

# Time to switch.

The new time switches  
from Hager

:hager





## **The start of a new era.**

Technical know-how, decades of experience and always ready to listen to the needs of our customers. The new time switches bring all these qualities together to further facilitate installation and commissioning in the future.

The new generation combines the functions and modes required for modern building automation. Moreover, it offers you the possibility, for the first time, to program your time schedule via an app. Not only does this save time, but it ensures maximum flexibility in your personal time planning.

A further time-saving feature is choosing the right time switch. Instead of 15 references, the new product range now only comprises 4, without forgoing proven functions.

## Benefits at a glance

# Easy. Convincing. Safe.

The new time switches allow you to perform time switch tasks even faster and more flexibly, thanks to state-of-the-art technology.



### New generation. More possibilities

Higher functionality and a clearer product range make it easier for you to choose the right time switch.



### Time-saving installation

The possibility of pre-programming the time switch before installing it, offers you maximum flexibility in personal time scheduling.



### Hassle-free commissioning

Extended program functions enable you to create individual program requests in seconds. Program time switching sequences directly on the device, via software or app. The new app is compatible with iOS (from version 8), Android (from version 5.1) and Windows (from version 10).



### Compatible with twilight sensors

Switch your programs on or off depending on your set brightness value via the separately available twilight sensor.



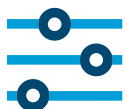
## Convenient programming

The clear display of end devices offered by the app and software, makes the setting-up, programming and managing of the time switches easy and convenient.



## Location-accurate geo-coordinates

Transmit the exact geo-data to the time switch via app or software at the touch of a button. Your system will thereby receive all necessary data for the use of the Astro mode. At the same time, public holidays and school holidays are transmitted, enabling an automated feature to control exceptions.



## More programming flexibility

Set up time schedules at the location of their use or prepare or change them from any location via app or software. Pre-created time schedules can be easily transferred to your time switch at any time via Bluetooth.



## Highest data security

Secure storing of program-related data directly from the app in the Hager Cloud. Via myHager you can then share them with colleagues or pass them to your customers.



## High inrush currents safely under control

Thanks to the integrated zero-cross switching, high inrush currents of LEDs are no longer an issue. This protects contacts and ensures an even longer lifespan of our time switches.

Old v. new

# Efficiency pushed to extremes.

The new generation of time switches makes installation considerably easier. Now with only 4 instead of 15 references, we have laid out our range much more clearly. The new time switches include all the proven functions that previously required several time switches and they expand these with new features. This way, you solve even the most demanding time switch tasks effortlessly with just one reference.

# Evolution of the range:

## 1 Channel

| Program        | Previous models | Multifunctional time switch | Weekly time switch   |
|----------------|-----------------|-----------------------------|--|
| Daily program  | EG010           | EGN100                      | EGN103<br>or<br>EGK103 =<br>set consists of<br>EGN103 + EGN003 |
| Weekly program | EG103           |                             |  |
|                | EG103E          |                             |  |
|                | EG103V          |                             |  |
|                | EG103D          |                             |  |
|                | EG071           |                             |  |
| Astro program  | EE180           |                             |  |

## 2 Channels

| Program        | Previous models | Multifunctional time switch |
|----------------|-----------------|-----------------------------|
| Weekly program | EG203           | EGN200                      |
|                | EG203E          |                             |
| Yearly program | EG293B          |                             |
| Astro program  | EE181           |                             |
| Twilight       | EE200           | EGN200 + EEN003             |
|                | EE202           |                             |

## 4 Channels

| Program        | Previous models | Multifunctional time switch |
|----------------|-----------------|-----------------------------|
| Weekly program | EG403E          | EGN400                      |
| Yearly program | EG493E          |                             |

New product range

# Our new time switches at a glance.

The time switches EGN100, EGN200 and EGN400 combine all functions of a modern time switch.

For less complex weekly time switch tasks, EGN103 offers a simple and cost-saving one-channel solution, available as a set or individually.

## EGN103



Digital weekly time switch,  
1 channel

E-No: 533 175 334

## EGN100



Digital multifunctional  
time switch with Bluetooth,  
1 channel

E-No: 533 175 234



## EGN200



Digital multifunctional  
time switch with Bluetooth,  
2 channels

E-No: 533 175 434

## EGN400



Digital multifunctional  
time switch with Bluetooth,  
4 channels

E-No: 533 175 534

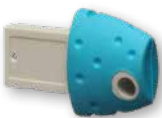
New product range

# Add-ons for your time switch.

Our time switches are the ideal solution for effectively implementing simple to complex time switch tasks. In addition to the individual products, you can also order the new time switches in sets with additional modules, such as twilight sensors.

The new Bluetooth programming key EGN003 enables you to program time schedules for EGN103 not only on the device itself, but also via the new app.

