends equipment lifespan, reduces energy consumption, and ensures safety and stability

Temperature Control

temperature management

Display accuracy of 0.1°C

and control precision of

±0.5°C for accurate



OpenTherm Protocol

Supports OpenTherm protocol for efficient heating control

Multiple Screen Options

Offers TN, VA, LED, and IPS screen options to meet various needs



| Scenario | Floor Heating | | | | | |
|-----------------|------------------|--------------|--------------|----------|----------|----------|
| System mode | Water Gas Boiler | | | Electric | | |
| Model | 703 | 7035 | 723 | 7235 | 716 | 7165 |
| Wi-Fi | S | \checkmark | \checkmark | I | S | S |
| Schedule | S | \checkmark | \checkmark | I | v | I |
| Passive Linkage | _ | _ | \checkmark | I | v | _ |
| 485 modbus | _ | | _ | S | _ | S |
| NTC | | Opti | 10K | Optional | | |
| Output load | ЗА | | | 16A | 16A | |



Underfloor Heating

Smart Temperature Control

Electric Underfloor Heating



Water Underfloor Heating



Gas Boiler Control



Passive Control



OpenTherm Protocol Support

Underfloor Heating ID Choices



R9MW



R53W



V4W



R3W



R7W



W8V



R7C



R8C



R5W



R6W



R9W



R8W



Please scan the QR code or visit the website https://go.rti-tek.org/heating





Smart Thermostats with Battery Powered

This smart thermostat is crafted for surface-mounting and runs on battery power, making it ideal for modern homes that require flexible layouts and greater convenience.

Specifications

Power Supply: 2 x1.5V Alkaline AA batteries Display Accuracy: 0.1°C Temperature Control Accuracy: 0.5°C Temperature Control Range: 5~95°C Ingress Protection: IP20 Materials: PC + ABS Sensor: NTC, B=3380, R25=10KΩ±1% Safety Certification: CE, RoHS

Model: T5

Dimensions(W×H×D): 86 x 90 x 20.8 mm Installation: Surface-mounted Panel Standard: 86-type Hole Distance: 60 mm





Battery-Powered

No wiring required, offering flexible installation options



Easy Surface Mount

Surface mount design for quick installation and easy access



Flexible Boiler Control **Optional versions supports** both active and passive control for gas boilers



Multiple Heating Options

Optional configurations include electric underfloor heating, water underfloor heating, or gas boilers to accommodate various requirements



https://go.rti-tek.org/H-B-P



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Smart Thermostats for Fan Coil Unit

This flush-mounted thermostat controls air conditioning fan coil units, offering options for two-pipe and four-pipe systems, as well as integrated underfloor heating and air conditioning systems.

Specifications

Power Supply: AC100~240V; 50/60Hz Current Load: 3A Power Consumption: 1.5W Max Display Accuracy: 0.1°C Temperature Control Accuracy: 5~95°C Ingress Protection: IP20 Materials: PC + ABS Sensor: NTC, B=3380, R25=10KΩ±1% Safety Certification: CE, RoHS

Model: R7C

Dimensions(W×H×D): 86 × 86 × 43 mm Installation: Flush-mounted Panel Standard: 86-type Hole Distance: 60 mm





Fan Speed

Supports high, medium, and low options



0-10V Control

Supports 0-10V signal transmission, provides precise temperature control and energy savings



Monitors temperature and humidity in real-time for optimal comfort



Modbus 485 Utilizes Modbus protocol with RS-485 communication for multi-device connectivity and data transfer





| Scenario | | | Fan Coll | | | Integ | rated |
|-------------------------|------------|---------------------------|----------|---------|--------------|-----------------------------|--------------------------|
| System mode | | 2-pipe | | 4-pipe | | Fan-Coil with Floor-Heating | |
| Model | 743 | 853 | 853S | 863 | 8635 | 963 | 963S |
| Wi-Fi | | | I | | I | | |
| Schedule | _ | _ | _ | _ | _ | | _ |
| Time Task | | | I | | I | | |
| Fan control | | | I | | I | | |
| Passive Linkage | _ | I | S | | S | S | v |
| 485 modbus | _ | | S | | S | _ | v |
| NTC | — Optional | | Optional | | Optional | | |
| Output load | ЗА | | ЗА | | ЗA | | |
| Works with Apple Hom | | works with Google Home | with | | Yandex Alice | | works with Smart Life |

Air Conditioning

Fan Coil Control

For Two-pipe System



For Four-pipe System



Linkage Control



Passive Control



Supported Modbus 485

Air conditioning ID Choices



R9W



R3W



R7C



R8C

More product information

Please scan the QR code or visit the website: https://go.rti-tek.org/AC





Smart Fan Coil Thermostats for Easy Installation

This wall-mounted type thermostat controls air conditioning fan coil units and works with various HVAC systems, offering flexibility for modern homes with adaptable layouts.

