

# PANNOS

## Product specification

### User interface

- Multi-metal touch control with vibration feedback
- Supports long press and short press for special functions, such as scene change, dimming up/down
- Adaptive back-lit feedback
- OLED display with day/night auto brightness mode
- 3D human motion detection(25-50cm)

### Integrated light dimming control

- For switching and dimming of 8 mutually independent groups (8 light zones) of LED lights with dimmable 0-10v driver
- 8 control voltage outputs 0...10 V DC
- Command objects for each actuator channel for switching on/off and set/value
- Output max current for each circuit: 10mA
- 8 output ports and 1 GND port on the back of the device
- Adaptive ambience light control for eye comfort
- Each actuator channel can be enabled and disabled by configuration of ETS5
- Each actuator channel can be controled by APP

### Integrated EnOcean wireless technology

- Radio frequency according to EnOcean standard at 868.3 MHz
- Radio Standard (Modulation) :ASK(Europe)
- Data rate: 125kbps
- With internal antenna
- Max numbers of ENOCEAN devices can be connected: 20
- Max distances of the RF signal: 30m(indoor)
- Max 10 enocean sub-panels supported
- Each enocean sub-panel with 4 push buttons, each button can be configured as 4 functions: trigger 0/1, always 0, always 1, scene control by scene number.
- Functions of enocean sub-panel are configured by ETS5
- Max 10 enocean motors supported
- Functions of enocean motor can be configured by ETS5
- Max 2 enocean door magnetic switchs supported
- Functions of door magnetic switch can be configured by ETS5
- Max 2 enocean IR sensors supported
- Functions of door magnetic switch can be configured by ETS5
- Each enocean device can be enabled and disabled by configuration of ETS5.
- Each enocean device can be controled by APP

## Integrated enno Wi-Fi module

- WLAN Standard: IEEE 802.11b/g/n
- Frequency Range: 2.400 GHz ~ 2.497 GHz (2.4 GHz ISM Band)
- Supports remote update firmware by server.
- Supports local weather and outdoor temperature info update by server.
- With internal antenna

## Integrated APPLE Homekit technology

- Supports enno iOS app control
- Supports Siri control for all the connected devices
- Supports scene configuration and group configuration by enno iOS APP
- Supports changing name of the devices by APP
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## Integrated temperature sensor and humidity sensor

- Supports room temperature detecting, sensing range -10 - 85°C
- Supports room humidity detecting, sensing range 0% - 100%RH

## Integrated IR sensor and brightness sensor

- For measuring ambient brightness, sensing range 0 - 128 klx (direct sunlight)
- For detecting motion, sensing range 25-50cm

## Integrated KNX bus technology

- Supports TP-1 twisted pair media, communication rate: 9600 baud rate
- Supports 16 control objects for 0%-100% steps dimming or curtain control, which coded as 0-255 in KNX bus.
- Supports 10 switch objects for switch control.
- Control objects could be configured as these types: RS485 Curtain, 0-10v dimming light, Remote dimming light, movement control.
- Switch objects could be configured as these types: door magnetic switch, floor heating, fresh air, motion sensor, light switch, enOcean motor, dry contact devices, general switch, report emergency.
- Supports 10 enOcean sub-panels
- Supports 3 air conditioners
- Supports temperature and humidity objects for current environment.
- Supports 16 scenes, scene number: 1-16
- Supports 64 groups for group control.
- Supports scene configuration and group configuration by enno iOS APP after ETS system configuration
- For the parameterization of a KNX system using ETS 5.0

## Integrated RS485 bus technology

- Max communication distance : 1219m
- Max transmission rate : 10Mbps
- Max supports up to 32 nodes
- Supports Bacnet protocol
- Supports Modbus protocol and customized protocol
- Bacnet protocol does not operate with Modbus protocol and customized protocol
- Supports device address configured by ETS5
- For the parameterization of the address of RS485 device using ETS5

