

JUNG
MADE IN GERMANY



New Items
2016
light+building

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LS ZERO

Timeless, reduced, consistent



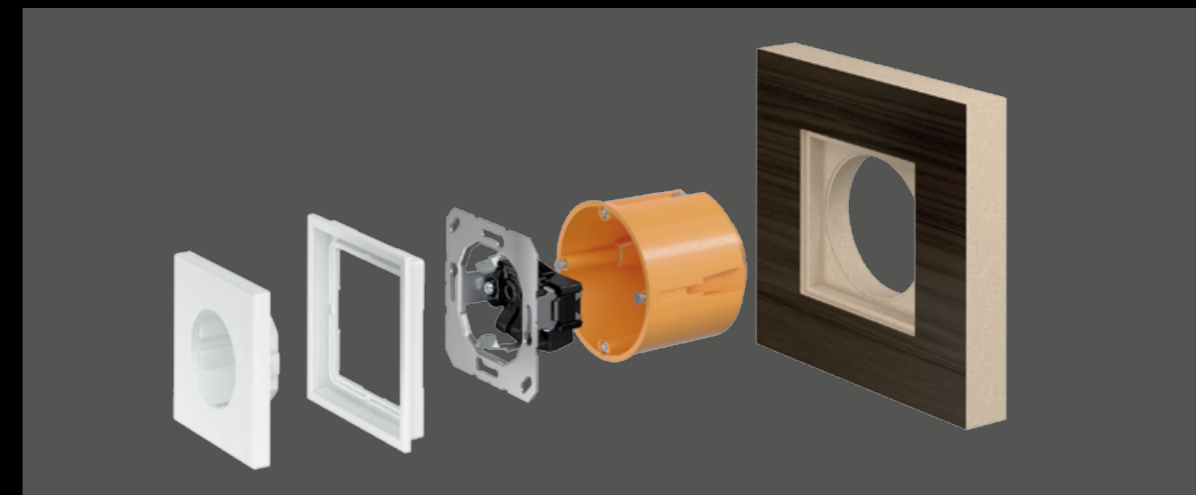
Consistent variety of solutions, the greatest possible reduction in the design: LS ZERO transfers the design constants of the classic LS 990 range to a new flush-mounted interpretation. Installed in furniture, brickwork or drywalls, LS ZERO creates a level plane in any type of installation between the surface and the operating element. Furnishing concepts thus make a compelling and creative statement. All the requirements for a modern electrical installation can of course be implemented with LS ZERO.

Available from April 2016

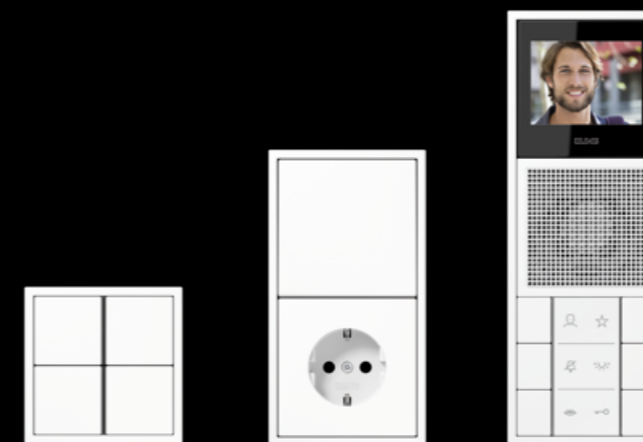
LS ZERO installed in furniture

Part of furniture design

With LS ZERO, the electrical installation is now part of the creative element of furniture design: thanks to the fully flush-mounted installation, the furniture and switches are interlinked in an almost seamless transition. This creates new possibilities for modern architecture and interior design. There is a trailer available under jung.de/lzero which clearly illustrates the individual steps required for the installation.



Using the drawing data provided by JUNG, the furniture maker can work to the nearest millimetre. After milling the cut-out, conventional cavity wall boxes are placed in position for the flush-mounted installation of the required insert, LS ZERO frame and cover.



Either installed separately in single frames or combined in multiple frames (2- or 3-gang): a flush-mounted installation is achieved with LS ZERO. The range is available in white as well as in the Le Corbusier® colour palette.

LS ZERO: Brickwork and drywall installation

Reduction as a statement

When installed in brickwork and cavity walls, a unique, harmonious and level installation is achieved with LS ZERO – using conventional device boxes and a uniform, narrow frame. Using a special plaster frame, a consistent fit and a bonded connection is also achieved.*



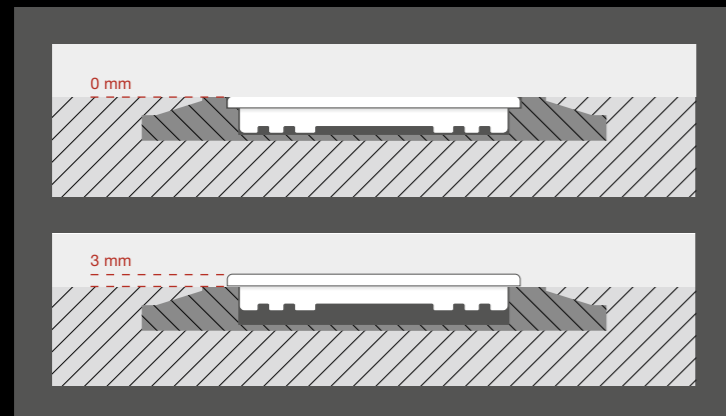
Brickwork

In this type of installation, the plaster frame forms a firmly bonded connection with the plaster. The use of the supplied plaster cover enables clean and neat plastering. The installation is carried out in conventional flush-type boxes which are flush with the brickwork.



