HELTUN

FAN COIL THERMOSTAT

IT’S YOUR COMFORT.
TAKE CONTROL.

HELTUN

WHEN YOUR COMFORT MATTERS

When considering Thermal Comfort
what aspects are the most important?
Is it general room temperature?
Heating or Cooling temperature?
Conditioning and ventilation speed?
Or maybe something else?

Whatever the need, HELTUN guarantees to take care of it

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TAKE CONTROL

5 channel relays,
5A load each with two
independent inputs

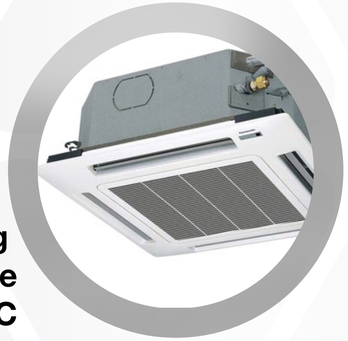
Split Wall Mounted AC

Ceiling Concealed AC

Window Mounted AC

Ceiling Suspended AC

Ceiling Cassette AC



Floor Convectors

Split Ducted AC

Portable AC

Fan Coil units

Standing Floor (Tower) AC

ELEGANCE

Powerful, efficient and well-designed, HELTUN is the thinnest and most stylish thermostat on the market. Featuring a crystal-clear glass window, the 9mm thick casing is resistant to fire and short circuit.

HELTUN

89mm
89mm
HELTUN
ROOM TEMP
22.5 °C
MORNING
FAN SPEED
AUTO
HUMIDITY
67 %
AM 09:43
SAT
OPERATING MODE
TIME
SET TEMP
25.0 °C
HEATING
+
SPEED
−
MODE

9mm
28mm

∅53mm
FAN COIL THERMOSTAT
HE-ZW-THERM-FC1 (868.4MHz)
100-240V~ 50/60Hz, 5x5A
SN: 121-01-1-0001
Made in Armenia
220V IN
CH 4,5 IN
CH 1,3 IN
CH 1 OUT
CH 2 OUT
CH 3 OUT
CH 4 OUT
CH 5 OUT

HELTUN integrates seamlessly into your interior design and is available in 24 combinations: 4 frame colours (Silver, Chrome, Black and White) and 6 glass types (White, Black, Yellow, Green, Red, Blue), you can choose any style that suits your taste.

