Smart Radiator Thermostat

Featuring LoRaWAN®

WT101



WT101, 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. WT101 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 Milesight LoRaWAN® gateway and Milesight Development Platform solution, users can control the room temperature as well as triggering other sensors or appliances easily remotely.

WT101 is widely used for smart heating control of buildings and homes.

◆ 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-deterring 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
- Function well with standard LoRaWAN® gateways and network servers
- Compatible with Milesight IoT Cloud and Milesight Development Platform
- Support Firmware Update Over the Air (FUOTA) feature

◆ Specifications

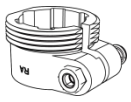
Wireless Transmission	
Protocol	LoRaWAN®
Frequency	IN865/RU864/EU868
Tx Power	16 dBm (868 MHz)
Sensitivity	-137dBm
Mode	OTAA/ABP Class A
Valve Control	
Actuator	Stepping Motor
Default Valve Fitting	M30 ×1.5 mm
Optional Adapters	RA, RAV, RAVL, Giacomini, M28 (Comap, Herz, TA)
Advanced Feature	Automatic Temperature Control, Valve Opening Control, Heat Plans, Freeze Protection, Open-window Detection, Tamper Alarm, Effective Stroke
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)
Software	
Configuration	NFC via Mobile App or Downlink
Advanced Feature	Child Lock, External Sensor Mode, FUOTA
Physical Characteristics	
Power Supply	2 x 1.5V Li-FeS_2 AA Replaceable Batteries (3000 mAh in Total)
Battery Life[1]	Around 8 Years (SF7, EU868)

	Around 5 Years (SF10, EU868) (10 min Interval + Control Once during 5-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
Weight	170g (With Batteries)
Dimension	Φ 52*90mm (Φ 2.05 * 3.54in)
Material & Color	Stainless+ABS, White
Installation	Latching on the Valve
Approvals	
Regulatory	CE
Environmental	RoHS

[1]Tested under laboratory conditions and for guideline purposes only.

◆ Adapter Kit (Optional)

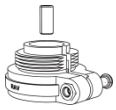
Milesight provides a valve adapter kit including all below accessories for different valve installation:



Danfoss RA



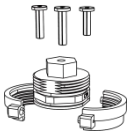
Danfoss RAVL



Danfoss RAV

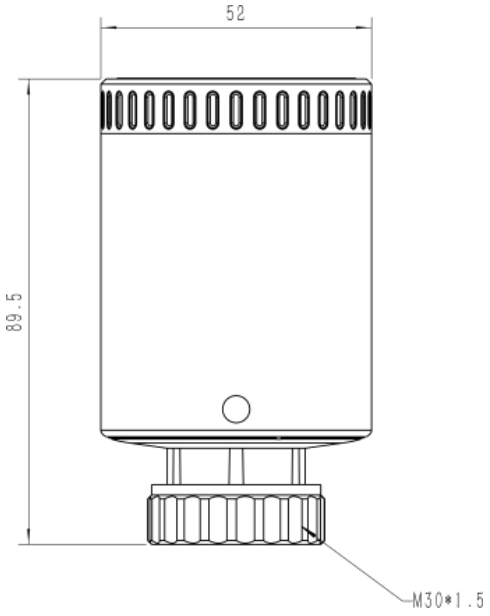


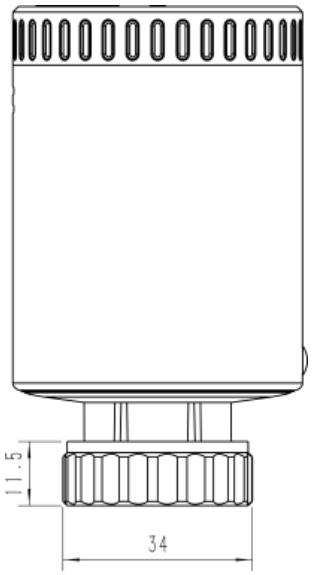
Giacomini



M28 (Comap, Herz, TA)

◆ Dimensions (mm)




11.5
34