Drywall

A prerequisite for this type of installation is the double panelling of the drywall. A conventional cavity wall box is used; the LS ZERO plaster frame has the same profile height as a plasterboard (12.5 mm) and also enables a firmly bonded connection with the surface.



Alternative: 3 mm profile height

Alternatively, there is a variant of LS ZERO available with a 3 mm profile height. This is ideally suited for example to walls with wall-paper/panelling. The design frame overlaps the edge of the wallpaper by a minimal amount (1.5 mm) and therefore produces a harmonious visual effect. This variant is also suitable for a plaster or plasterboard thickness of 12.5 mm.



There are trailers available under jung.de/lzero which illustrate the individual steps for the installation including all the processes involved. *The material of the plaster frame bonds with the conventional plaster.

Smart Visu Server

Visualisation solution for the smart home



The Smart Visu Server is the optimum solution to visualise a KNX installation both quickly and cost-effectively. The compact device for wall or rail mounting certainly packs a punch: simply launch the integrated commissioning interface SV Control via the web browser and create the visualisation following an intuitive process.

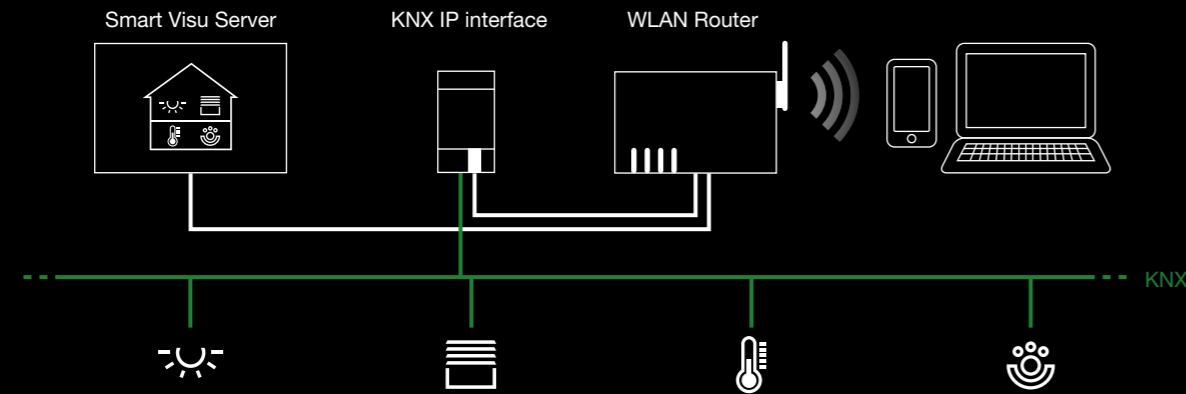


The operation is carried out via the clearly structured user interface Smart Visu Home, whereby the user can carry out own settings or actions. The device has been conceived for mobile control via smart devices – independently of the operating system – and thus provides an added plus in terms of convenience and flexibility.

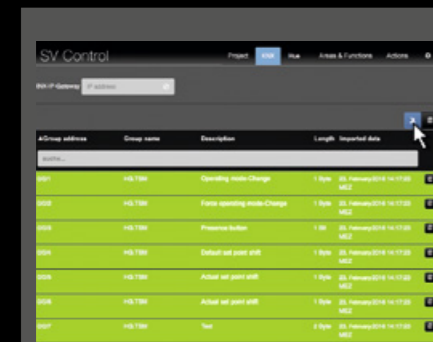
Already available

SV Control

Simple commissioning with the Smart Visu Server

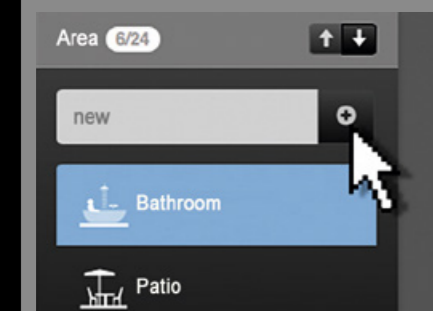


SV Control is the integrated, web-based commissioning tool for the Smart Visu Server and enables the convenient creation of a KNX visualisation – via computer, laptop or smart device, independently of the operating system.



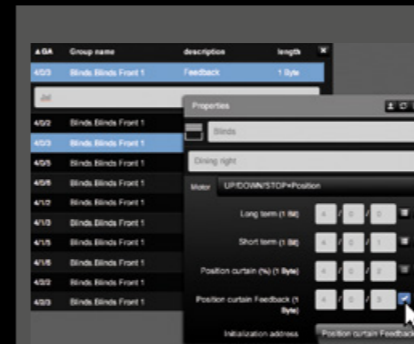
ETS import

The first step is the import of the existing installation from ETS with an OPC file. The connection to KNX is carried out via a KNX IP interface or a KNX IP router. The group addresses are clearly displayed in a sortable list.



Create areas

The next step is to create the areas. These can be rooms or groups such as favourites or functions. Once the areas have been named individually, an appropriate symbol can be assigned from the library. The interface can therefore be adapted to requirements. Up to 24 areas can be created.



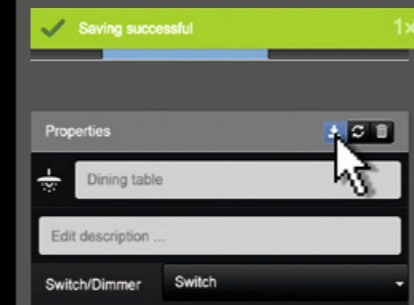
Create functions

Functions are now created in these areas. After selecting the function type (e.g. "Motor" for blind control), the relevant symbol can be taken from the library. The corresponding data points can be connected from the imported group addresses. 240 functions with a total of 1,200 data points can thus be created.



