HELTUN™

IMPOSSIBLY SMART

TOUCH PANEL SWITCH

SOLO	DUO	TRIO	QUATTRO	QUINTO
TPS01	TPS02	TPS02	TPS04	TPS05

WITH Z-WAVE 700 PLATFORM

YOUR CONVENIENCE MATTERS

- When considering your convenience at home, what is most important?

- Is it being able to turn ON or OFF lights without running through different rooms?

- Or be able to lock the door, close the blinds, and dim the lights with a single touch?

- Or maybe something else?

**Whatever the need,
HELTUN has got you covered.**

HELTUN

TAKE CONTROL

Doors & Gates

Blinds

Curtains

Light Switches

Windows

Motorized Valves

Electronic Door Locks

Scene Activation

Up to five channel relays with dry contacts & 5 Amp load each.

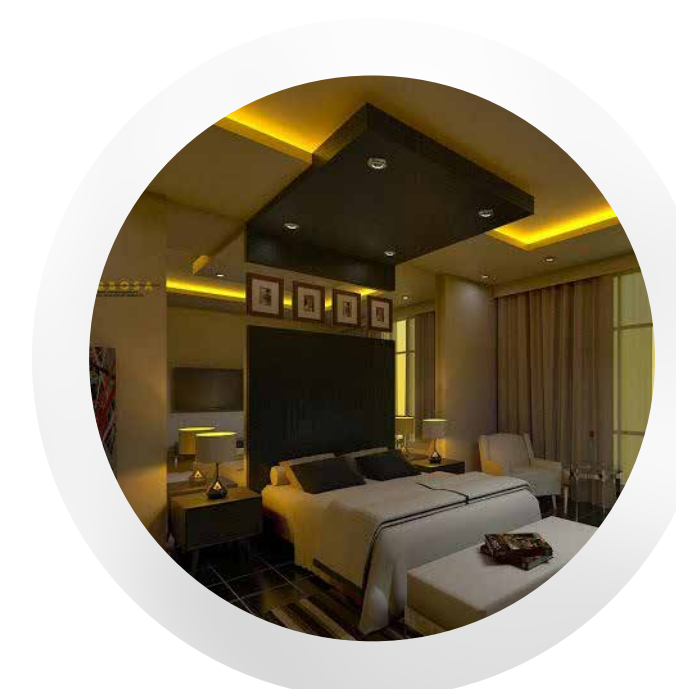HELTUN Advanced Zero-Cross Technology delivers greatly increased longevity & reliability.

HELTUN

IMPOSSIBLY THIN
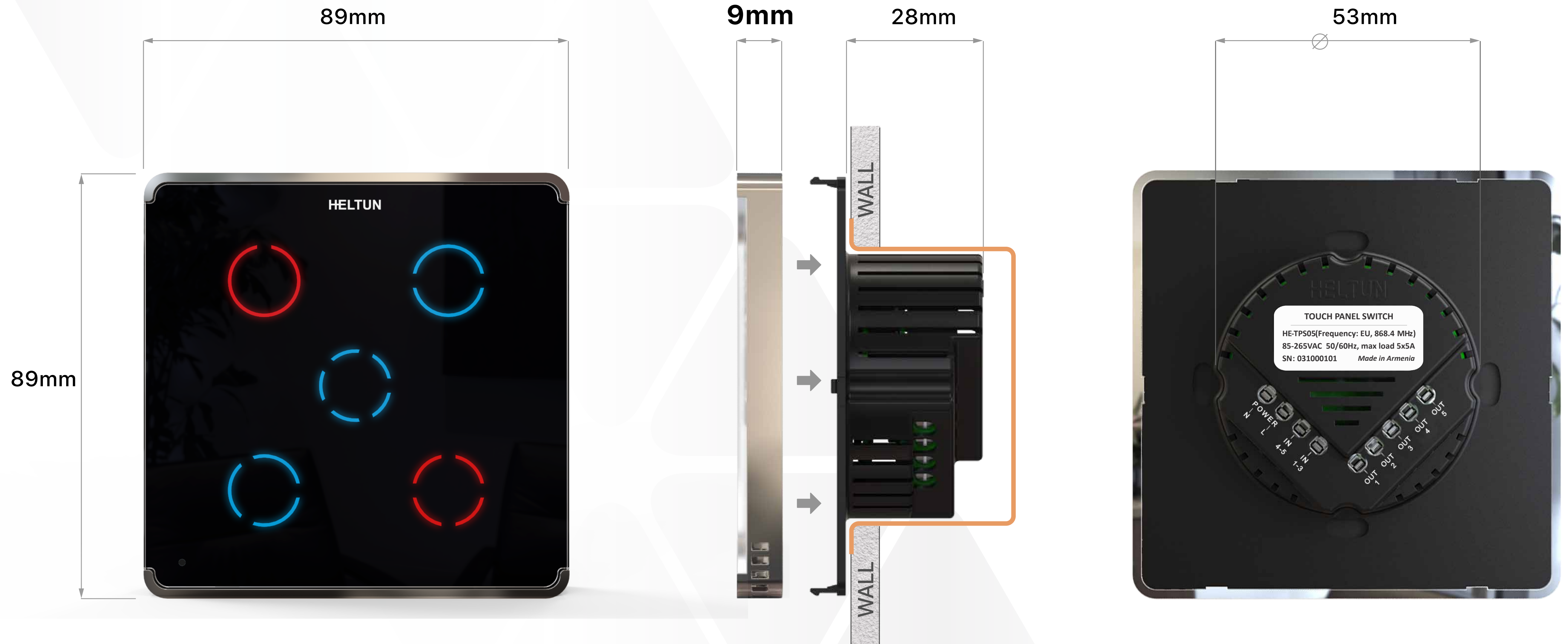
89mm

9mm

28mm

53mm

89mm

HELTUN

WALL

WALL

HELTUN

TOUCH PANEL SWITCH

HE-TPS05(Frequency: EU, 868.4 MHz)
85-265VAC 50/60Hz, max load 5x5A
SN: 031000101   Made in Armenia