## EGN003



Bluetooth programming key,  
for EGN103

E-No: 533 178 944

## EEN003



Separate twilight sensor,  
wall mounted

E-No: 535 909 500

## EEN002



Separate twilight sensor,  
flush mounted

E-No: 535 909 400

## EGK103



Digital weekly time switch,  
1 channel + Bluetooth  
programming key

E-No: 533 175 324

## EGK101



Digital multifunctional time switch  
with Bluetooth, 1 channel,  
flush-mounted sensor

E-No: 533 175 314

## EGK100



Digital multifunctional time switch  
with Bluetooth, 1 channel,  
wall-mounted sensor

E-No: 533 175 304

# Programming via app and software.



With the new Hager Mood app and software, the programming of your time schedules is completely location independent. If you wish, you can create them conveniently from home and on the go or make modifications.

Via Bluetooth, you can transfer your time schedules to the device at any time.

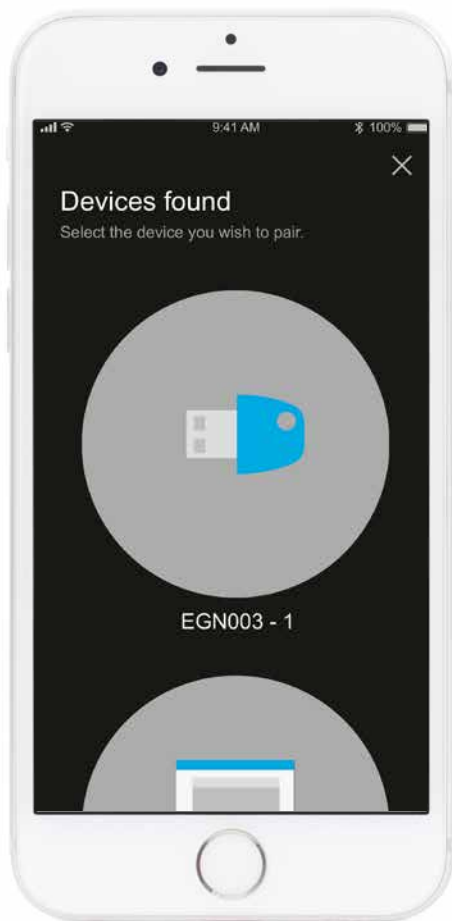


# Benefits of the app:

- 01 Easy and convenient**  
The larger displays of a laptop, smartphone or tablet increase the clarity of programming.
- 02 Automated Astro and public holiday settings**  
After manually entering the location data, the software or app customises local features such as sunrise and sunset times, holiday periods and public holidays.
- 03 Available everywhere**  
Your time schedules can be checked, edited and pre-programmed for on-site installation, regardless of location and time.
- 04 Safer connection**  
To connect and transfer the time schedules via Bluetooth, a confirmation is required on the device. Thus, preventing unauthorised access by third parties.
- 05 Transmission of time schedules to third parties**  
You can share your generated time schedules with your colleagues or pass them to your customers via the Hager Cloud.

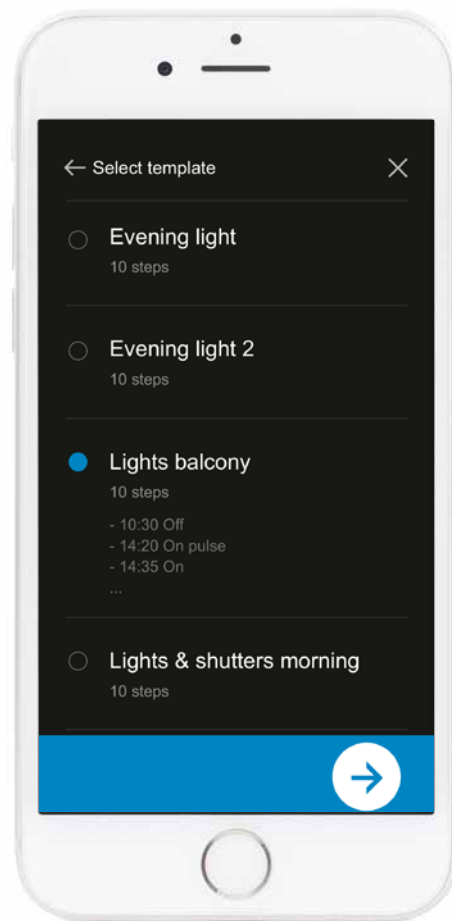


# Easy commissioning thanks to Hager Mood app.



## 01 Select the timer

Use Bluetooth to locate the time switch and establish a connection. When connecting, the time switch briefly lights up and you need to confirm the access manually.



## 02 Create programs

The next step is to set the desired time, precise to the minute, for your time switch operation. Define switch on/off times, leap days as well as exceptions and priorities.