Assign functions

The different functions can now be assigned to several areas in parallel if required: the function "Reading light" can for example be integrated both in the "Lounge" and "Reading" areas and then retrieved via these areas. These assignments can be modified at any time.



Save areas and functions

All the required areas and functions are saved once they have been created and assigned. This concludes the creation of the visualisation. A backup can also be stored on the computer – for security reasons for the customer or as a template for other projects (such as several residential units in an apartment building).



Visualisation

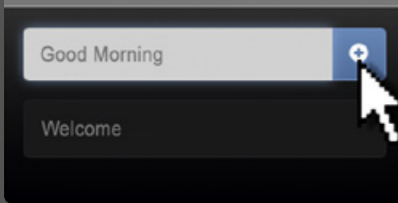
If the visualisation has been created and saved, it is immediately visible and can be operated via the "Smart Visu Home" on the terminal device of the user. If required, changes, adaptations and extensions can of course be carried out at any time.

Smart Visu Home

Convenient operation with the Smart Visu Server

The web-based Smart Visu Home provides the user with a clearly structured, graphical user interface which he can use to operate all the relevant KNX functions as well as the Philips Hue colour light system via his smart device. In addition, he can carry out his own settings (actions) such as time-controlled switching operations, conditional events or status displays.

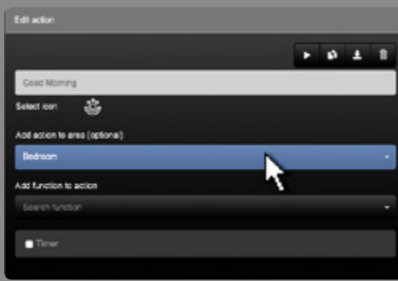
Action 1/250



Create action

The first step in creating your own action is to name it. Giving the actions descriptive names helps to maintain clarity. "Good Morning" for example could include functions which take place automatically when you get up in the morning.

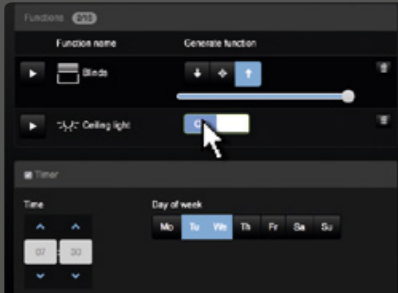
Edit action



Create and assign action

If required, the action can be assigned to an area – in our example the area would be the "Bedroom". All the functions are then displayed in a drop-down list such as "Raise the blinds", "Switch on the lighting".

Functions

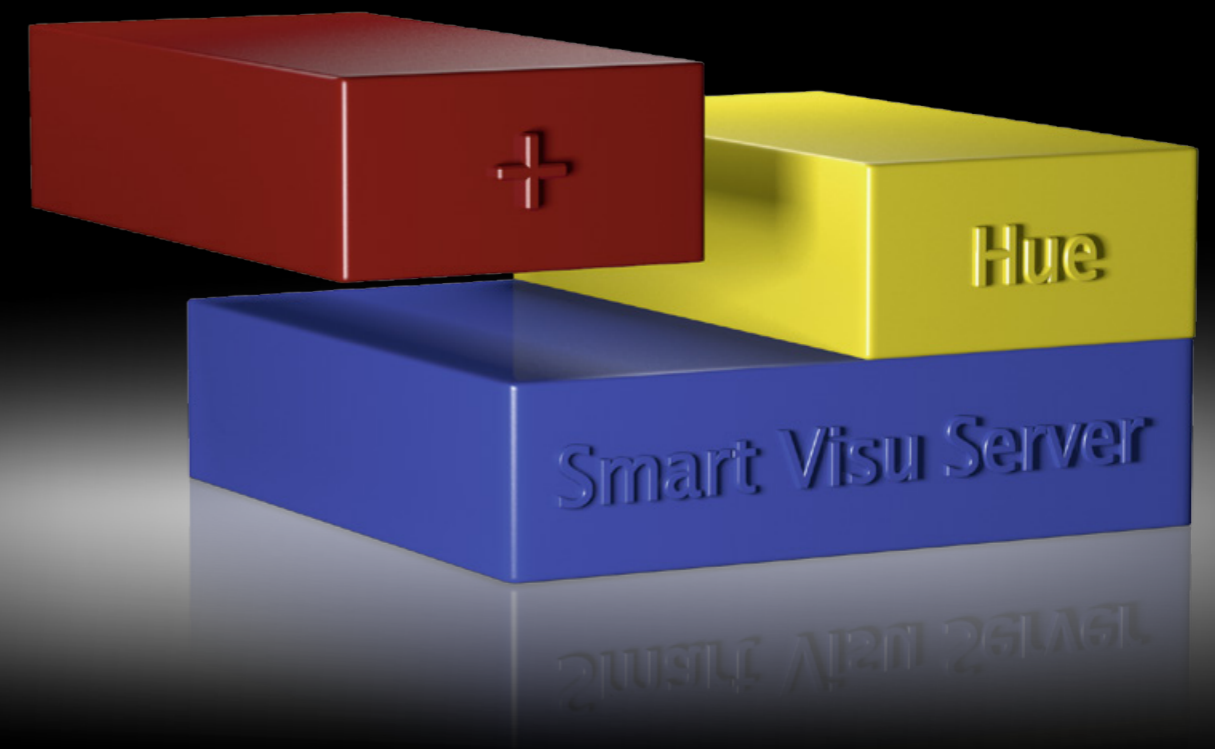


Values and timers

The required value is set for each function e.g. "Blinds to 100%", "Lighting on 100%". A time setting can also be defined via the integrated timer: MO – FR at 7:30. When activated, the action takes place automatically but can of course also be triggered manually at any time.