POWER
N
L
IN
4-5
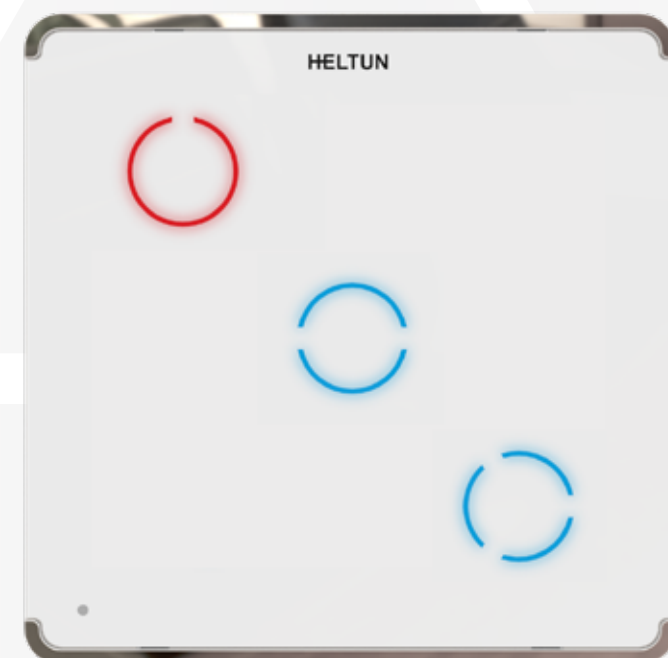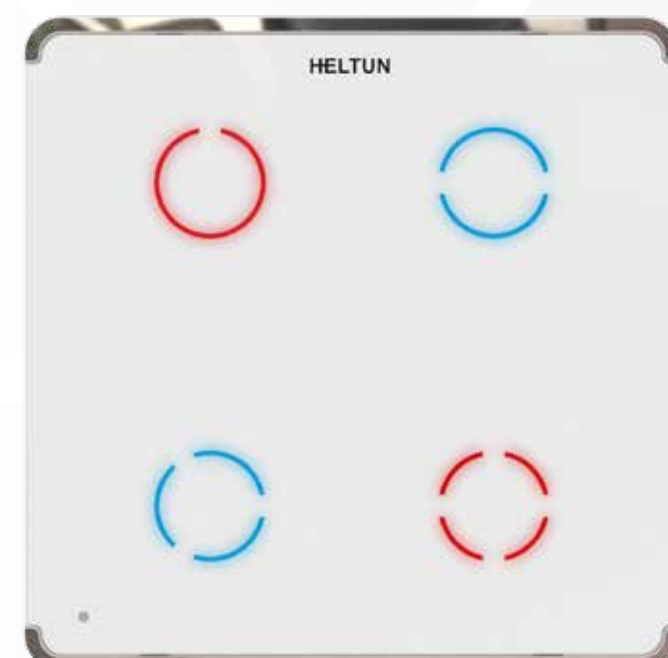IN
1-3

OUT
1
OUT
2
OUT
3
OUT
4
OUT
5

solo

duo

quinto

trio

quattro

FIVE WAYS TO PLAY

The HELTUN Touch Panel Switch comes in five different configurations to fit any need:

- **quinto:** five relay channels, independently configurable
- **quattro:** four relay channels, independently configurable
- **trio:** three relay channels, independently configurable
- **duo:** two channels, independently configurable
- **solo:** one channel, independently configurable

Whether one switch or five, the HELTUN Touch Panel Switch is still impossibly thin and impossibly smart.
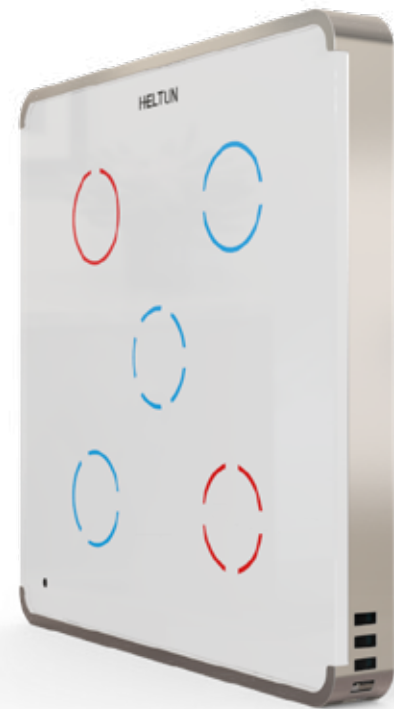
ELEGANT DESIGN

The Touch Panel Switch is available in 30 combinations to integrate seamlessly with your interior design. Five frames (silver, chrome, gloss black, matte black, & white), and six glass colours (white, black, yellow, green, red and blue) let you match any environment, style, or taste.

Designed to be powerful, efficient and stylish, at 9 mm thick the Touch Panel Switch is 'impossibly thin' and good-looking on your wall.
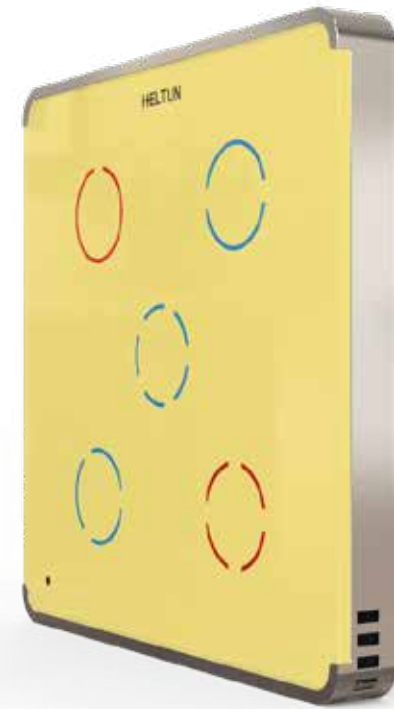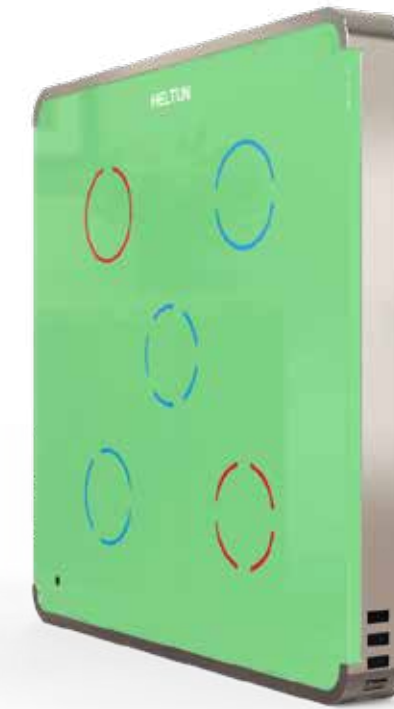
HELTUN