DE SIGN

HELTUN

FRAME: SILVER
GLASS: WHITE
MODEL: 121101

FRAME: SILVER
GLASS: BLACK
MODEL: 121102

FRAME: SILVER
GLASS: YELLOW
MODEL: 121103

FRAME: SILVER
GLASS: GREEN
MODEL: 121104

FRAME: SILVER
GLASS: RED
MODEL: 121105

FRAME: SILVER
GLASS: BLUE
MODEL: 121106

FRAME: CHROME
GLASS: WHITE
MODEL: 121201

FRAME: CHROME
GLASS: BLACK
MODEL: 121202

FRAME: CHROME
GLASS: YELLOW
MODEL: 121203

FRAME: CHROME
GLASS: GREEN
MODEL: 121204

FRAME: CHROME
GLASS: RED
MODEL: 121205

FRAME: CHROME
GLASS: BLUE
MODEL: 121206

HELTUN

FRAME: BLACK
GLASS: WHITE
MODEL: 121301

FRAME: BLACK
GLASS: BLACK
MODEL: 121302

FRAME: BLACK
GLASS: YELLOW
MODEL: 121303

FRAME: BLACK
GLASS: GREEN
MODEL: 121304

FRAME: BLACK
GLASS: RED
MODEL: 121305

FRAME: BLACK
GLASS: BLUE
MODEL: 121306

FRAME: WHITE
GLASS: WHITE
MODEL: 121401

FRAME: WHITE
GLASS: BLACK
MODEL: 121402

FRAME: WHITE
GLASS: YELLOW
MODEL: 121403

FRAME: WHITE
GLASS: GREEN
MODEL: 121404

FRAME: WHITE
GLASS: RED
MODEL: 121405

FRAME: WHITE
GLASS: BLUE
MODEL: 121406

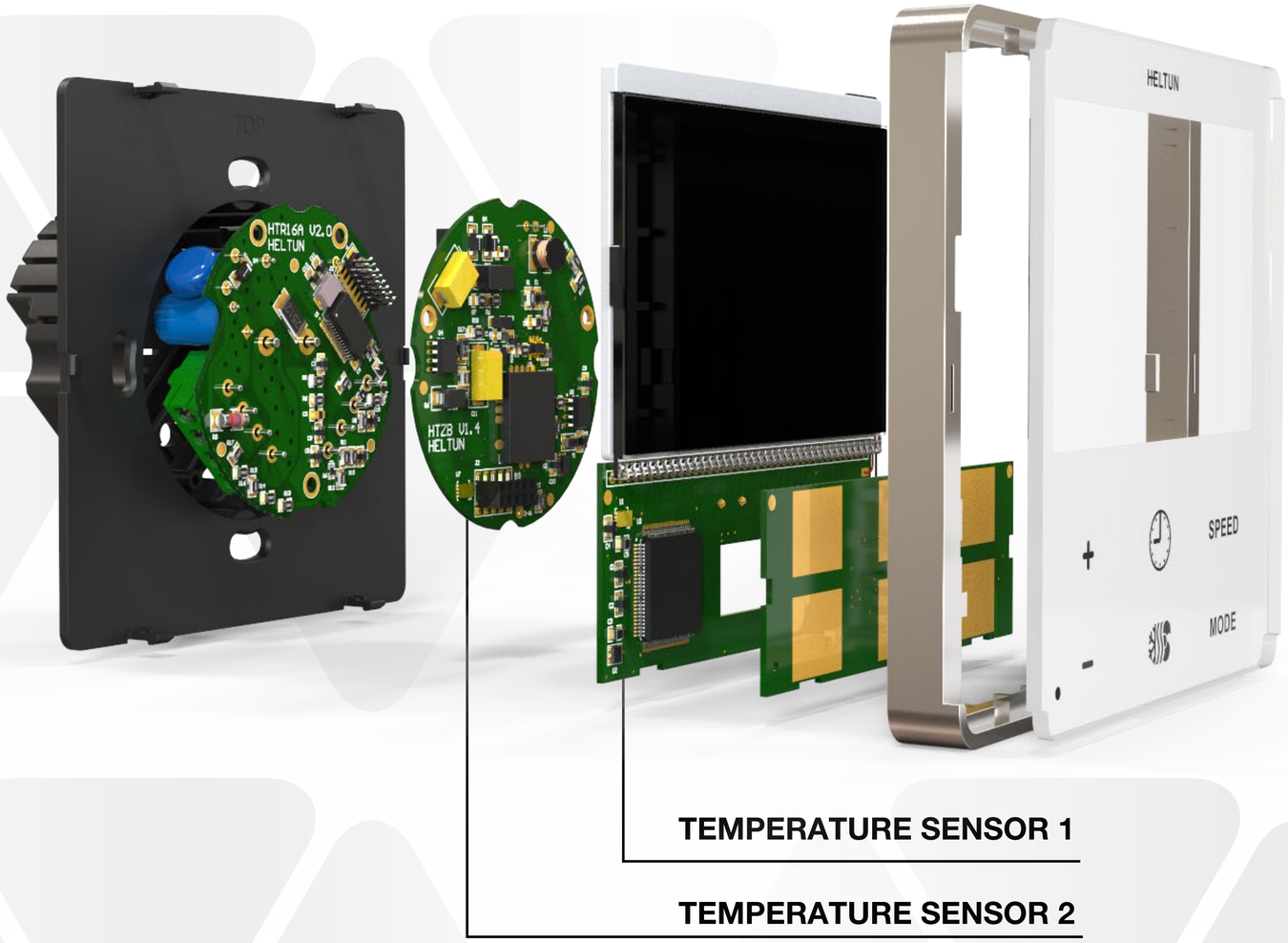
INTERNAL SENSORS

In addition to temperature control sensors, HELTUN thermostats also feature built-in humidity and light sensors.