Modular software

Open for the future



The architecture of the Smart Visu Server software has been created so that it keeps pace with the requirements of modern life. From home entertainment to intelligent fridges, there is an increasing number of smart devices in a modern household which enable connectivity to the building system. The Smart Visu Server has therefore been consciously created as an open system. It is possible with regularly released updates to add technologies and protocols as modules. The server thus already supports the Philips Hue colour light system in its factory state. As soon as a Hue bridge with taught-in devices is detected in the network, the operator interface can be accessed for the integrated and convenient control of the lamps in an area.

Smart Control 7"

Control panel for the complete building system



As a control panel, the new Smart Control 7" takes over the control of various home automation systems using apps. Both eNet and KNX installations as well as door intercom functions can be operated via a single device (in connection with the Siedle Smart Gateway) – either separately or in parallel.

Thanks to the JUNG Launcher, all the available applications are clearly displayed and can be launched simply by touching the relevant icon. Due to the open operating system, the Smart Control 7" can also be extended by further apps at any time.

Already available



The Smart Control 7" can be installed either vertically or horizontally, depending on its intended purpose and individual preference. With its elegantly designed cover available in aluminium or black, the panel makes a great impression on the wall under any circumstances.



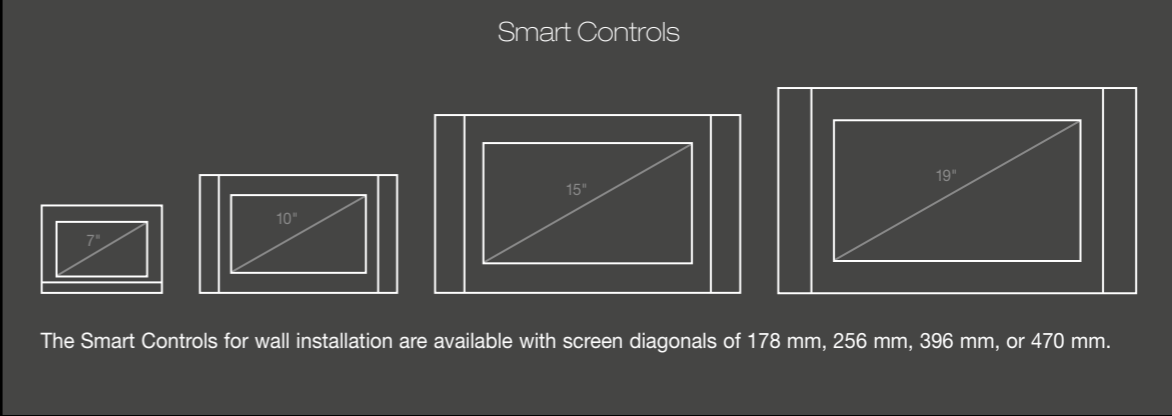
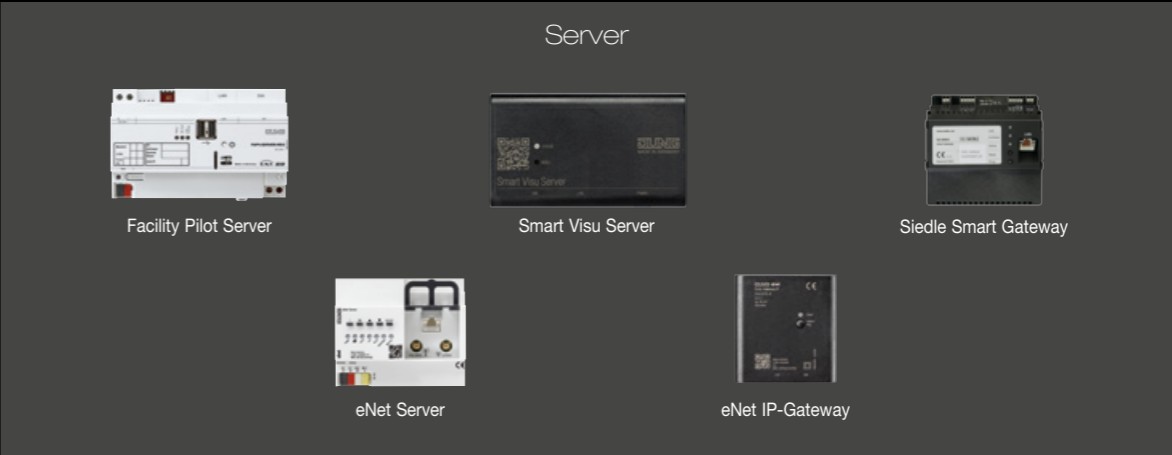
The particularly flat shape of the Smart Control 7" emphasises its sleek appearance: the design cover only protrude by around 3 mm.

JUNG Launcher

The entire smart home on a single screen



Multi-functional user interface: JUNG Launcher displays a summary of all apps that are installed on the Smart Controls. The applications are directly selected by simply touching the appropriate icon. All apps are running in parallel, so you can switch between them at any time. Apps may be added at any time.



The Smart Controls for wall installation are available with screen diagonals of 178 mm, 256 mm, 396 mm, or 470 mm.

Facility Pilot Server

App for the JUNG Launcher

KNX installations for e.g. commercial or private buildings with individual adaptations may be displayed and controlled in an ideal way using the Facility Pilot Server. The various contents are clearly structured and are the basis for ease of operation.



The visualisation is through the uniform JUNG user interface that allows the various features to be controlled in a logical and intuitive manner. Optionally, a freely configurable user interface may be used.