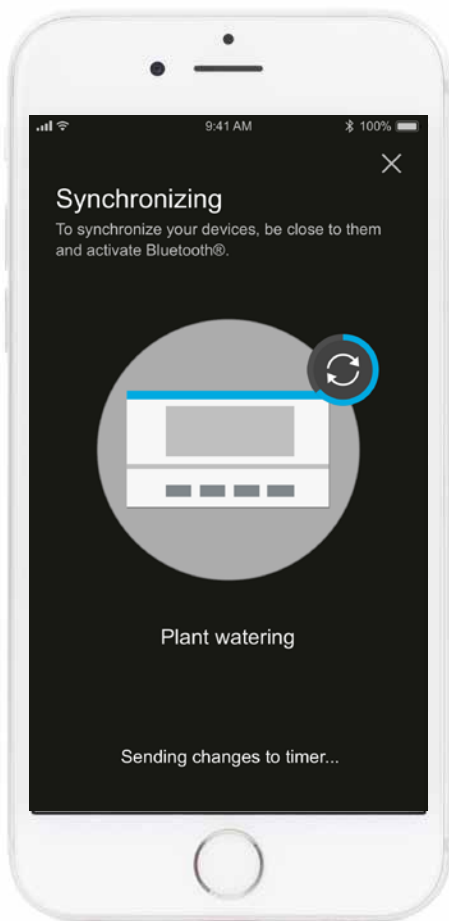
The Hager Mood app allows you to program your time schedules before the actual installation. You can put your time switch into operation immediately following the installation.

## Download

The free Hager Mood app can be downloaded from the Google Play Store and Apple App Store.

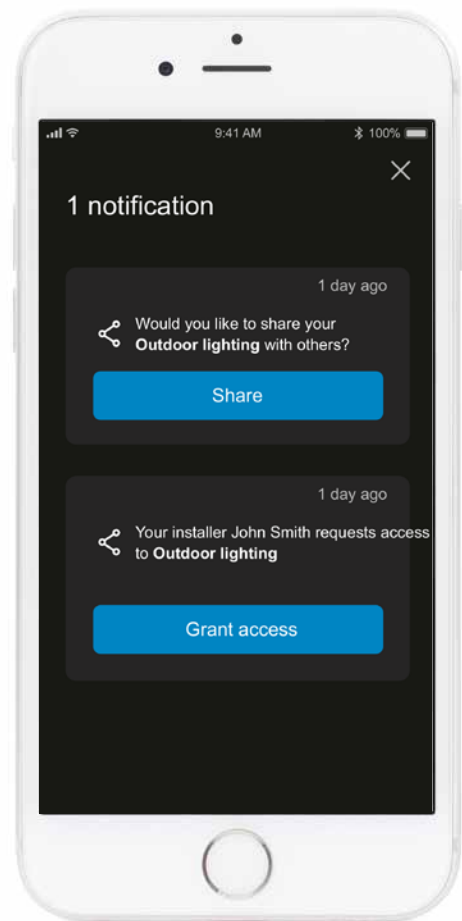


For our software for Windows, visit [hager.ch/zeitschaltuhren](http://hager.ch/zeitschaltuhren) (available from 01.2020)



### 03 Synchronise the program with the timer

To transfer the program created on your end device to the timer, synchronise them with each other. This process requires both devices to be in Bluetooth range.



### Transfer of data with myHager

After programming, data can be shared with colleagues via Hager Cloud. You can also transfer editing and access rights to the customer.

# The all-in-one solution for your time switching.

With the new time switches from Hager, you are opting for multi-functional talents. They bring together all proven functions of the old generation and new features and fulfil every demand.



### **Time switching**

Use the daily, weekly or yearly function to create your time schedules. As a result, you and the customer have free rein, whether to set routine or exception weeks or to plan everything in advance for the entire year.



### **Astro switching**

Your time switch thinks with you: In the Astro function, the time switch automatically adjusts its time cycles to sunrise and sunset.



### **Twilight switching**

The expandable twilight sensor detects changing lighting conditions on site and adjusts the timer automatically. You can also use your time switch as conventional twilight switches.