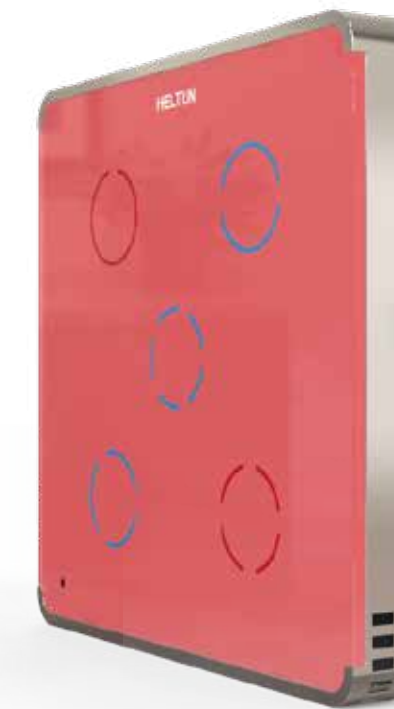| FRAME:	SILVER	FRAME:	SILVER	FRAME:	SILVER	FRAME:	SILVER	FRAME:	SILVER	FRAME:	WHITE
GLASS:	WHITE	GLASS:	BLACK	GLASS:	YELLOW	GLASS:	GREEN	GLASS:	RED	GLASS:	BLUE
MODEL:	HE-TPS05-SW	MODEL:	HE-TPS05-SK	MODEL:	HE-TPS05-SY	MODEL:	HE-TPS05-SG	MODEL:	HE-TPS05-SR	MODEL:	HE-TPS05-SB

FRAME:	CHROME	FRAME:	CHROME	FRAME:	CHROME	FRAME:	CHROME	FRAME:	CHROME	FRAME:	CHROME
GLASS:	WHITE	GLASS:	BLACK	GLASS:	YELLOW	GLASS:	GREEN	GLASS:	RED	GLASS:	BLUE
MODEL:	HE-TPS05-CW	MODEL:	HE-TPS05-CK	MODEL:	HE-TPS05-CY	MODEL:	HE-TPS05-CG	MODEL:	HE-TPS05-CR	MODEL:	HE-TPS05-CB
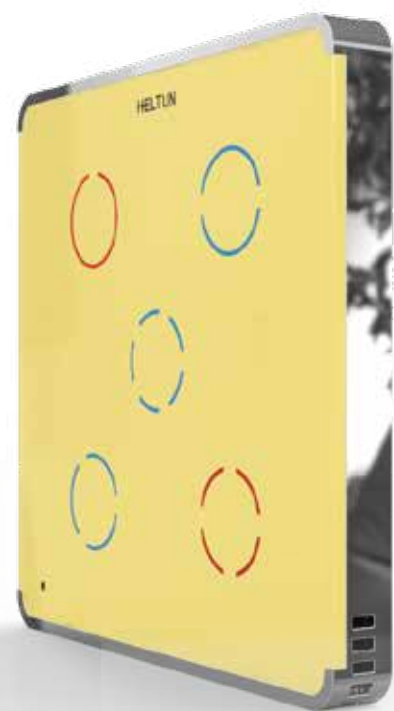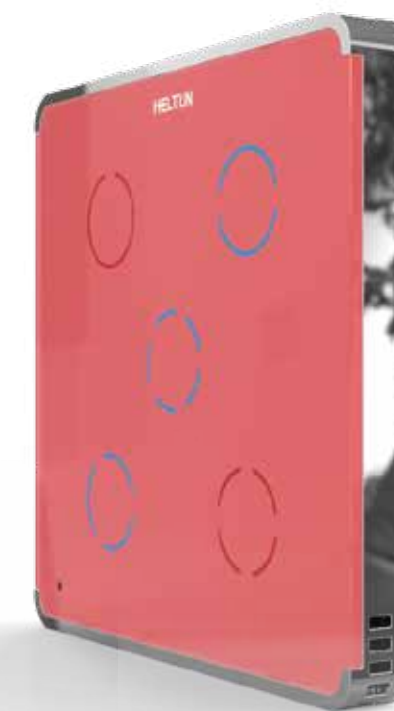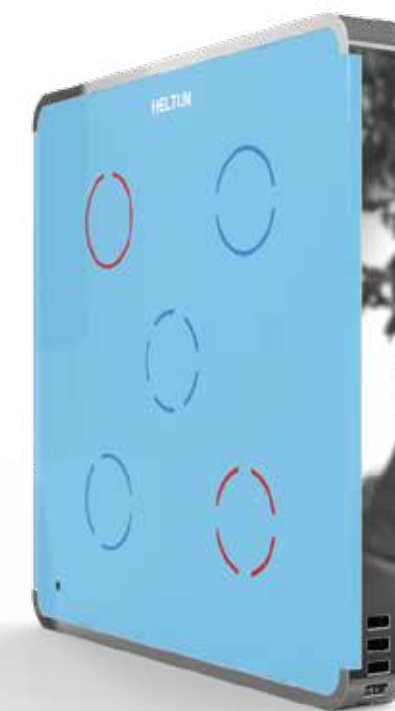
HELTUN
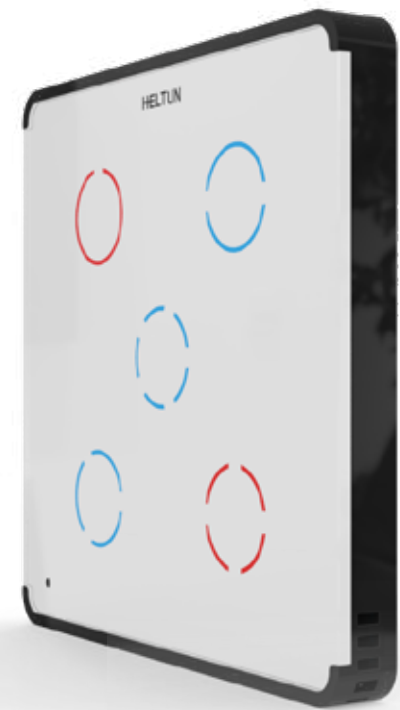
FRAME:	BLACK GLOSS / MATTE
GLASS:	WHITE
MODEL:	HE-TPS05-GKW / MKW