The Compact DIN C-rail PC Facility Pilot Server.

Smart Visu Server

App for the JUNG Launcher

For a KNX standard installation in a conventional detached house or freehold flat, the Smart Visu Server is used for visualisation. In the Smart Visu Home menu, the user may configure his/her own settings and actions such as time-controlled switching operations etc.



Also, the Smart Visu Server is used to operate the system. The clearly structured menu allows the user to individually set functions and actions.



The Smart Visu Server for wall or mounting rail installation.

eNet

Apps for the JUNG Launcher

Based on the connection to the eNet server, all eNet functions and scenes are displayed using the browser-supported eNet Home visualisation that is implemented in the server. Alternatively, visualisation may be provided by connecting to the eNet IP gateway and using the associated app. The logical structure that is based on rooms, functions, and favourites ensures good overview and intuitive operation.



eNet is intuitively displayed and controlled through the Launcher: touch the appropriate icon to select a room or function/scene.



eNet may also be displayed and controlled through the Launcher by alternatively connecting to the eNet IP gateway and using the associated eNet app.

Door communication

App for the JUNG Launcher

By linking this system to the Siedle Smart Gateway, the Smart Controls become video communication stations for the door communication – displayed on the JUNG Launcher. The clearly structured user interface ensures easy and convenient operation. Moreover, the large and clear display helps increasing the security at a glance.



More security: for monitoring all entry doors, a video/audio connection may be established at any time.

SIEDLE Systemtechnik
In-Home

The Siedle Smart Gateway is the interface to door communication.



F 50 KNX Compact room controller

Variety of functions, intuitive operation

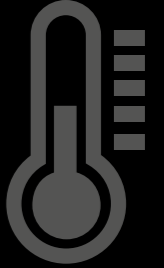


New room controller for the KNX F 50 family: the KNX compact room controller appeals by intuitive operation and two built-in temperature controllers. The large backlit LCD clearly shows the most important values and functions, irrespective of the viewing angle. Depending on the respective functions, the button icons shown on the display may be individually selected during programming. Buttons labelled by means of the Graphic Tool further assist the user in assigning functions; the same applies to the RGB status LEDs. Push-button sensor or controller functions may be assigned to each of the room controller buttons.

Already available

Smart temperature control

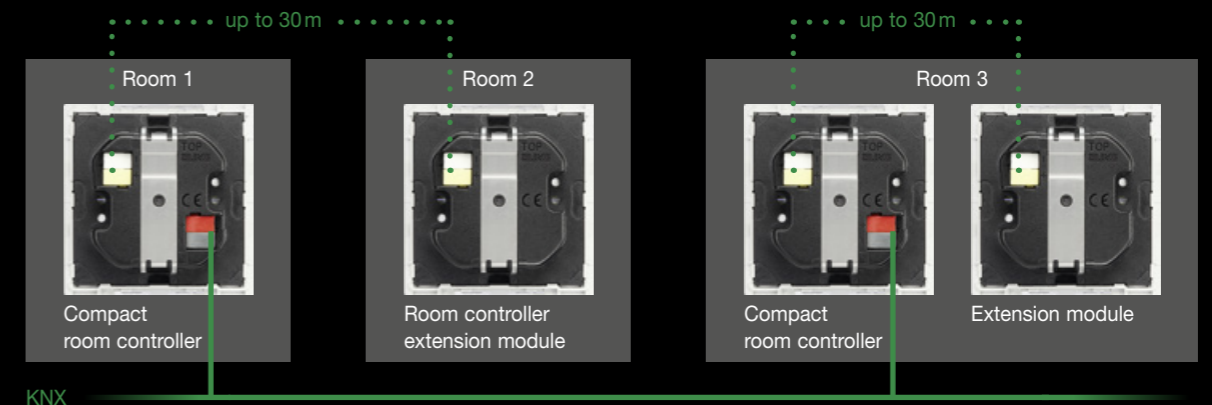
The F 50 compact room controller provides four options to determine the actual temperature: firstly, by means of the built-in temperature sensor; secondly, by means of the temperature sensor of a connected extension module; thirdly, by means of an external sensor that may be optionally connected; and fourthly, by means of the temperature sensor of any other KNX device using a 2-byte float message. Moreover, the actual temperature may be obtained from a combination of these sources and shown on the display: using the two built-in temperature controllers, the temperature of two rooms may be exclusively controlled in parallel. This way, not only the desired temperature can be achieved in the room in which the compact room controllers are installed, but also e.g. in the hallway using a connected extension module – easily, quickly and cost-efficiently.



The KNX Compact room controller is available in a 2-gang and 4-gang version. Available in the same design as of the AS, A, CD, and LS ranges, it harmoniously fits to the remaining electrical installation.

Flexible with extension modules

By connecting extension modules to the compact room controller, functions may be added to the unit as required. What is typical of the F 50 family: the extension modules may be installed in a distance of up to 30 m. Thus, the KNX functions may be easily and cost-efficiently operated from an adjacent room – including stand-alone temperature control.





KNX RF

Wall-mounted transmitters in shape of F 40 and F 50

KNX RF wireless standard in the JUNG design: wall-mounted transmitters in F 40 and F 50 family – ideal for upgrading or extending existing KNX systems. The JUNG KNX wall-mounted transmitters bypass any structural conditions, where no bus cables can or should be laid. This way, the especially flat devices can be flexibly placed within the room, since they are simply affixed to plaster, wood, or glass. Residents can then conveniently regulate their room functions at the touch of a button.