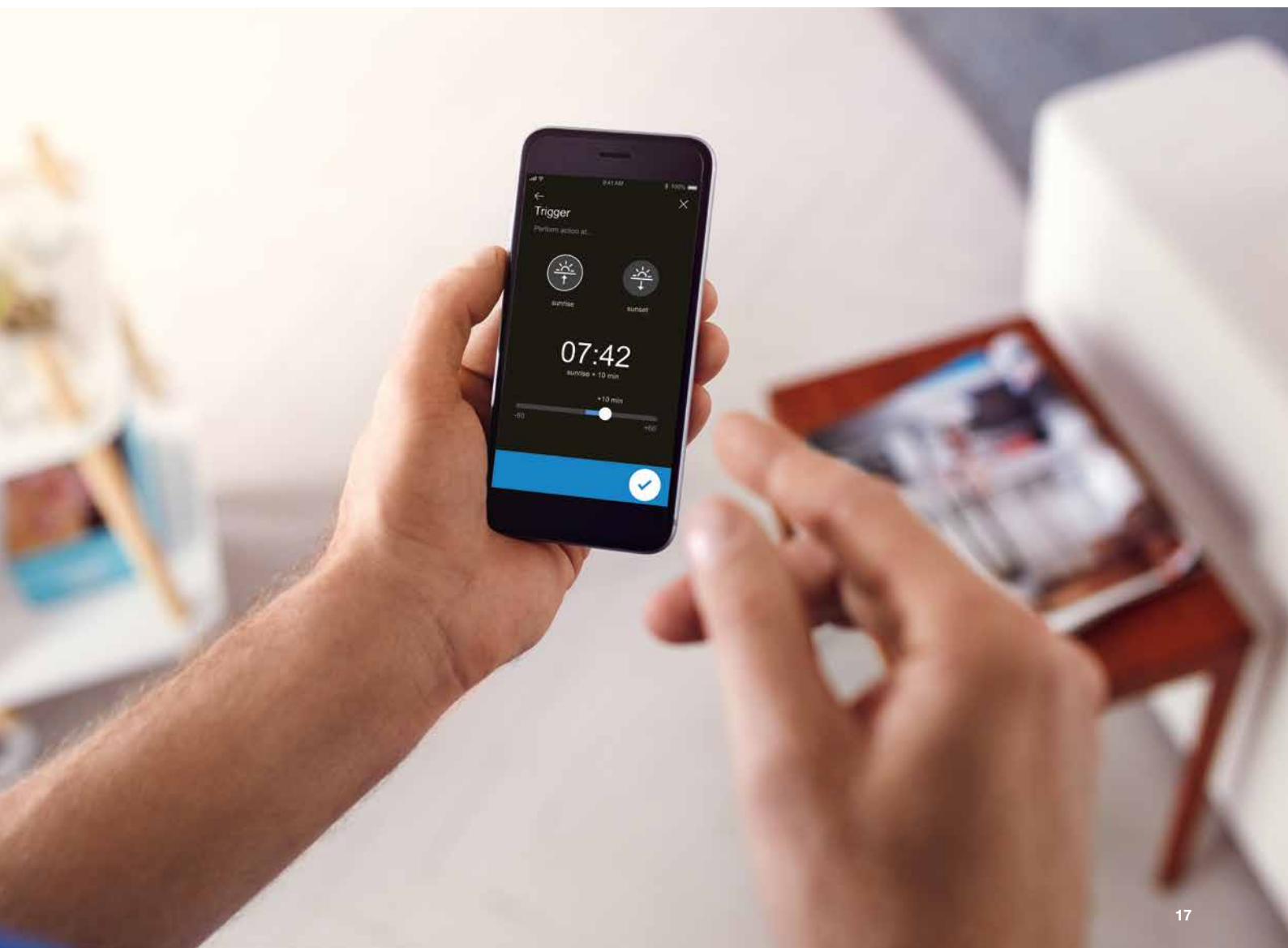
### Staircase switching

The optional connection of wired pushbuttons or radio components (quicklink) enables the installation of effective staircase switching.



### Timer

Setting the switch-on time in conjunction with a connected pushbutton makes it easy to set up a timer.