TEMPERATURE SENSOR

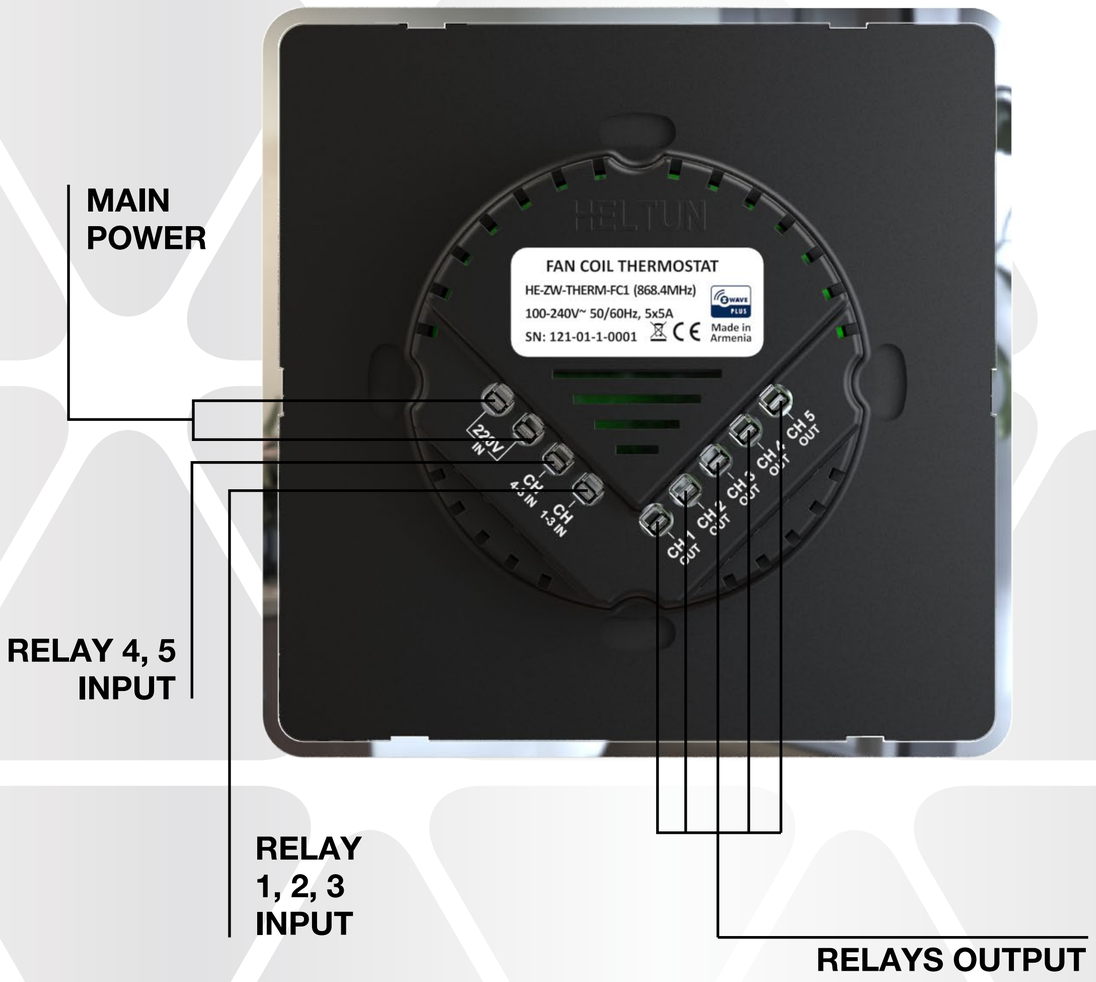
HUMIDITY SENSOR

LIGHT SENSOR



ADDITIONAL SENSORS THAT HELP YOU SAVE ENERGY

When an electronic device carries out its function, a certain amount of heat is generated. As a result, the ambient temperature is usually reported incorrectly, with merely a 1.5-2.0 degrees Celsius precision. HELTUN engineers have added two additional internal sensors that consider excess heat generated from the device itself, whilst a special compensating software calculates the ambient temperature with an incredible 0.2-0.3 degrees Celsius precision.



INPUTS & OUTPUTS

The main power input is 100-250VAC.

It has 5 relay outputs each with max 5A load.

The switcher also has two independent inputs for relay channels which allow it to control systems with different power sources or to use outputs as dry contacts. E.g. to switch On/Off 220VAC light and control motorized valve with 24VDC power.

Input 1 with the required power source is for relay channels 1, 2 and 3, which can be loaded up to a max 15A.

Input 2 with the required power source is for relay channels 4 and 5, which can be loaded up to a max 10A.

KNOW HOW MUCH ENERGY YOU ARE USING

With our HELTUN built-in power consumption logic you can monitor precisely how much energy was used during any particular day, week or month for each channel.