FRAME:	BLACK GLOSS / MATTE
GLASS:	BLACK
MODEL:	HE-TPS05-GKK / MKK
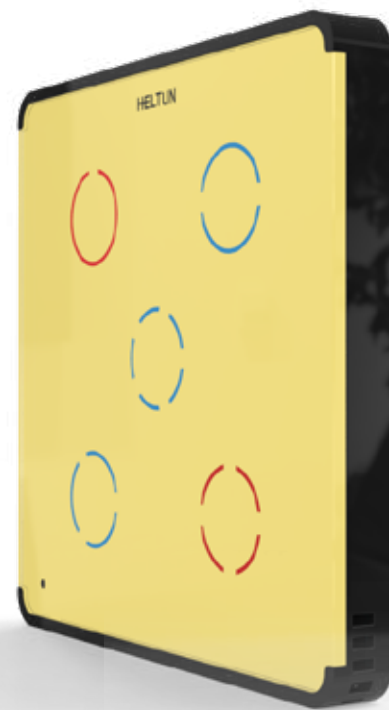
FRAME:	BLACK GLOSS / MATTE
GLASS:	YELLOW
MODEL:	HE-TPS05-GKY / MKY

FRAME:	BLACK GLOSS / MATTE
GLASS:	GREEN
MODEL:	HE-TPS05-GKG / MKG

FRAME:	BLACK GLOSS / MATTE
GLASS:	RED
MODEL:	HE-TPS05-GKR / MKR

FRAME:	BLACK GLOSS / MATTE
GLASS:	BLUE
MODEL:	HE-TPS05-GKB / MKB
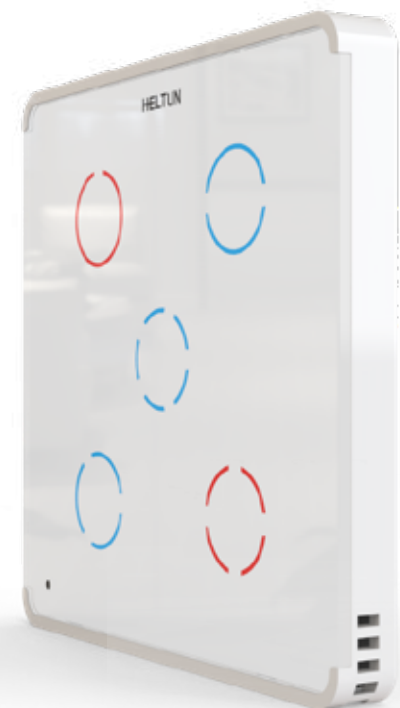
FRAME:	WHITE
GLASS:	WHITE
MODEL:	HE-TPS05-WW

FRAME:	WHITE
GLASS:	BLACK
MODEL:	HE-TPS05-WK

FRAME:	WHITE
GLASS:	YELLOW
MODEL:	HE-TPS05-WY

FRAME:	WHITE
GLASS:	GREEN
MODEL:	HE-TPS05-WG
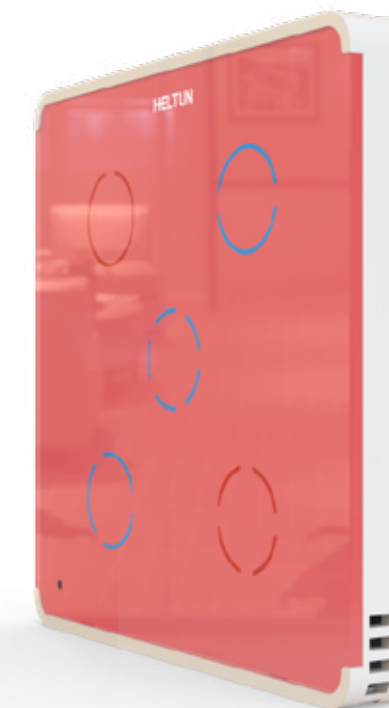
FRAME:	WHITE
GLASS:	RED
MODEL:	HE-TPS05-WR

FRAME:	WHITE
GLASS:	BLUE
MODEL:	HE-TPS05-WB

INTERNAL SENSORS

HELTUN Touch Panel Switches include sensors to monitor temperature, humidity, and ambient light which can be accessed by a Z-Wave controller and used to trigger home automation scenes.

The frequency (reporting time) of data updates from sensors can be individually adjusted to meet the needs of your smart home system.

TEMPERATURE SENSOR

HUMIDITY SENSOR

AMBIENT LIGHT SENSOR

MAIN POWER

RELAY 4 & 5 INPUTS

RELAY 1, 2 & 3 INPUTS

RELAY OUTPUTS

TOUCH PANEL SWITCH

HE-TPS05(Frequency: EU, 868.4 MHz)
85-265VAC 50/60Hz, max load 5x5A
SN: 031000101   Made in Armenia

INPUTS & OUTPUTS

The main power input can be either 85-265VAC or 12-48VDC.

There are five relay outputs each with a maximum 5 Amp load.

There are also two independent inputs for relay channels which allow control of systems with different power sources, or to use outputs as dry contacts: e.g. to switch On/Off 220VAC lights and control motorized valves with 24VDC power.

Input 1 with the required power source is for relay channels 1, 2 and 3, which can carry a maximum 15 Amp load.

Input 2 with the required power source is for relay channels 4 and 5, which can carry a maximum 10 Amp load.