# Zero-cross switching for high inrush currents.

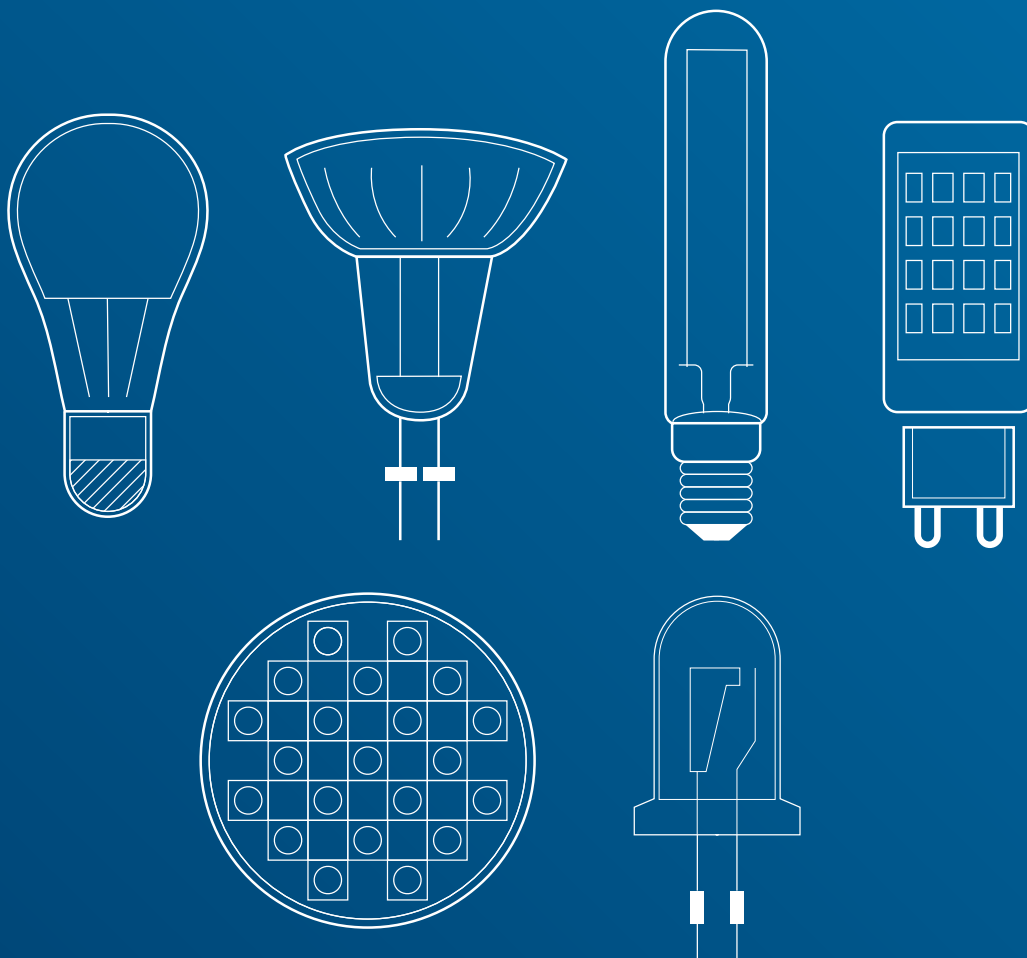
All the models of our new time switches use zero-cross switching and enable switching loads for LEDs of up to 400W.

The zero-cross switching implemented in the devices regulates inrush currents to a constantly low level. In order to do this, the system automatically determines the zero crossing of the sine wave at the AC voltage.



# Durable switching of LEDs.

The integrated zero-cross switching protects relay contacts and ensures compatibility with LED lamps. Thanks to the forward-looking approach, the life of the time switch is extended accordingly.



Maximum precision

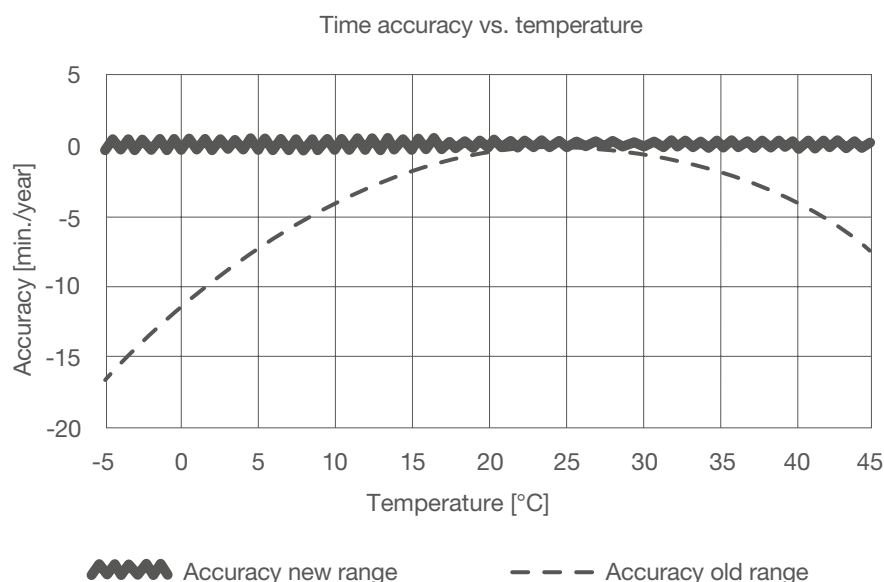
# Integrated real-time clock for maximum precision.

With modern time switching, every second counts. The integrated real-time clock ensures switching that is accurate to the second, thus increasing energy efficiency.



# To-the-second precision.

Our time switches EGN100 and EGN200 and EGN400 allow precise switching of your programs. The integrated real-time clock operates at temperatures from -5 °C to +45 °C with an accuracy of only +/- 90 seconds per year. This ensures the highest efficiency of time-bound time schedules - without needing to adjust the time manually due to excessive deviation from the real time. In addition, the time synchronises whenever an end device is connected via Bluetooth.