Just specify the consumption of the load in watts for each relay channel and the special logic will calculate total consumption relatively to the time since the output is in the ON state.

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CONTROLS

HELTUN thermostats have touch buttons which are super sensitive and react even before physical touch, in fact processing at 1-2mm distance The buttons are:

“SPEED” button to control the fan speed (cooling, heating or ventilation power).

"Mode" button to quickly change the operating mode of the thermostat (e.g. switch to economy mode or to comfort mode, etc.). Hold the Mode button to open settings menu that allows up to 20 various settings and parameters of the thermostat

"Time" button that allows you to quickly adjust the temperature for different times of the day.

“Climate” button – for selecting climate mode: Heating only, Cooling only, Heating and Cooling, Ventilation only

"+" and "-" buttons for adjusting the temperature

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LCD SCREEN

HELTUN’s large LCD screen shows all the necessary information simultaneously and, unlike many other models, does not require any additional commands. There is instant access to information from all sensors: ambient room temperature, air humidity, current temperature settings, thermostat operational mode, climate mode, fan speed, date and time.

Automatic screen brightness control seamlessly adjusts to the ambient light conditions, making it easy to read even in the dark.

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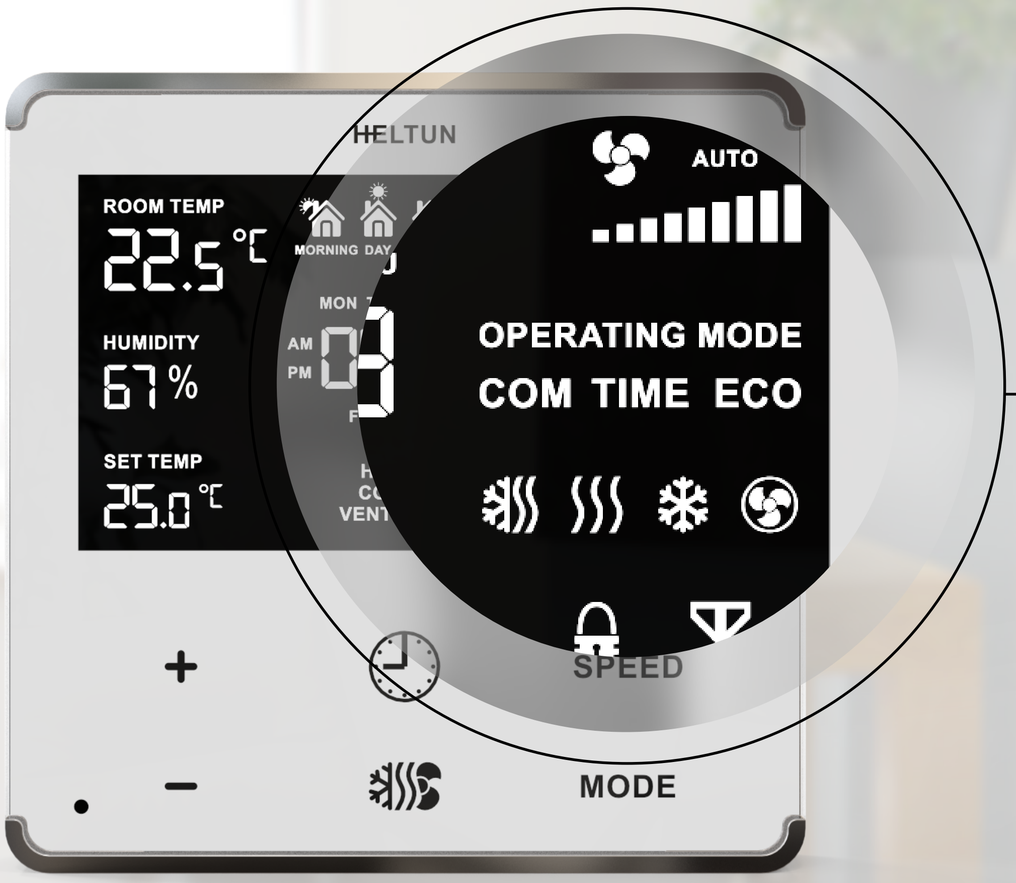

COM — Comfort mode

ECO — Energy saving mode

TIME — Time mode

Heating & Cooling mode

Heating only mode

Cooling only mode

Ventilation mode

OPERATING MODES

COM and ECO modes constantly maintain the set temperature. The user can easily change the temperature set for each mode. To do this, simply press the "mode" button to select the desired mode, and use the "+" and "-" buttons to set the required temperature.