Specifications

Power Supply: AC100~240V; 50/60Hz Current Load: 3A Power Consumption: 1.5W Max Display Accuracy: 0.1°C Temperature Control Accuracy: 0.5°C Temperature Control Range: 5~95°C Ingress Protection: IP20 Materials: PC + ABS Sensor: NTC, B=3380, R25=10KΩ±1% (external NTC optional) Safety Certification: CE, RoHS

Model: EBD1

Dimensions(W×H×D): 104 x 104 x 32 mm Installation: Surface-mounted Panel Standard: 86-type Hole Distance: 60 mm





Fan Speed

Supports High, Medium, and Low options



Easy Surface Mount

Surface mount design for quick installation and easy access



Temperature Control Efficient cooling and heating temperature management for comfort in all seasons



ECO Mode Activates energy-saving mode with a single press



EBD1 - White

EBD1 - Black

More product information Please scan the QR code or visit the website: https://go.rti-tek.org/AC-Easy-Install



Rti-Tek





RF433 Wireless Thermostat Sets for Gas Boiler Heating

This RF thermostat set includes a thermostat and a receiver, both using reliable 433 MHz RF technology. The thermostat can be placed anywhere and works with the receiver for seamless control of gas boiler heating.

Specifications

Thermostat Power Supply: 5V USB(Type-C)/3*1.5V alkaline AA batteries Receiver Power Supply: AC100~240V; 50/60Hz Display Accuracy: 0.1°C Temperature Control Accuracy: 0.5°C Temperature Control Range: 5~95°C Ingress Protection: IP20 Materials: PC + ABS Wireless Frequency: 433MHz(Bidirectional FSK) Transmission Distance: 200 meters (Open environment) Built-in Sensor: NTC, B=3380, R25=10KΩ±1% Safety Certification: CE, RoHS

Dimensions & Installation:

Thermostat Model: T9W

Dimensions(W×H×D): 118 × 86 × 24 mm Installation: Desktop Design for Flexible Placement



Dimensions(W×H×D): 86 × 86 × 26 mm Installation: Wall-Mounted, Standard 86-Type Panel, Hole Spacing 60mm



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200m

USB & Battery Dual Power

Flexible dual power options for convenience

Reliable RF transmission

with a range of up to 200

meters in open areas

RF 433 Stable Transmission



OT protcol

Portable Stand

Easily movable and positionable with a sturdy stand

OpenTherm Protocol

Supports OpenTherm protocol for efficient heating control



Underfloor Heating Wireless Gas Boiler Control

Many-to-One Configuration

One Receiver controls Multiple Thermostats for easy and efficient home heating management.



Socket Receiver

Powerful and compact design, seamlessly installed, saving valuable outlet space!



Gas Boiler Heating Control ID Choices

Thermostat







T8



T6



T9

Receiver



RC5P



RC9P



283°

Τ7





Smart Thermostatic Radiator Valves

This smart thermostatic radiator valve is designed to efficiently controls the heating process of radiators, ensuring optimal comfort and energy savings.

Specifications

Power Supply: 3 x 1 .5 V alkaline AA batteries Display Accuracy: 0.1°C Temperature Control Accuracy: 0.5°C Operation Temp. Range: 5°C~35°C Ingress Protection: IP20 Materials: PC + ABS Sensor: Built-in sensor or remote sensor Safety Certification: CE, RoHS Valve Compatibility: Fits M30×1.5 mm thread, compatible with Danfoss RA/ RAV/RAVL, Caleffi, Giacomini, M28 valves

Model: TRV 706 Dimensions: 59.7 × 95.3 × 59.7 mm





High-Performance Motor

Powerful stepping motor delivers 80N thrust for precise temperature control



ON/OFF & PID Modes

Choose between ON/OFF and PID modes for precise temperature control and energy efficiency



Four Smart Modes Comfort, Eco, Frost Protection, and Off modes-switch easily for year-round comfort



Easy Installation & Wide Compatibility

Fits M30×1.5 mm thread, compatible with Danfoss RA/RAV/RAVL, Caleffi, Giacomini, M28 valves-97% radiator valve compatibility



C!**)**· Low power consumption



Antifreezing Function

Automatic

Control



Child-lock

Function

Voice Control

illi

Power-off

Memory



Silent

Operation

Dual-Temp. Display

> **(**4**)** Battery Powered





Radiator Heating Control Design Innovation & Application Upgrade

Product Structure



APP Smart Control



Radiator Heating Control ID Choices



More product information Please scan the QR code or visit the website:

https://go.rti-tek.org/TRV





Smart Wireless Thermometer & Hygrometer

This smart temperature and humidity sensor monitors environmental conditions in real time and collaborates with other smart devices to improve energy efficiency and comfort at home.

