

Smart Radiator Thermostat

Featuring LoRaWAN

KWT101



KWT101, a LoRaWAN[®] radiator thermostat to help with managing the heating-control system. With 1 pre-set date period and up to 16 customized heating plans, it enables the smart management of heating system and save unnecessary cost in a way. KWT101 is a smart and highly environment-sensitive products, abnormal temperature difference and extreme-low temperature can quickly trigger it and it will take fast steps in correcting them by adjusting the valve opening.

Compliant with KLED LoRaWAN[®] gateway and KLED IoT Cloud solution, users can control the room temperature as well as triggering other sensors or appliances easily via webpage or mobile App remotely.

◆ Features

- Adjust the room temperature automatically and manually with a time-controlled regulation
- Up to 16 heating plans within 1 pre-set Date Period
- Built-in temperature sensor, enabling environmental detection and accurate control
- Intuitive and direction adjustment LED display to suit different installation environments
- Support open-window detection and freeze protection
- Equip with child-lock to enable tamper-proof in public area
- Tamper button design and theft-detering collar accessory for structural anti-theft protection
- Suit most common radiator valves with optional valve adapters for universal use

- Easy to install with simple lock design without further setting
- Equipped with NFC for one touch configuration, support card emulation mode
- Function well with standard LoRaWAN® gateways and network servers
- Compatible with KLED IoT Cloud

◆ Specifications

Wireless Transmission	
Protocol	LoRaWAN®
Frequency	IN865/RU864/EU868
Tx Power	16 dBm (868 MHz)
Sensitivity	-137dBm
Mode	OTAA/ABP Class A
Valve Control	
Actuator	Stepping Motor
Default Valve Fitting	M30 ×1.5 mm
Optional Adapters	RA, RAV, RAVL, Giacomini, M28 (Comap, Herz, TA)
Advanced Feature	Automatic Temperature Control, Heat plans, Child Lock, Freeze Protection, Open-window Detection, Tamper Alarm
Temperature Sensor	
Sensor Type	NTC
Range	-20°C ~ 60°C
Accuracy	± 0.5°C (0°C ~ 50°C)
Resolution	0.1°C
Others	
Display	LED Display with White Light
Button	1 × Control Knob, 1 × Calibration & Tamper Button (Internal), 1 × Reset Button (Internal)
Configuration	NFC Configuration via Mobile App
Physical Characteristics	
Power Supply	2 x 1.5V Li-FeS ₂ AA Replaceable Batteries (3000 mAh in Total)
Battery Life ¹	Around 5 Years (10 min Interval, Typical 4-month Heating Season, 25°C)
Operating Temperature	-20°C ~ +60°C
Storage Temperature	-40°C ~ +70°C (Without Batteries)
Relative Humidity	0% - 95% (Non-condensing)

Ingress Protection	IP30
Dimension	Φ 52*90mm (Φ 2.05 * 3.54in)
Material & Color	Stainless+ABS, White
Installation	Latching on the Valve

¹Tested under laboratory conditions and for guideline purposes only.