TIME mode allows to set a different temperature for Morning, Day, Evening and Night periods for each day of the week.

CLIMATE MODES

In Heating & Cooling mode the thermostat will constantly maintain the desired temperature. If the ambient room temperature will be higher than the Set Temperature the device will go to the Cooling state. In case the room temperature drops the thermostat will go to the Heating state.

In Heating only mode the thermostat will go to Heating state if the ambient room temperature will be lower than the Set Temperature and will go to IDLE state if the room temperature is higher than that required.

In Cooling only mode the thermostat will go to Cooling state if the ambient room temperature will be higher than the Set Temperature and will go to IDLE state if the room temperature is lower than that required.

In Ventilation mode the thermostat will only ventilate.

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TIME MODE

Reduce your energy consumption up to 50% and help look after the environment by activating the TIME mode. Adjust temperature according to your habits by reducing it while you are away from home and increasing in the evenings and early mornings.

On average, people spend about 12-14 hours a day at home. The rest of the time the house is empty and only needs minimum heating. Consider 7/8 hours of sleeping time in the hours spent at home, keeping in mind that the optimal sleeping temperature is considered to be 18 degrees Celsius.

The thermostat can be set individually for time and temperature for morning, day, evening and night. For example, it can be assigned for Monday morning start at 7.00, then day temperature starting at 9.00 (when absent for work etc.), then evening starting at 18:00 (half an hour before occupants return). The night regime then begins at 23.00 (bedtime).

You can have separate temperature settings for all 4 periods. But this is not all - as temperature can be programmed for each day of the week - weekends can be handled differently.

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FAN SPEED

Fan Speed (heating, cooling or ventilation power) can be controlled manually or in Auto mode.

There are 4 speed levels – Off, Low, Medium, High.

In Auto mode the thermostat logic will automatically select the speed level regarding the difference of the desired temperature and ambient room temperature.

If the difference is less than 1.0C the thermostat will select Low speed level.
If the difference is in range 1.0C – 2.0C the thermostat will select Medium speed level.
If the difference is more than 2.0C the thermostat will select High speed level.

When the ambient room temperature reaches the required temperature, the thermostat will go to IDLE (fan off) state.

HYSTERESIS

Hysteresis defines when the system should switch the heating/cooling on or off when the temperature changes. For example, if the desired temperature is 25℃ and hysteresis value is set to 0.5 degrees, it will switch the heating on when the ambient temperature drops to 24.5℃.

The higher your hysteresis value is set, the more energy you can save but at the same time the variations in your room temperature will be higher.

The factory default is 0.5℃.

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SAFE & SAVE

In case of a power cut or disconnection from the main power source the internal memory is not erased and on reconnection all your saved settings will be fully functional.

To prevent children from meddling with your thermostat settings, you can activate the special child-safe mode.

EASY TO INSTALL

HELTUN devices can be easily installed into any standard wall fitment (rectangular or round) and no special skills are required.

1

2

3

HELTUN

HomeSeer

Zipato

Vera

Fibaro
Home Center Lite

Eedomus

Fibaro
Home Center 2

Popp-HUB

Z-Wave.me
RaZberry

Z-WAVE PLUS S2 CERTIFIED

Connect your HELTUN devices to the Smart Home controlling system using the latest secure Z-Wave plus chip with new advanced Security 2 (S2) framework (AES 256 encryption method for data transfer).

The HELTUN thermostat is compatible with all Z-WAVE certified controllers and devices.

With the Z-Wave controller, you can manage all the functions of the thermostat via a mobile application, including temperature and mode change, viewing accurate energy consumption charts and much more.

Up to 10 separate devices can be connected to the thermostat. You can associate with the Heltun thermostat any Z-Wave compatible ON/OFF switcher or other thermostat and control different climate systems in the room, or even connect motion sensors and adjust the change of modes via identification of people and general movement inside the house.