Specifications

Power Supply: 3 x1.5V Alkaline AA batteries Display Accuracy: 0.1°C Temperature Control Accuracy: 0.5°C Temperature Control Range: 5~95°C Ingress Protection: IP20 Materials: PC + ABS Sensor: Built-in sensor External sensor: NTC or Temperature & Humidity Probe Safety Certification: CE, RoHS Dimensions(W×H×D): 68 × 68 × 22 mm Installation: Wall mount & Desktop





Smart Door & Window Sensors

This smart door and window sensor monitors the status of doors and windows in real time and works with other smart devices to create a secure and intelligent home environment.

Specifications

Power Supply: Battery Powered Sensor Technology: Contact Sensor Installation: Mount to door or window frame

Features:

- Work with Tuya/Smart Life APP
- Illegal Open/Close Alarm
- Real-Time Monitor
- Instant Notification
- Versatile Uses
- Easy Setup

Dimensions(W×H×D): 28 × 77 × 18 mm 14 × 77 × 18 mm





Smart Socket Thermostats

This smart socket enables remote monitoring and control of non-smart heating and cooling devices, enhancing the intelligent management of household temperatures for various appliances.

Specifications

Power Supply: AC100~240V; 50/60Hz Current Load: 16A Power: 3680W Display Accuracy: 0.1°C Temperature Control Accuracy: 0.5°C Temperature Measurement Range: -30~110°C Ingress Protection: IP20 (Thermostat) IP68 (NTC) Materials: PC + ABS Sensor: NTC, B=3380, R25=10KΩ±1% (Waterproof) Safety Certification: CE, RoHS

Model: TP5

Dimensions(W×H×D): 57 × 78 × 37.5 mm Installation: Plug and play Plug Standard: DIN VDE 0620-1 Sensor Length: 5cm, 300cm





Heating & Cooling Control

One device, perfect comfort. Effortlessly switch between heating and cooling for yearround comfort



Weekly Programming

Set it and forget it. Automatically adjust temperatures based on your weekly routine



Timer & Countdown Features cycle timer and countdown functions, auto power-off for safety.



High & Low Temp. Alert

Get notified when temperatures go beyond your set range. Stay safe and worry-free



Dual-Temp. Display



Real-Time Weather Remote Control

Antifreezing Function



Child-lock Function









Heating & Cooling Control ID Choices

Thermostat









TP3

TP4

TP5

TP6

Linkage Control



NTC

Temperature-Humidity Sensors

More product information

Please scan the QR code or visit the website: https://go.rti-tek.org/socket











Smart Water Timers

This smart irrigation timer provides precise automated watering, conserving water resources while ensuring healthy plant growth. A perfect choice for home gardening and outdoor use.

Specifications

Power Supply: 4 x AA (1.5V) Alkaline Batteries Operating Water Pressure: 0.03MPa -0.9MPa (4.35 psi - 130.53 psi) Maximum Flow Rate: 35L/min Waterproof Rating: IP65 Water Inlet Connection: Compatible with 3/4" Faucet Threads Water Outlet Connection: Compatible with 3/4" Standard Garden Hose Threads Material: PC + ABS Safety Certifications: CE, RoHS, FCC Model: WT501 Dimensions(W×H×D): 118 × 86 × 24 mm

Model: WT601 Dimensions(W×H×D): 175 × 78 × 43.6 mm

Thread Options: NH (USA): 3/4" NPT (National Pipe Thread) BSP (EU): 3/4" BSP (British Standard Pipe)







Weather Forecast

Real-time weather updates to help you adjust your watering schedule based on current conditions



Volume-Based Watering Water according to plant needs, ensuring optimal irrigation with each application (Only FM

version)



Flow Statistics

Monitor water flow to help you manage your water usage effectively (Only FM version)



Rain Delay

Pause watering programs to avoid irrigation during rain, conserving water resources

4 5 6 11 12 13 14 18 21 19 20 ... 27 25 26 28

Access past watering logs and water usage history for smarter water management

Historical Records



Watering Calendar

Smart watering calendar to easily view your upcoming watering schedule





WT501



WT601-Blue



WT601-Yellow



WT601-Black

More product information

Please scan the QR code or visit the website: https://go.rti-tek.org/WT





Smart Zigbee & BLE Gateway / Hubs

Enables remote monitoring and control, supporting automated routines and real-time data exchange across connected devices for enhanced smart home management.