Each relay channel uses HELTUN Advanced Zero-Cross Technology to deliver greatly increased longevity & reliability of your system.
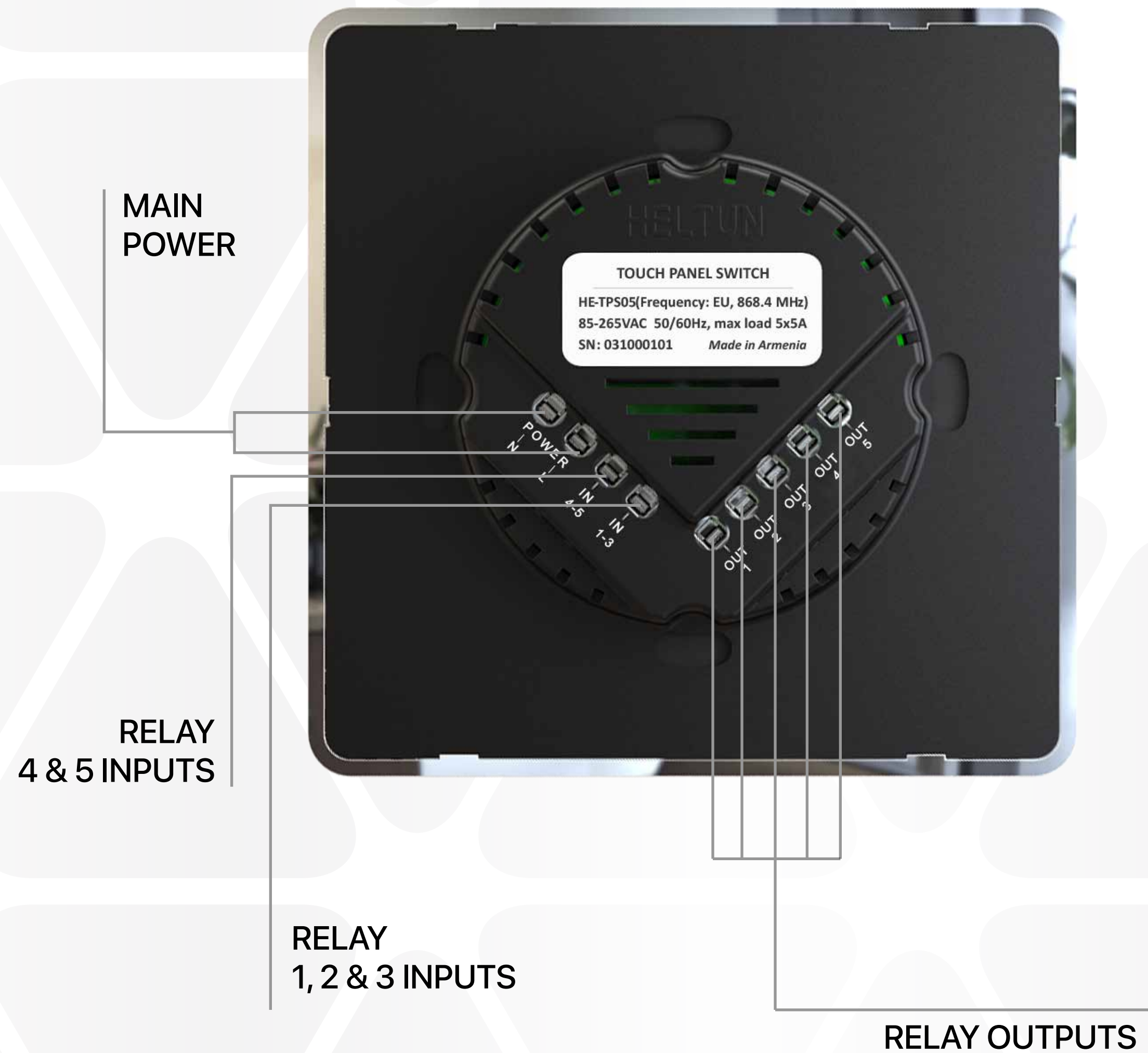
KNOW HOW MUCH ENERGY YOU USE

The HELTUN built-in Power Consumption System precisely monitors how much energy you used during any particular day, week, or month.
Do your current light switches do that?

Just specify the consumption of the load in watts for each relay channel and the Touch Panel Switch logic will calculate total consumption relative to the time since the output was in the 'ON' state.

We have also designed the circuitry so it draws almost zero watts to power itself when in standby mode. This saves you energy and money especially if your home is equipped with many HELTUN products.
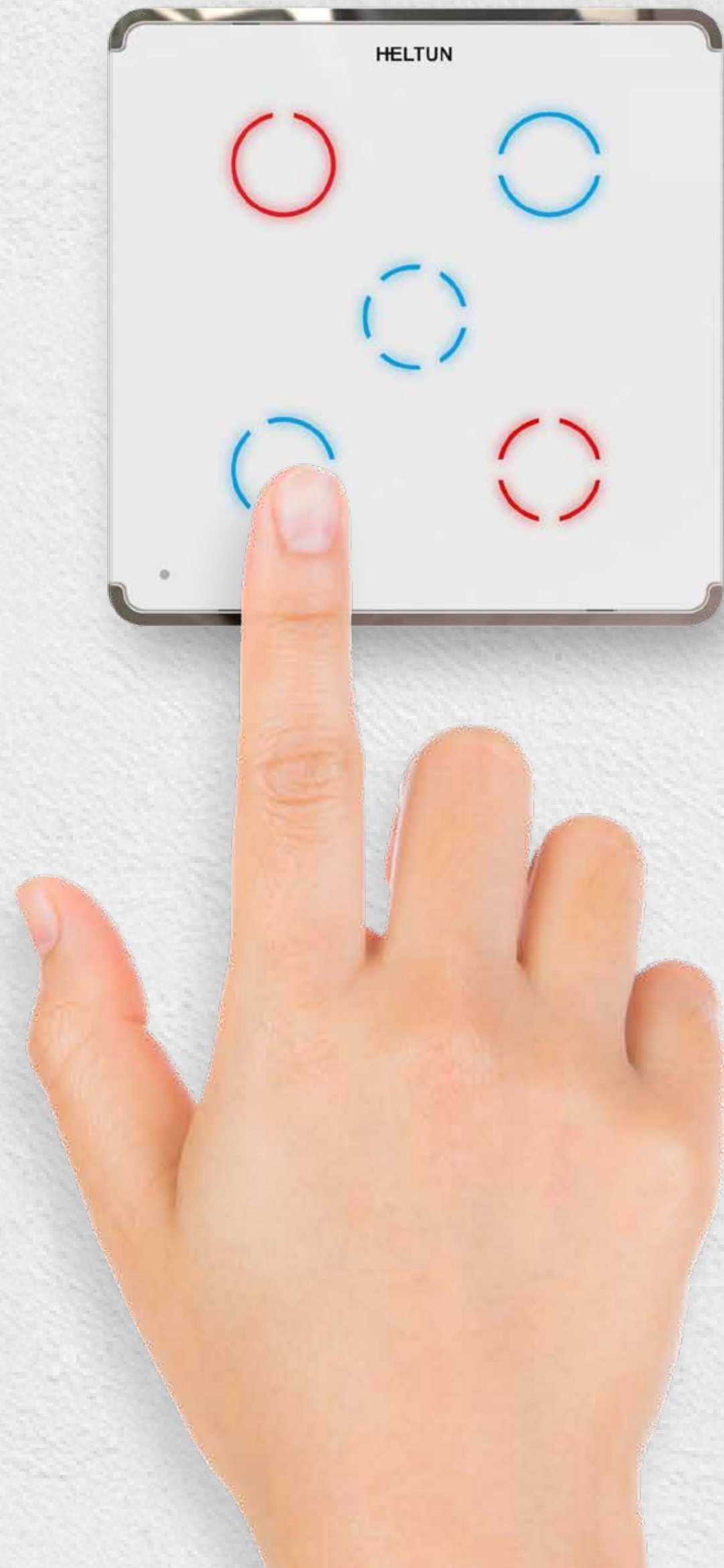
TOUCH CONTROLS

The panel has five touch-sensitive control 'buttons' that react to even the lightest touch.