The integrated real-time clock operates exactly to the second, assuming normal use. Even at extreme temperatures of -5 °C to +45 °C however, the difference is only +/- 90 seconds per year.

# Compatible with all components.

Special requirements call for special solutions: Whether you wish to connect a switch to your time switch, extend your device via a twilight sensor or control it by remote control. All our multifunctional time switches are designed so that you can easily customise your time switches to your individual requirements.

### Control via radio transmitter



TU404

### Connection with brightness sensor



EEN003

### Connection via wired pushbutton



WH27130100C



EEN002



**Soft-touch control buttons**  
Improved pushbuttons enable quick setting on the time switch

**User-friendly operation**  
Integrated display with LED backlighting



## Examples of application

# Wide range of applications.

Our time switches are suitable for almost all private and commercial applications. Here a small excerpt:

### Outdoor lighting in multi-unit apartment buildings

Automatically control the lighting of entrance areas.



### Shop window lighting of commercial spaces

With the right programming, shop windows can be presented attractively also at night.



## Locking systems of public buildings

Our time switches enable time-bound opening and closing of accesses to public buildings.



## Holiday program with absence simulation

Lighting at twilight provides a sense of security - and also during holidays.





# Lighting control of buildings

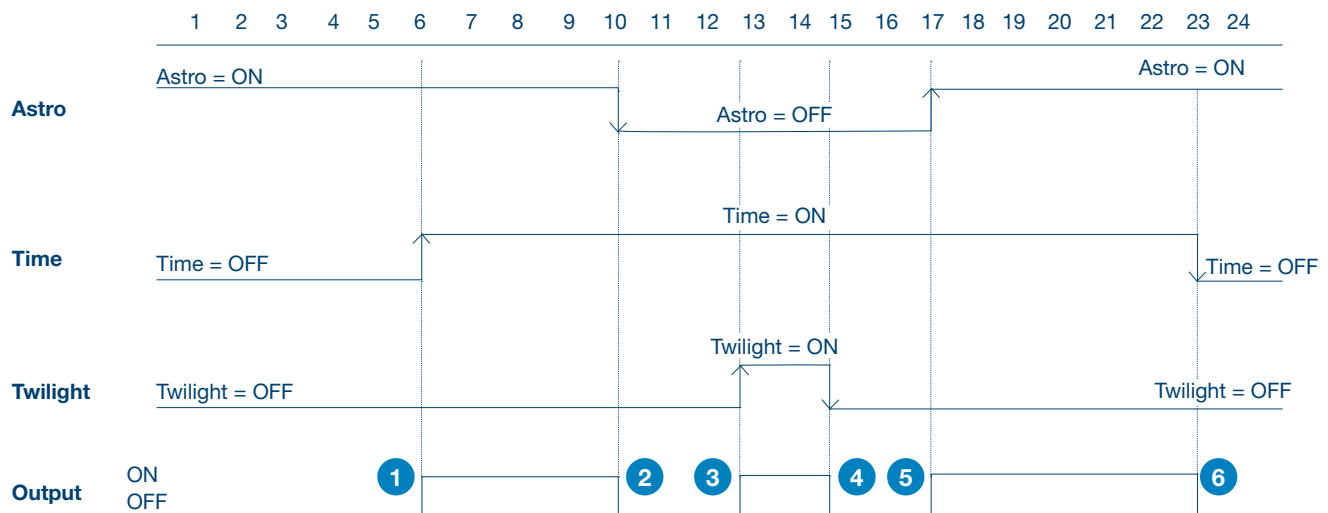
## Efficient switching via the Astro function.

The implemented, location-based Astro function automatically detects sunrise and sunset and adjusts the time switching accordingly. Light and time-specific controls can be programmed conveniently without needing to constantly make manual adjustments.

## Combination

# Logical control and connections.

By combining the Astro function, twilight and time at one output, logic control and connections can easily be created.



- 1 When time event ON and Astro state ON = output ON
- 2 When Astro state OFF = automatically OFF
- 3 When Astro state Off and time event ON, and twilight ON (brightness less than 100 lux, e.g. during a storm) = light On
- 4 When Astro state Off and time event ON, and twilight switch OFF = light OFF
- 5 When Astro state ON and time event ON = light ON
- 6 When time event OFF = automatically OFF

# Time to switch.

The future begins today. Do you wish to know more about our new digital time switches? Then begin your personally favoured e-learning today!

## Webinars time switches



### Web Based Training

Web Based Training (WBT) is based on interactive virtual online training that you can do any time and from any place. It is a compact transfer of knowledge which familiarises you with everything you need to know about digital time switches. A WBT is modulating and can be paused and restarted at any time.



### How-to videos ...

... so that the main steps for the operation of the digital time switches are always available online from anywhere.