Specifications

Wireless Protocols: IEEE 802.15.4 (Zigbee), Wi-Fi 802.11b/g/n System Requirements: Android 6.0 or above, iOS 11.0 or above

Wireless Range

Zigbee: Up to 160 meters (Open area) BLE: Up to 50 meters (Open area) Wi-Fi: Up to 100 meters (Open area) Dimensions(W×H×D): ZB2W-U01: 62 × 62 × 15.5 mm ZB2W-G01: 56 × 56 × 23 mm



ZB2W-U01

ZB2W-G01





Smart HVAC Control Panel

This smart HVAC control panel serves as the core device for home temperature management, capable of monitoring temperature and heating in up to 8 rooms, making it ideal for complex living environments.

Specifications

Wireless Protocols: IEEE 802.15.4 (Zigbee), Wi-Fi 802.11b/g/n System Requirements: Android 6.0 or above, iOS 11.0 or above

Wireless Range

Zigbee: Up to 160 meters (open area) BLE: Up to 50 meters (open area) Wi-Fi: Up to 100 meters (open area) Voltage Range: AC 100~240V; 50/60Hz

Model: V9

Dimensions(W×H×D): 86 × 86 × 43 mm



Smart Home Energy Saving & Comfortability

Supports Matter standard, Wi-Fi, Zigbee, Bluetooth, and RF Remote Control, and compatible with leading smart home platforms like Amazon Alexa, Google Home, Apple HomeKit, and Smart Life.




Smart Thermostats for Underfloor Heating

Thermostats Classic Series

Suitable for: Underfloor heating (Electric / Water /Gas boiler heating)

Support: Weekly programming

Current load:

16A (For electric heating) / 3A (For water heating and gas boiler heating)

Power supply options: AC100~240V; 50/60Hz

Power consumption: **1W Max**

Temperature setting accuracy: **0.5°C**

Temperature setting range: 5~95°C

Installation: Wall mounted

Sensor: NTC, B=3380, R25=10KΩ±1% (External NTC optional)

Gas boiler Control: Dry contact control (Default) Active control

Dimensions (W x H x D): 86 x 90 x 43 mm (Reference)



Thermostats Wi-Fi Series

Suitable for:

Underfloor heating (electric / water /gas boiler heating)

Support: Weekly programming

Current load: 16A (For electric heating) / 3A (For water heating and gas boiler heating)

Power supply options: AC100~240V; 50/60Hz

Power consumption: **1W Max**

Temperature setting accuracy: **0.5°C**

Temperature setting range: **5~95°C**

Installation: Wall mounted

Sensor: NTC, B=3380, R25=10KΩ±1% (External NTC optional)

Gas boiler Control: Dry contact control (Default) Active control

Dimensions (W x H x D): 86 x 90 x 43 mm (Reference)



Wi-Fi Thermostats Battery Powered Series

Suitable for:

Underfloor heating (Electric / Water /Gas boiler heating)

Support: Weekly programming

Power supply options: 3 x 1.5V alkaline AA battery 2 x 1.5V alkaline AA battery (Optional)

Gas boiler Control: Dry Contact/ OpenTherm (optional)

Power supply options: AC100~240V; 50/60Hz

Power consumption: **1W Max** Temperature setting accuracy: **0.5°C**

Temperature setting range: 5~95°C

Installation: Wall mounted Sensor: NTC, B=3380, R25=10KΩ±1% (External NTC optional)

Gas boiler Control: Dry Contact

Dimensions (W x H x D): 86 x 90 x 43 mm (Reference)









V3B

V8B

V9B

T5

Smart Thermostats for Fan Coil Unit Control

Suitable for:

- Central air conditioning /fan coil units
- Supports cooling/heating (2-pipe)
- Cooling & heating (4-pipe)
- Underfloor heating & air conditioning(2-pipe)

Features 3-speed fan settings: High, Medium, Low, and Auto

Power supply options: AC100~240V; 50/60Hz

Current load: 3A

Setpoint range: 5 to 35°C (Default)

Accuracy: 0.5°C

Control: Remote control

Installation: Wall mounted

Weekly programming: Optional

RS485/Modbus communication: Optional

Room card function: Optional

Dimensions $(W \times H \times D)$: 86 x 90 x 43 mm (Reference)