## Power supply

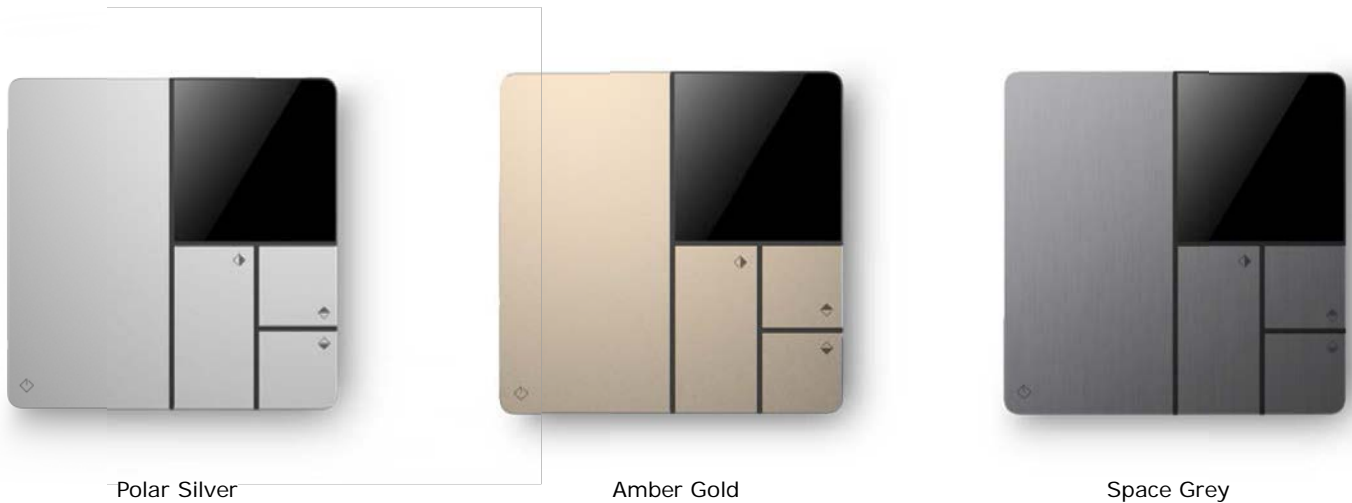
- Rated operation voltage range: 30V DC
- Power consumption approx: 4.8w
- KNX bus voltage range: 30V DC
- Max operation current: 160mA @ 30V

## Working environment

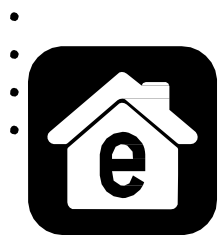
- Operation temperature range: -5°C~ +40°C
- Operation moisture range: 20%~75%RH
- Storage temperature range: -10°C~ +50°C
- Storage moisture range: 20%~80%RH

## Optional product finish

- Dimensions: 108 mm x 108mm x 36.5mm
- Weight: 180 g



## enno iOS App for Panno S



Enno App, as a professional and convenient smart control application works with Panno S, controls the devices including light, blind, HVAC, door switch etc. in home automation.

### APP topology

- The house composed of rooms
- Each room may create up to 16 scenes
- Rooms can show the status of indoor temperature, lights, curtain, door magnetic, in the main screen.
- Devices are in the Room.
- Devices configured by ETS5, and APP can load the configuration and display on APP.

### Features

- Pairing with Panno S: create a room named with user's preferences. User can search the available Panno S by edit the room, and complete pairing with Panno S.
- Control and edit scene of the room: The scenes from Panno S synchronize with Enno App, customer could control and edit all scenes by app conveniently.
- Homekit actionset control: user could use personal preference to customize the actionset (special voice command) through enno iOS APP.
- Control the specified devices connected to Panno S. User can control the specified devices including light, curtain, HVAC, door switch etc.
- Timer setup: Customer could add a timer, set the starting time and ending time, and set a actionset to be execute.
- Home control authorization: user could authorize family members to control the house which installed enno iOS app.
- Devices management: user could move device to other rooms.
- Software remote upgrade: user could update the firmware by APP.
- Magic control: user could set the conditions that the HVAC equipment would automatic working.
- Alarm remote push: If an alarm generate, the server will push the message to iphone.
- Background music: users could configure music play to scene, when scene trigger on, the music will be played automaticly.
- Visual intercom: users could enter visual intercom function by Enno APP.

Download on the App store:

<https://itunes.apple.com/us/app/enno/id1033412392>

# Product installation

For wall installation

Flush-mounting device for mounting in a 86mm \* 86 mm installation box, with screw fixing