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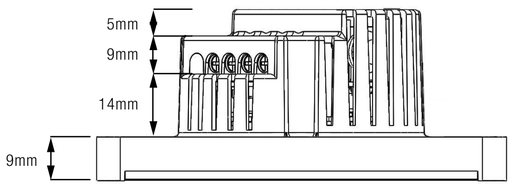

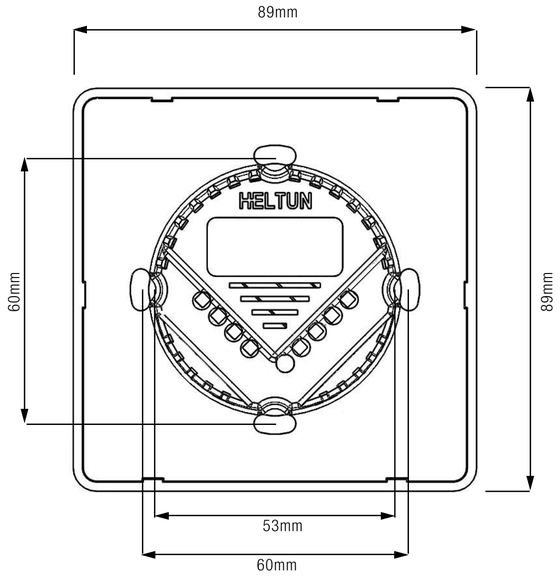

TECHNICAL SPECIFICATIONS:

- Front frame dimensions: 89x89x9mm
- Back dimensions: 53x53x28mm
- Material: Flame retardant plastic, tempered glass
- 4 frame colours: Silver, Chrome, Black, White
- 6 glass colours: White, Black, Yellow, Green, Red, Blue
- LCD: 73x42mm, black with white icons
- 6 sensitive capacitive touch buttons
- Operating temperature: -10°C – +60°C
- Power supply: 100V – 230VAC, 50Hz/60Hz
- Power consumption: 2.0W
- Max resistive load: 5A for each output channel
- Relays life time: 100.000 switches
- Internal ambient brightness sensor
- Internal temperature sensor
    - o Measurement range: -40°C to +125°C
    - o Accuracy: ±0.5°C
- Internal humidity sensor
    - o Measurement range: 0 – 80%RH
    - o Accuracy: ±3.0%RH
- IP class: IP21
- Z-Wave frequency: EU-868/869 MHz

(other frequencies available on request)

- Z-Wave SDK: V6.71
- Z-Wave Plus module: ZM5202

FUNCTIONAL SPECIFICATIONS :

- Inclusion/exclusion into/from z-wave network
- Association control of 10 devices from network
- 3 operation modes:
    - o COM – Comfort mode
    - o ECO – Energy saving mode
    - o TIME – Time mode
- 4 period temperature schedule for 7 days of the week
- Choosing a climate mode
    - o Heating and Cooling
    - o Heating only
    - o Cooling only
    - o Ventilation
- Software energy consumption meter for each channel
- Consumption meter reset
- Temperature sensors calibration
- Temperature set intervals: 4°C to 37°C
- Temperature limiter
- Choosing a temperature hysteresis
- Choosing a degree (Celsius / Fahrenheit)
- Adjustable LCD brightness: Auto or Manual
- LCD standby mode
- Child lock
- Factory reset

Z-WAVE CLASSES:

CLASSES GENERIC_TYPE_THERMOSTAT
SPECIFIC_TYPE_THERMOSTAT_GENERAL_V2
COMMAND_CLASS_BASIC
COMMAND_CLASS_SUPERVISION
COMMAND_CLASS_SECURITY_2
COMMAND_CLASS_THERMOSTAT_SETPOINT_V3
COMMAND_CLASS_THERMOSTAT_SETBACK
COMMAND_CLASS_THERMOSTAT_MODE_V3
COMMAND_CLASS_THERMOSTAT_OPERATING_STATE
COMMAND_CLASS_THERMOSTAT_FAN_MODE_V4
COMMAND_CLASS_THERMOSTAT_FAN_STATE_V2
COMMAND_CLASS_SENSOR_MULTILEVEL_V7
COMMAND_CLASS_VERSION
COMMAND_CLASS_MANUFACTURER_SPECIFIC
COMMAND_CLASS_ZWAVEPLUS_INFO
COMMAND_CLASS_METER_V3
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_CLOCK
COMMAND_CLASS_CONFIGURATION_V2
COMMAND_CLASS_ASSOCIATION

HELTUN

Made in Armenia
The Land of Surprising Engineering

www.heltun.com
info@heltun.com