[hager.ch/zeitschaltuhren](https://hager.ch/zeitschaltuhren)



### Webinar\*

Do you want a more condensed version of the training in your office or at home? Webinars are online, live seminars to which you can sign up and which you can log into at a defined time. Here, an expert will present and explain all the fundamentals and functionalities of digital time switches.

For current dates and registration for webinars, visit:

### Online registration



[hager.ch/seminare](https://hager.ch/seminare)

\* The webinars are set to be available for November 2019.



# KNX Systemübersicht

Objekte zur Speicherung  
der standardisierten  
Nutzdaten



**Erweitertes  
Protokoll**

**Standard-Protokoll**



EGN103

**Weekly time switch, 1 changeover contact, 16A, 2 space units, digital**

Weekly time switch digital 1-channel for time-dependent control of equipment. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device, bar display for quick recognition of daily programming. Automatic summer/winter time change.

#

- programmable with Bluetooth (with EGN003)
- changeover
- with potential-free switching contact
- button lock using lock key
- programming without voltage supply possible
- with programming key
- with automatic summer/winter time change
- program cycles: 1 x 7 days
- with screw terminals
- for mounting on DIN top-hat rail
- 5 years power reserve

## Technical specifications

|  |                            |
|--|----------------------------|
| Operating voltage                      | 230V (+10% / -15%)         |
| Frequency                              | 50/60 Hz                   |
| Contact rating                         | AC1 $\mu$ 16A 230 V~       |
| Power input                            | 0.25 VA                    |
| Switching current at $\cos \phi = 0.6$ |                            |
| Power loss at full load                |                            |
| 230 V incandescent and halogen lamps   | max. 2300 W                |
| Number of function channels            | 1                          |
| Number of contacts per channel         | 2                          |
| Shortest switching time                | 1 min                      |
| Number of switching times for On/Off   | 56                         |
| Power reserve [years]                  | $\approx 5$ a              |
| Accuracy rate                          | $\pm 1.5$ s/day            |
| Operating temperature                  | - 5 ... 45 °C              |
| Conductor cross-section (flexible)     | 1 ... 6 mm <sup>2</sup>    |
| Conductor cross-section (rigid)        | 1.5 ... 10 mm <sup>2</sup> |
| Rail-mounted device (RMD) width        | 2 units                    |



EGN100



### Multifunctional time switch, 1 channel, 10A, 1 space unit, digital

Digital multifunctional time switch to control loads with commands such as on, off, pulse or cycle, astronomical function that switches connected loads according to the sunrise and sunset times. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device. The twilight function measures the lighting level via a photocell and switches depending on the measured value. Automatic summer/winter time change.

- integrated Bluetooth connection
- program cycles: daily, weekly, yearly
- 1 changeover output
- with pulse function
- wired input
- with radio input connection: Quicklink configuration
- button lock
- with automatic summer/winter time change
- with screw terminals
- for mounting on DIN top-hat rail
- 10 years power reserve

#### Technical specifications

|  |                             |
|--|-----------------------------|
| Operating voltage                      | 230V (+10% / -15%)          |
| Frequency                              | 50/60 Hz                    |
| Contact rating                         | AC1 $\mu$ 10A 230 V~        |
| Power input                            | 0.17 VA                     |
| Switching current at $\cos \phi = 0.6$ |                             |
| Power loss at full load                |                             |
| 230 V incandescent and halogen lamps   | max. 2300 W                 |
| Number of function channels            | 1                           |
| Number of contacts per channel         | 2                           |
| Shortest switching time                | 1 min                       |
| Number of switching times for On/Off   | 100                         |
| Power reserve [years]                  | $\approx 10$ a              |
| Accuracy rate                          | $\pm 90$ s/year             |
| Operating temperature                  | - 5 ... 45 °C               |
| Conductor cross-section (flexible)     | 0.2 ... 2.5 mm <sup>2</sup> |
| Conductor cross-section (rigid)        | 0.2 ... 4 mm <sup>2</sup>   |
| Rail-mounted device (RMD) width        | 1 unit                      |



EGN200

**Multifunctional time switch, 2 channels, 16A, 2 space units, digital**

Digital multifunctional time switch to control loads with commands such as on, off, pulse or cycle. Astronomical function that switches connected loads according to the sunrise and sunset times. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device. The twilight function measures the lighting level via a photocell and switches depending on the measured value. Automatic summer/winter time change.