For the F 50 version, an additional temperature sensor for capturing the actual temperature is installed in the room. For allocating functions to buttons, these can be individually labelled using the JUNG Graphic Tool. Addressing, parametrising, and diagnosing are easily carried out using the KNX wireless USB flash drive or, optionally, through the KNX USB data interface. The KNX bus is connected to the wireless system using the JUNG media coupler.

Available from September 2016



The new KNX wall-mounted transmitters are available in the AS, A, CD, and LS ranges.



The JUNG media coupler with built-in line coupler capability connects the KNX and wireless systems. It is the interface between the wired and radio controlled products. When the unit is not connected to a bus but to 24V power supply only, it works as a repeater.



Alternative to the wall-mounted radio transmitters: using KNX radio hand-held transmitters, mobile operation is by remote control. There are two versions available with a choice of two or four channels. The status is displayed by the coloured LED.

KNX push-button sensors F 40

Universal design with temperature sensor



The new KNX universal push-button sensors F 40 bring more convenience to intelligent room temperature control: in addition to the options for operating the different KNX functions, the latest generation of push-button sensors have an integrated temperature sensor to measure the actual temperature value. Installed accordingly in the room, the sensors can relay this value to a KNX motor valve drive and thus support energy-efficient room temperature control.

Available from May 2016

KNX motor valve drive

With integrated room temperature controller

Smart and energy-efficient: the new KNX motor valve drive with an integrated temperature sensor for automatic room temperature control. The discretely designed device, which can be painted over, has an input which can either be used as a binary input or for the connection of an external temperature sensor. The new universal push-button sensor F 40 is also suitable for extended temperature detection and reports the temperature from a separate location in the room – which in turn optimises energy-efficient heating.

Already available



KNX 6-gang binary input

Rounding off the temperature control

Optimised for connection to 230 V and low voltage AC/DC: the new KNX 6-gang binary input. Integrated in a sophisticated KNX room temperature concept, it ideally has a window contact connected to it so that the window status can be sent for example to the KNX motor valve drive. This guarantees that the room temperature is lowered accordingly when the room is ventilated and heat is not lost through the window. An integrated pulse and operations counter rounds off the device functionality.

Available from July 2016





KNX Presence detector mini

Unobtrusive visual appearance, focused detection

Unobtrusive, compact, precise: The KNX Mini Standard and Universal presence detector is featured by the following characteristics. It is designed to control lighting systems, room thermostats, and other electrical loads as needed. The striking feature is its compact design offering several ceiling installation options: Depending on the particular room situation, the unit may be installed in a false ceiling, on the surface, or in a commercial flush wall box. When flush-mounted or installed in a false ceiling, the unit is hardly identified at the ceiling and thus does not affect the interior design of the room.

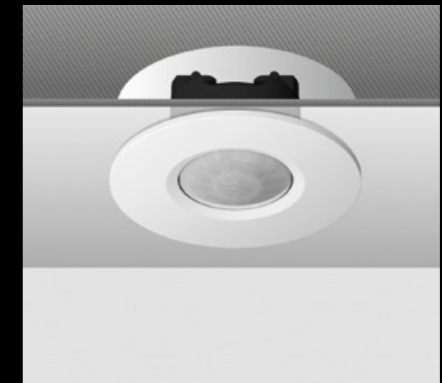
Focused detection, e.g. above office working places, in entrances or hallways, is a functional benefit. Depending on its configuration, the unit may be used as a ceiling observer, presence detector, or in signalling mode. Using software to parameterise several devices in parallel with several devices set up as satellite units being combined with a master device enables the detection area to be extended as required.

The five functional blocks of the universal version work independently of each other and can be switched between day and night operations. Each functional block can be configured as required for presence detector, ceiling observer or signalling mode (so that different tasks can be fulfilled with only one device that operates in the different areas of the room). If required, regulation of lighting is also possible depending on daylight. Additionally the three PIR sensors can be individually analysed as required by software. The setting and operation can optionally be carried out through infra-red remote control.

Already available



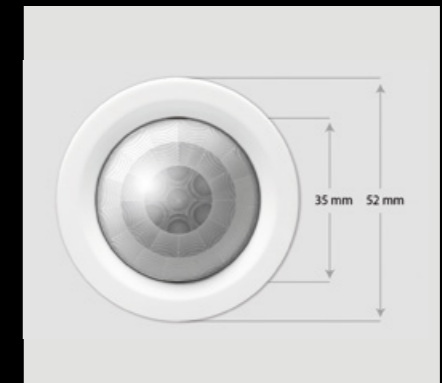
The most discreet installation type is definitely the clamp assembly in a false ceiling. The spring clips ensure fastness, and only the lens and the narrow design ring can be seen from below.



Flush-mounted installation of the presence detector mini or the brightness sensor is carried out by means of a separate flush mounting set in an off-the-shelf DIN 49073 flush wall box.



The third type of ceiling installation is the surface-mounted option. Here, too, JUNG offers a separate installation set that contains a bezel as well as a surface cap to give it a consistent appearance.



Compact design, slim dimensions: convincing with a decent style.

KNX Brightness sensor

With the KNX brightness control with integrated brightness sensor, the interior light control depends on the amount of daylight present. It has the same three options for ceiling installation as the presence detector mini. The brightness sensor with its harmonious proportions, "invisible" adjustment elements and sensor technology features an unoptrusive design.