R3W

R7C

R8C

R9W

Smart RF433 Thermostat Kits for Gas Boiler Heating

Wireless thermostat set Suitable for: Underfloor heating /gas boiler heating

Support: Weekly programming

Wireless Frequency: 433MHz(Bidirectional FSK)

Power Supply: Thermostat: 5V USB(Type-C) & 3*1.5V Alkaline AA batteries;

Receiver: AC100~240V ; 50/60Hz ; (Reference)

Temperature setting accuracy: 0.5°C

Temperature setting range: 5~95°C

Control: **Remote control**

Installation: Wall mounted (Surface)

Gas boiler Control: Dry Contact/ OpenTherm (Optional)

Transmission Distance: 200 meters (Open environment)

Built-in Sensor: NTC, B=3380, R25=10KΩ±1%

Thermostat Size: $86 \times 86 \times 24$ mm (Reference)

Receiver Size: 86 × 86 × 26 mm

Thermostat



Receiver





RC5P



Smart Socket Thermostats for Heating & Cooling

Suitable for: Electric heating & cooling

Support:

- Weekly programming
- Timer & Countdown
- High & Low Temp. Alert

Current load: 16A

Power supply options: AC100~240V; 50/60Hz

Power : 3680W

Temperature setting accuracy: **0.5°C**

Temperature Measurement Range: -30~110°C

Control: Buttons, App remote control

Ingress Protection: IP20 (Thermostat) IP68 (NTC)

Sensor: NTC, B=3380, R25=10KΩ±1% (Waterproof)

Plug Standard: DIN VDE 0620-1

Sensor Length: 5cm, 300cm

Dimensions(W×H×D): 57 × 78 × 37.5 mm (Reference)







TP3

TP4

TP5



TP6

Smart Thermostatic Radiator Valves for Radiator Heating

Suitable for: Radiator heating

Support:

- Weekly programming daily settable
- Comfort, Eco, Frost Protection, and Off Modes
- ON/OFF & PID system modes
- Open window function

Power supply options: **3 x 1 .5 V alkaline AA batteries**

Temperature setting accuracy: **0.5°C**

Operation Temp. Range: 5°C~35°C

Control: Buttons, Knob, App Remote control

Sensor: NTC, B=3380, R25=10KΩ±1%

Valve Compatibility: Fits M30×1.5 mm thread, compatible with Danfoss RA/RAV/RAVL, Caleffi, Giacomini, M28 valves













702



801



901

601



706

602



802

Timer Controller for Electric Heated Towel Rack

Model: TR3/TR1

Dimensions(W×D×H): 64.8mm*24mm*30mm

Power supply: AC100~240V; 50/60Hz

Power Consumption: 300W Max

Timing Function: **2H/4H/6H**

Power Gear: High / Medium / Low

Features:

- Scientific management of the use of time, 3 heating modes can be selected, energy saving and power saving.
- Bathroom artifacts, drying towels, dehumidification and antibacterial.
- Easy installation, no helper, you can do the installation yourself.











TR1-30B

TR1-30S

TR1-30W

TR3-30B

TR3-30S



TR3-30W

Central Heating Hub Controllers

Product Name:

Wireless floor heating junction box multi-function controller

Model: WBG833

Power Supply: AC100~240V; 50/60Hz

Current Load: **10A Max**

Storage Temp.: -20°C~70°C

Linkage Delay Time: 5min / 3min / 0min

Heating Control: ALL OFF / AUTO / ALL ON Wireless Frequency: 433MHz (Bidirectional FSK)

Transmission Distance: 200 meters (Open environment)

Dimensions(W×D×H): 280 × 110 × 40mm

Features:

- Centralized control of 8 sub-controllers, visual interface, convenient and intuitive.
- Can be systematically overridden to control zone valves or boiler thermostats.
- Simple installation and operation, effortless comfort and energy saving.





WBN833

WBG833

Fil Pilote Thermostats

Product Name: Pilot Wire Thermostat

Model: RP5W / RP5Z (-PM)

Control: Buttons, App

Power Supply: AC100~240V; 50/60Hz

Radio frequency rang: 2.400GHz ~ 2.483GHz

Operating Temp.: 0°C to 50°C, indoor use only Storage Temp.: -20°C~70°C

Temperature sensor: NTC, B=3380, R25=10KΩ±1%

Compatibility:

Compatible with all Class II electric radiators equipped with Pilot Wire technology

Dimensions(W×D×H): 86 × 86 × 26 mm













Professional Smart Energy Saving Solution Provider with ODM and OEM Services for HVAC Systems



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