Each button has a two-colour backlight, red or blue, to indicate its state. 15 different brightness levels can be manually configured for each button backlight by setting the value in the parameter settings, or in automatic mode.

In auto mode, an internal ambient light sensor adjusts button backlight brightness automatically to room lighting conditions. This makes each control state easy to see even on bright sunny days, plus it will prevent your eyes from being overpowered at night.

HELTUN

POWERFULLY CUSTOMIZABLE

1) Each of the five buttons can control any relay output. Also, the output of 1-5 relays can be controlled by each button.

2) There are five modes that can be configured for each button:
- **Momentary** - switch ON when button is touched, switch OFF when released.
- **Momentary Reversed** - switch OFF when touched, switch ON when released.
- **Invert State** - when button is touched: turn ON if OFF, or turn OFF if ON.
- **Switch ON Only** - when touched.
- **Switch OFF Only** - when touched.

3) Relay outputs can be controlled by a timer. For example, pressing a button can switch a relay ON, and after a specified time it can automatically be switched OFF (or vice-versa: OFF, then ON). This function can be used to open or close garage doors, gates, blinds, curtains, locks, etc., and then return them to their previous state with no additional input.

4) Each touch-sensitive 'button', its backlight, and associated relay output, can be independently managed by a Z-Wave controller or associated device - and can run scenes with the backlight indicating scene state or device status.

HELTUN

MOTORIZED DEVICE CONTROLS

The HELTUN Touch Panel Switch does a lot more than just control house lights. You can use it to control motorized blinds, curtains, garage doors, driveway gates, and electric locks. You have full control over programming different buttons for specific functions.

For example, you can designate the top left button to raise the living room blinds, and the bottom left button to lower them. In this mode, if the blinds are rising and you then touch the down button, the system will automatically cancel the UP command and initiate a DOWN command, or vice-versa.

The system also calculates the position of the blinds when fully opened or closed and automatically stops the motor when it reaches the UP or DOWN limit.

If you have installed a door sensor - as on a garage door - you can associate that sensor with the button backlight to indicate the actual UP or DOWN state of the door.

SCHEDULES & SCENARIOS

Using the internal timekeeping of the HELTUN Touch Panel Switch, you can create schedules for some devices.
For example:

• Open the blinds at 7:00AM and close them at 10:00PM

• Switch on the porch light at 7:00PM and turn it off at 1:00AM.

Scenarios can also be created that allows connected devices to be triggered by a sensor. For example:

• If the ambient light sensor detects less then 200 lux, connected house lights would switch to ON.

• If the internal temperature sensor measured less than 23°C, the connected heating system could be switched on.

The possibilities for adding convenience and comfort are endless and limited only by the creativity of the owner or installer of the HELTUN Touch Panel Switch.

HELTUN

Z-Wave
Dimmers

Z-Wave
Roller Shutters

Z-Wave
Sockets

Z-Wave
Micromodules

CONTROL UP TO 100 Z-WAVE DEVICES

The HELTUN Touch Panel Switch quinto has 20 association groups, with 5 controlled devices for each group. "Basic Set Devices" (On/Off), or "Multilevel Set Devices" (Variable Position), can be associated to each group. This enables it to operate within the most demanding smart home systems.

It can also be configured to provide control and feedback in powerful ways. For example, you can associate a Z-Wave dimmer switch to two Touch Panel buttons allowing you to turn a light fixture:

- **ON** - (touch upper button)
- **OFF** - (touch lower button)

You can also configure the same two buttons to:

- **BRIGHTEN** - (hold upper button)
- **DIM** - (hold lower button)

You can even associate the button backlights with the Z-Wave dimmer switch and dim them to the same level as the lights. The HELTUN Touch Panel Switch is almost infinitely configurable while remaining intuitive and easy to use.
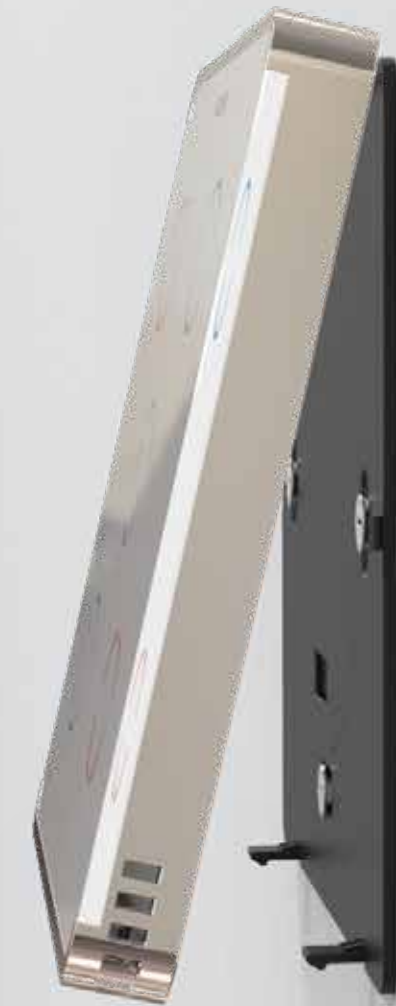
HELTUN

EASY TO INSTALL

HELTUN Touch Panel Switches can be easily installed into any standard electrical junction box (square or round).
Installation must only be performed by someone trained in handling high voltage electrical systems.