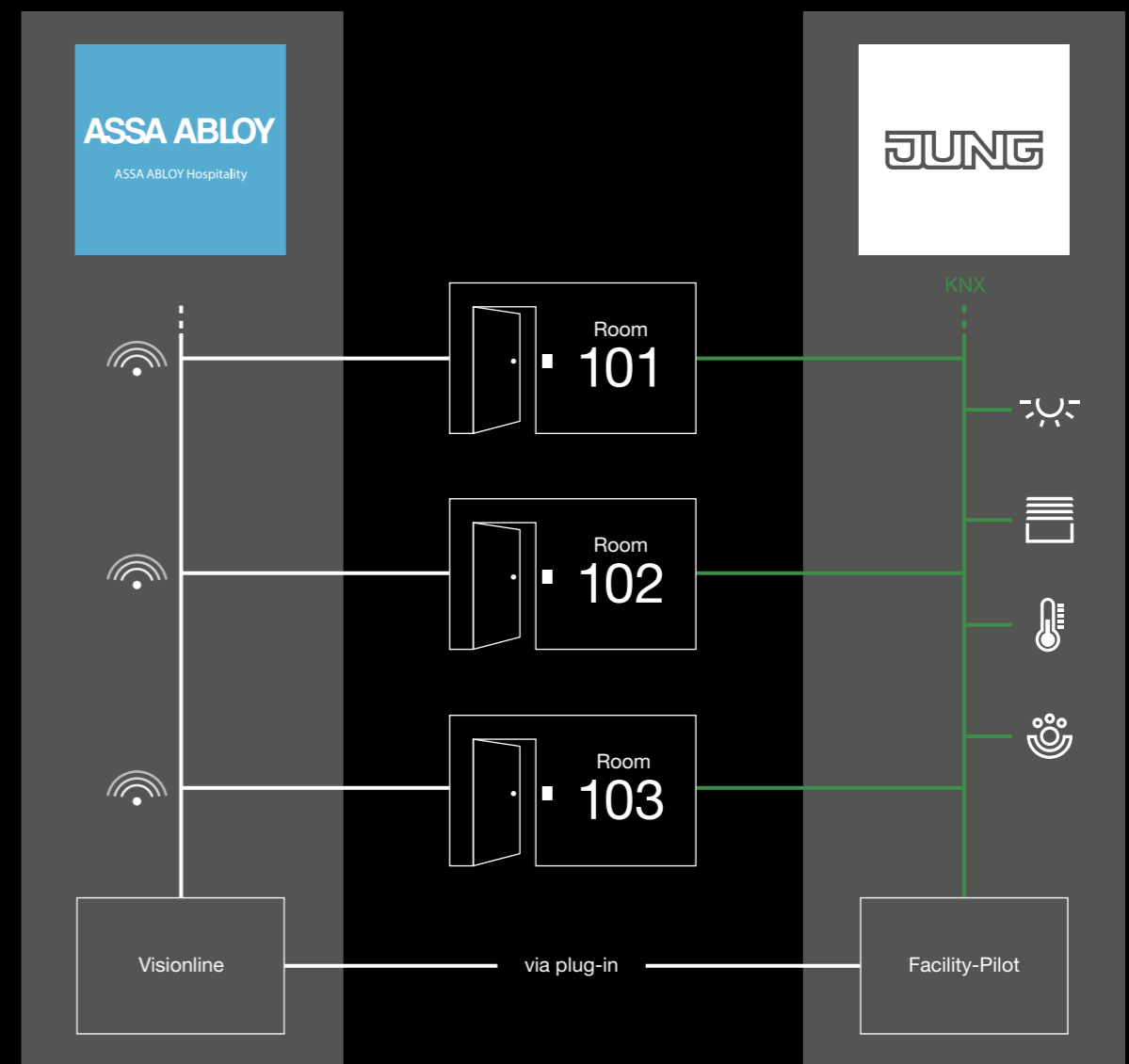
Guest Room Management System

JUNG KNX technology meets Assa Abloy hospitality

A strong alliance for increased comfort and convenience, security and energy efficiency in the hospitality sector of the hotel industry: through Assa Abloy, the world-wide leading manufacturer and supplier of locking solutions, a progressive hotel locking system is made available with an electronic key card and Visionline software from VingCard. With an interface connection to the JUNG KNX system, there are numerous benefits for automation and operational comfort for both hotel operators and guests.

Interface to the world of access control

With a new plug-in, the JUNG Facility-Pilot offers an interface to the Visionline software. While the future-proof KNX technology in the hotel room provides intelligent functions in an intuitive operational concept, the link with the Visionline software from VingCard creates added value as regards comfort, security and energy efficiency – starting as soon as you enter the room. “Greeting scenes” can be implemented when you open the room door with the key card: a comfort lightscene is switched on, the curtains are opened, the air conditioning system is triggered in comfort mode etc. Special profiles can also be created and triggered for the staff e.g. to create the optimum lighting conditions for cleaning the room. A message can also be sent to reception when the room door is not closed – the possibilities are endless.



Assa Abloy at the door, JUNG in the room – the coupling of Vision Line and the KNX Facility-Pilot takes place via the plug-in. The advantages are obvious: Accurate control for for the hotelier, maximum comfort for the guest.