- integrated Bluetooth connection
- program cycles: daily, weekly, yearly
- 2 changeovers output
- with pulse function
- with radio input connection: Quicklink configuration
- programming without voltage supply possible
- button lock
- LC display with lighting
- with automatic summer/winter time change
- with screw terminals
- for mounting on DIN top-hat rail
- 10 years power reserve

**Technical specifications**

|  |                             |
|--|-----------------------------|
| Operating voltage                      | 230V (+10% / -15%)          |
| Frequency                              | 50/60 Hz                    |
| Contact rating                         | AC1 $\mu$ 16A 230 V~        |
| Power input                            | 0.3 VA                      |
| Switching current at $\cos \phi = 0.6$ |                             |
| Power loss at full load                |                             |
| 230 V incandescent and halogen lamps   | max. 2300 W                 |
| Number of function channels            | 2                           |
| Number of contacts per channel         | 2                           |
| Shortest switching time                | 1 min                       |
| Number of switching times for On/Off   | 200                         |
| Power reserve [years]                  | $\approx 10$ a              |
| Accuracy rate                          | $\pm 90$ s/year             |
| Operating temperature                  | - 5 ... 45 °C               |
| Conductor cross-section (flexible)     | 0.2 ... 2.5 mm <sup>2</sup> |
| Conductor cross-section (rigid)        | 0.2 ... 4 mm <sup>2</sup>   |
| Rail-mounted device (RMD) width        | 2 units                     |



EGN400



### Multifunctional time switch, 4 channels, 16A, 2 space units, digital

Digital multifunctional time switch to control loads with commands such as on, off, pulse or cycle. Astronomical function that switches connected loads according to the sunrise and sunset times. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device. The twilight function measures the lighting level via a photocell and switches depending on the measured value. Automatic summer/winter time change.

- integrated Bluetooth connection
- program cycles: daily, weekly, yearly
- 2 changeovers output
- with pulse function
- with radio input connection: Quicklink configuration
- programming without voltage supply possible
- button lock
- LC display with lighting
- with automatic summer/winter time change
- with screw terminals
- for mounting on DIN top-hat rail
- 10 years power reserve

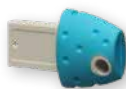
### Technical specifications

|  |                             |
|--|-----------------------------|
| Operating voltage                      | 230V (+10% / -15%)          |
| Frequency                              | 50/60 Hz                    |
| Contact rating                         | AC1 $\mu$ 16A 230 V~        |
| Power input                            | 0.45 VA                     |
| Switching current at $\cos \phi = 0.6$ |                             |
| Power loss at full load                |                             |
| 230 V incandescent and halogen lamps   | max. 2300 W                 |
| Number of function channels            | 4                           |
| Number of contacts per channel         | 2                           |
| Shortest switching time                | 1 min                       |
| Number of switching times for On/Off   | 400                         |
| Power reserve [years]                  | $\approx 10$ a              |
| Accuracy rate                          | $\pm 90$ s/year             |
| Operating temperature                  | - 5 ... 45 °C               |
| Conductor cross-section (flexible)     | 0.2 ... 2.5 mm <sup>2</sup> |
| Conductor cross-section (rigid)        | 0.2 ... 4 mm <sup>2</sup>   |
| Rail-mounted device (RMD) width        | 4 units                     |

## Product data sheet

EGN003 / E-No 533 178 944

**:hager**



EGN003

### Bluetooth programming key, for EGN103 time switches

EGN003 is suitable for the following applications:

- Creating a time schedule via smartphone
- Copying and saving switching programs

#### Technical specifications

|                       |                             |
|-----------------------|-----------------------------|
| Operating temperature | -5 ... 45 °C                |
| Dimensions            | 10 x 20 x 30 mm (L x W x H) |
| Colour                | blue                        |

## Product data sheet

EEN002 / E-No 535 909 400



EEN002

### Separate flush-mounted sensor for twilight switch

Flush-mounted sensor with connection cable for twilight switch EEN10x

#### Technical specifications

|  |                          |
|--|--------------------------|
| Measuring range brightness                                 | 5 ... 2000 lx            |
| Operating temperature                                      | -30 ... 60 °C            |
| Probe cable length   | 1 m                      |
| Conductor cross-section                                    | 2 x 0.75 mm <sup>2</sup> |
| Cable length between twilight switch and brightness sensor | max. 100 m               |

## Product data sheet

EEN003 / E-No 535 909 500



EEN003

### Separate wall-mounted sensor for twilight switch

For detecting surrounding brightness.

#### Technical specifications

|  |                            |
|--|----------------------------|
| Measuring range brightness                                 | 5 ... 2000 lx              |
| Operating temperature                                      | -5 ... 45 °C               |
| Conductor cross-section                                    | 0.75 ... 4 mm <sup>2</sup> |
| Colour   | light grey                 |
| Cable length between twilight switch and brightness sensor | max. 100 m                 |







**Hager SE**  
Zum Gunterstal  
66440 Blieskastel  
Germany

**[hager.com](https://www.hager.com)**

**Dear reader,**

**please be aware, this brochure is a template.  
It can be adapted in product portfolio and  
language to your local market needs. It is not  
changeable according concept.**

**Request for open data: [cme.hager.com](https://cme.hager.com)**

**Thank you for your attention.**