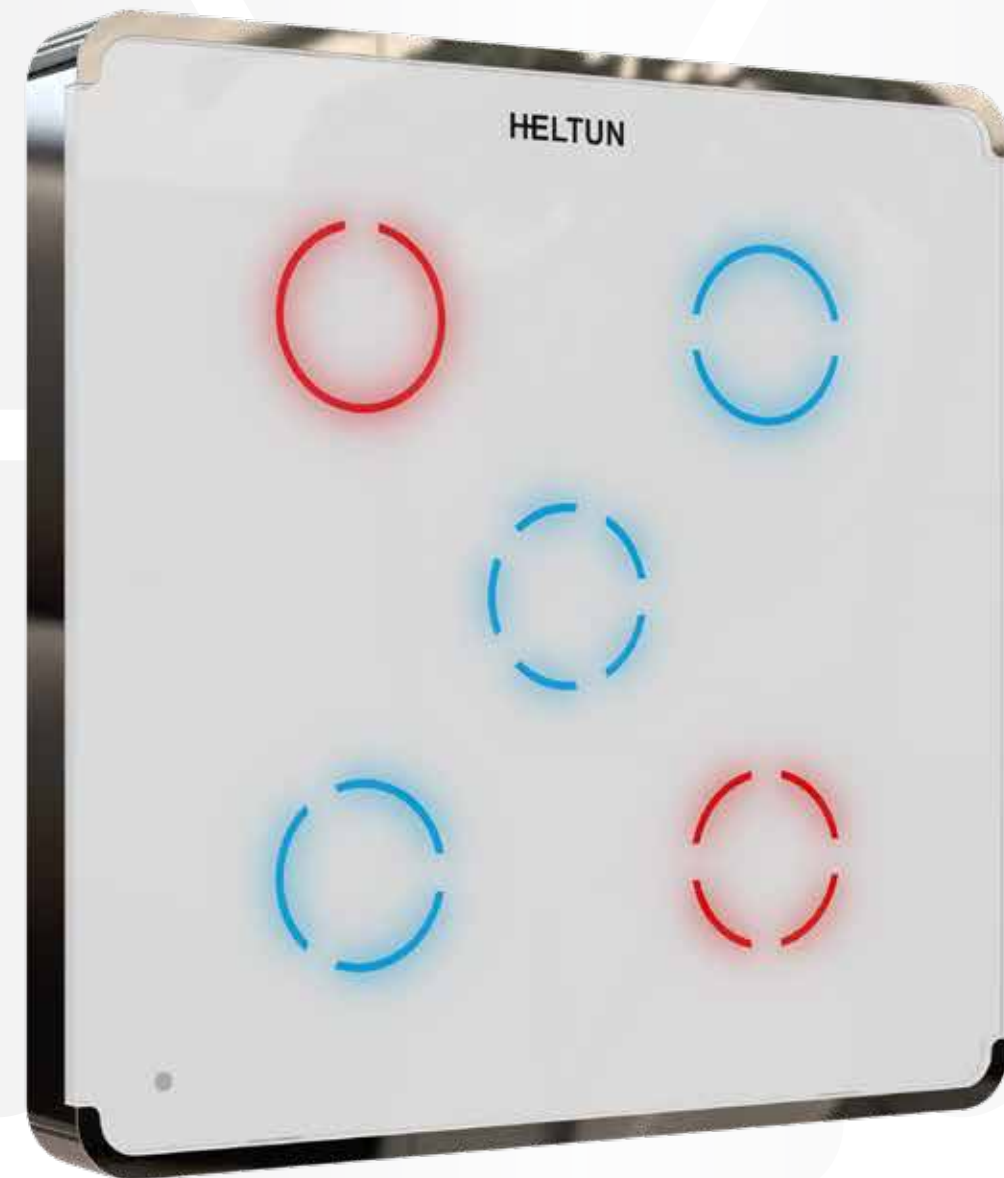**1**

2

3

HELTUN

Zipato

HomeSeer

Athom Homey

Fibaro
Home Center Lite

Vera

Fibaro
Home Center 2

Eedomus

Z-Wave.me
RaZberry

Z-WAVE PLUS V2 CERTIFIED

You can connect HELTUN devices to a Smart Home controller using the latest Z-Wave Plus V2 700 platform. HELTUN features advanced Smart Start technology for easy system integration, and the Security 2 (S2) framework with AES 256 encryption for safe data transfer.

This Touch Panel Switch is compatible with all Z-Wave certified controllers and devices that properly implement Z-Wave Touch Panel Switch classes. Using a Z-Wave controller, you can manage all switch functions via a mobile app including temperature & mode changes, viewing energy consumption charts, and much more.

Up to 100 separate devices can be connected to your HELTUN Touch Panel Switch quinto. You can associate it with any Z-Wave compatible ON/OFF switch, or other Touch Panel Switch, to control different climate systems in a room. You can even connect motion sensors and change Touch Panel Switch modes when people are detected in the house.

HELTUN devices are compatible with all Z-Wave frequencies for different countries (Europe, Russia, Israel, Australia, USA, India, Hong Kong, China, Japan, and Korea).

HELTUN periodically releases new device firmware with added features which can be remotely updated via an encrypted OTA (Over-The-Air) process.

HELTUN

5mm
9mm
14mm
9mm

89mm

60mm

89mm

53mm

60mm

TECHNICAL SPECIFICATIONS:

- Front frame (on wall) dimensions: 89x89x9mm
- Rear electronics dimensions: 53x53x28mm
- Materials: Tempered glass, Flame retardant plastic
- Five frame colors: White, Gloss Black, Matte Black, Silver, & Chrome
- Six glass colors: White, Black, Yellow, Green, Red, & Blue
- Five touch-sensitive capacitive buttons
- Individual red & blue colour LED button backlights
- Button brightness control
- Operating temperature: 0°C to +50°C
- Power supply: 85-265VAC 50Hz/60Hz, 24-48VDC
- Five relays for resistive loads up to 5A each
- Two independent relay inputs (dry contact)
- Relay switching with HELTUN Advanced Zero-Cross Technology
- Relay lifetime: 100.000 switches
- Internal ambient light sensor
- Internal temperature sensor
  - Measurement range: –30°C to +80°C
  - Accuracy: ±0.5°C
- Internal humidity sensor
  - Measurement range: 0% to 80%RH
  - Accuracy: ±3.0%RH
- Power consumption software logic
- Power consumption: 1W
- IP class: IP21
- Z-Wave Plus V2 SDK: V7.11
- Z-Wave module: ZGM130S
- Requires mounting to flush electrical junction box: Round or square type – min. depth 40mm
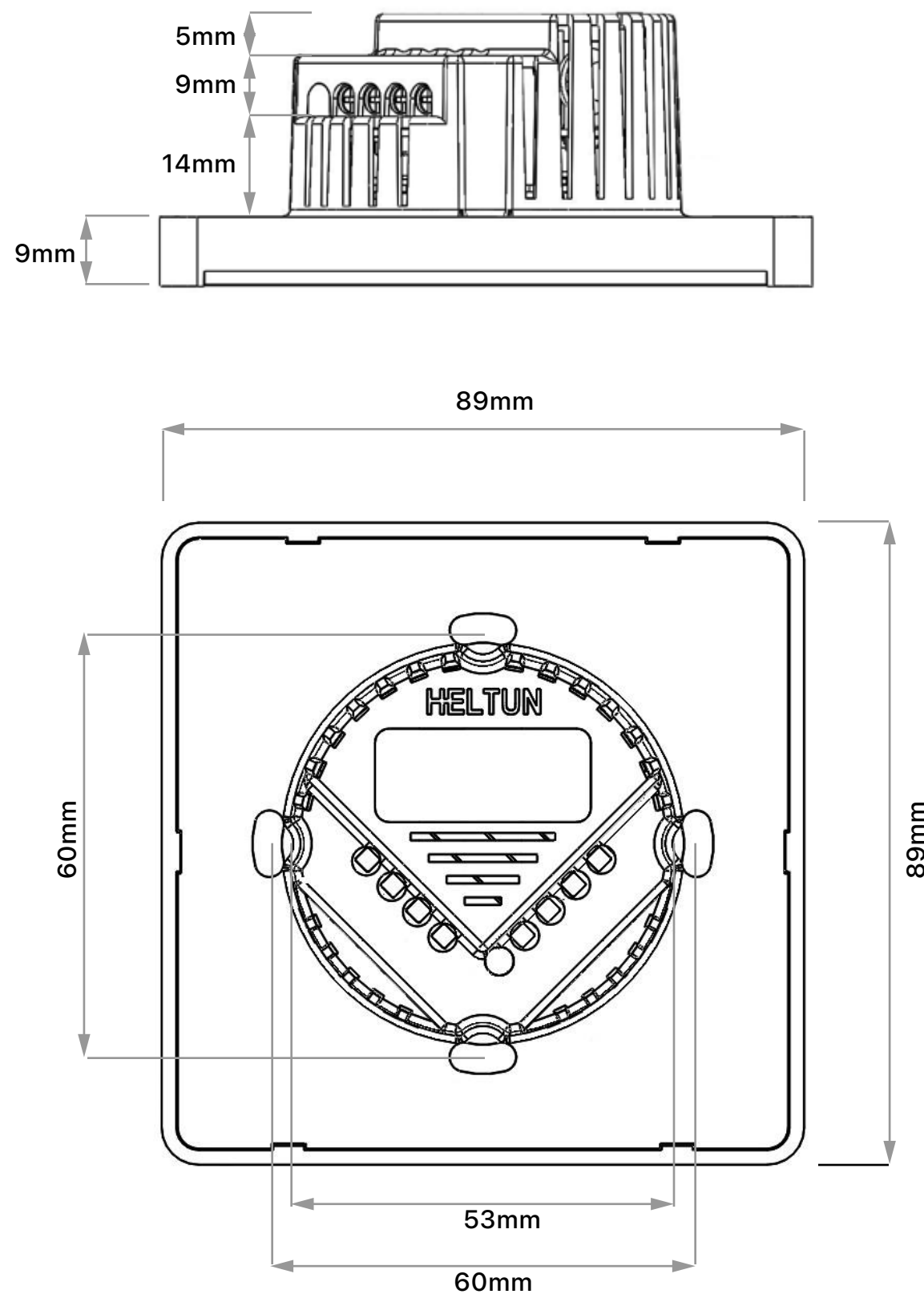
FUNCTIONAL SPECIFICATIONS :

- Options for Inclusion/Exclusion to/from Z-Wave network
  - Non-Secure
  - S0 Secure
  - S2 Unauthorized, S2 Authorized with Key
- Association control with 100 devices from network
- Schedule Mode
- Motorized device control (roller shutter mode)
- Each of the five buttons can control any relay output
- Up to 5 different relays channel can be controlled by one button
- Seven modes for each button:
  - Invert State
  - Momentary
  - Momentary Reversed
  - Switch ON Only
  - Switch OFF Only
  - Timer (ON then OFF)
  - Timer (OFF then ON)
- Set up each button to control devices from associated groups
- Exclusion of any channel from control
- Each button, backlight, & outputs can be managed by a gateway or associated device
- Each button can trigger scenes
- Each button backlight can indicate scene or associated device state.
- Button backlight brightness control:
  - Automatic adjustment (depending on ambient light)
  - Manual adjustment (15 levels)
- Backlight standby mode (different brightness for active and inactive states)
- Backlight colours invert
- Backlight blinking function (for easy identification from other Z-Wave devices)
- Adjustable periodic measurements from:
  - Internal temperature sensor
  - Internal humidity sensor
  - Internal ambient light sensor
  - Energy consumption meter
- Calibration of Internal Room Air Temperature Sensor
- Power consumption software logic
- Factory reset button
- SmartStart technology for quick addition to Z-Wave networks
- OTA (Over-The-Air) encrypted firmware update

Z-WAVE PLUS V2 SPECIFICATIONS:

Generic Device Class: GENERIC_TYPE_WALL_CONTROLLER

Specific Device Class: SPECIFIC_TYPE_NOT_USED

Supported Command Classes:

COMMAND_CLASS_ZWAVEPLUS_INFO [0x5E], V2

COMMAND_CLASS_ASSOCIATION [0x85], V2

COMMAND_CLASS_ASSOCIATION_GRP_INFO [0x59], V3

COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION [0x8E], V3

COMMAND_CLASS_MULTI_CHANNEL[0x60], V4

COMMAND_CLASS_CENTRAL_SCENE[0x5B], V3

COMMAND_CLASS_SWITCH_BINARY[0x25], V2

COMMAND_CLASS_BASIC [0x20], V2

COMMAND_CLASS_SENSOR_MULTILEVEL [0x31], V11

COMMAND_CLASS_METER [0x32], V4

COMMAND_CLASS_CLOCK [0x81], V1

COMMAND_CLASS_TRANSPORT_SERVICE [0x55], V2

COMMAND_CLASS_SECURITY [0x98], V1

COMMAND_CLASS_SECURITY_2 [0x9F], V1

COMMAND_CLASS_VERSION [0x86], V3

COMMAND_CLASS_MANUFACTURER_SPECIFIC [0x72], V2

COMMAND_CLASS_DEVICE_RESET_LOCALLY [0x5A], V1

COMMAND_CLASS_POWERLEVEL [0x73], V1

COMMAND_CLASS_SUPERVISION [0x6C], V1

COMMAND_CLASS_INDICATOR [0x87], V3

COMMAND_CLASS_CONFIGURATION [0x70], V4

COMMAND_CLASS_APPLICATION_STATUS [0x22], V1

COMMAND_CLASS_FIRMWARE_UPDATE_MD [0x7A], V5

HELTUN™

IMPOSSIBLY SMART

Designed and Manufactured in Armenia | The Land of Surprising Engineering

www.heltun.com | info@heltun.com