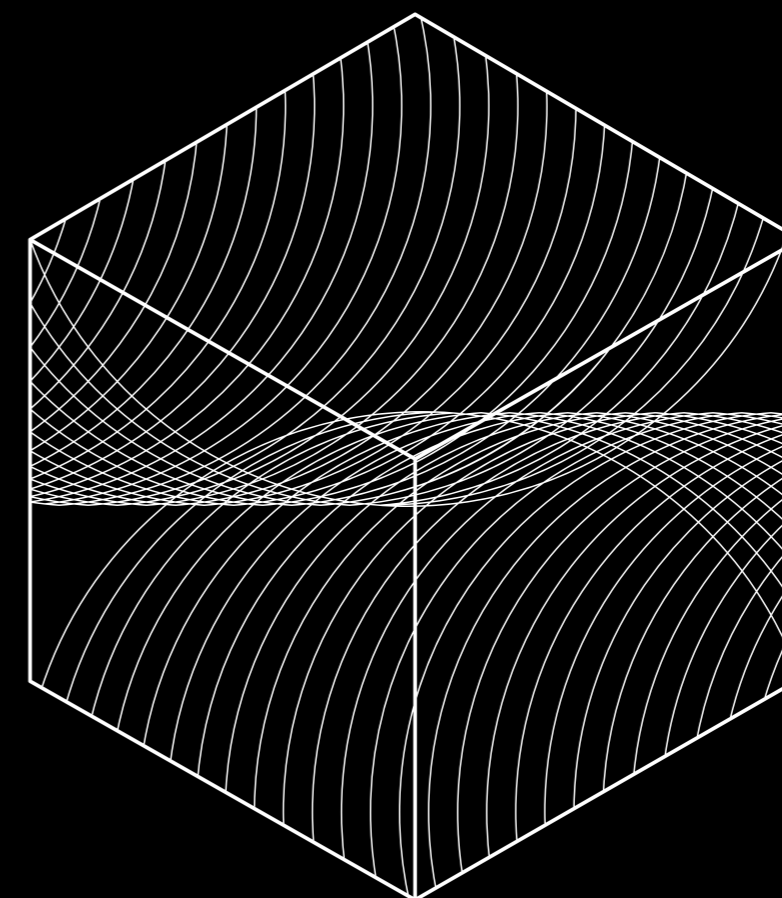
Synergy embodied

The combined strength of two specialists

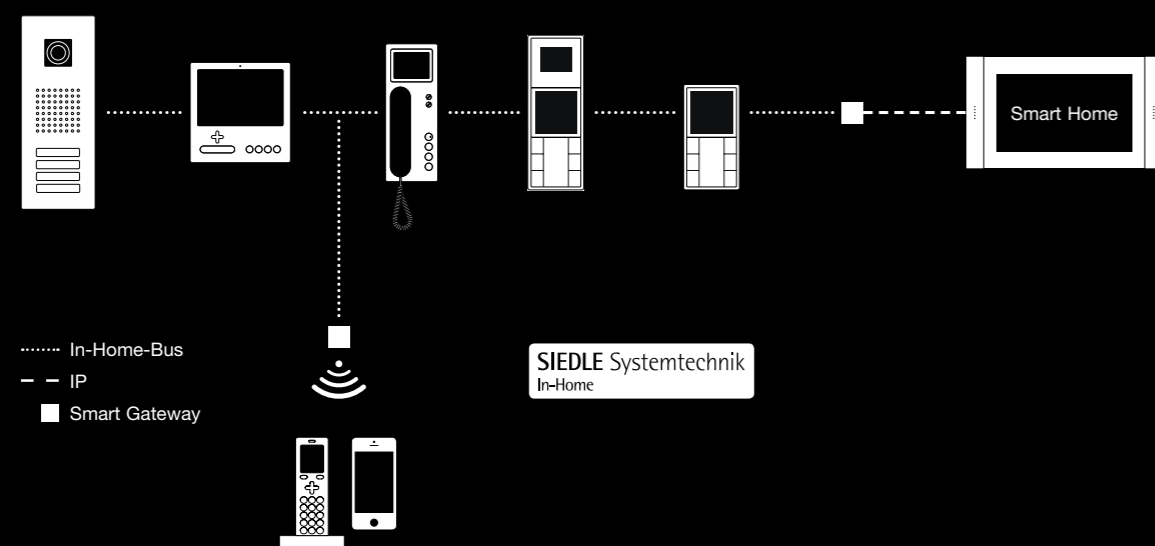
When the expertise of two specialists combines, new possibilities emerge. JUNG as an authority on building system technology and aesthetic switch design is collaborating with Siedle as an expert in door and building communication.

Ultimately the components from JUNG and Siedle speak the same language: equipped with Siedle system technology, the JUNG indoor video and audio stations in a variety of switch designs communicate perfectly with the door stations from Siedle. For seamless communication and the best possibilities for trade, commerce and architects.

www.neuesynergie.de/en



NEUE SYNERGIE



JUNG Indoor station

Equipped with Siedle system technology

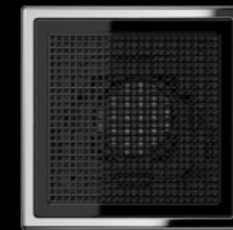


Display in large format

At a glance: with the new, large 2.7"/70 mm display for the indoor video stations from the CD and LS ranges, the resident can now see even better who is standing in front of the door. Practical: the smaller displays which have already been installed can simply be exchanged as needed without requiring any configuration.

The JUNG indoor stations are impressive due to their functionality and visual effect. There is not only an extensive design selection available; they are also extremely flexible due to their modular construction. Video, audio and push-button modules can be mounted together in a multiple frame or separately in single frames. When combined with the abundance of JUNG design ranges, there is a wide variety in terms of material, colour and shape. When the expertise of two specialists combines, new possibilities emerge. JUNG as an authority on building system technology and aesthetic switch design is collaborating with Siedle as an expert in door and building communication.

Already available



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Video station

See who is standing in front of the door: the coloured TFT screen (2,7"/70 mm) gives you a clear look at the visitor. Hands-free talking with best loudspeaker quality, eleven different signal sounds and convenient push-button operation are also a standard feature of the video indoor station.

Audio indoor station

Clear door communication: top-quality sound and optimal loud-speaker quality (call volume incrementally adjustable up to 92 dB(A)) enables the best communication between residents and visitors. Hands-free talking and door opening at the touch of a button makes it easy to operate.

Standard indoor station

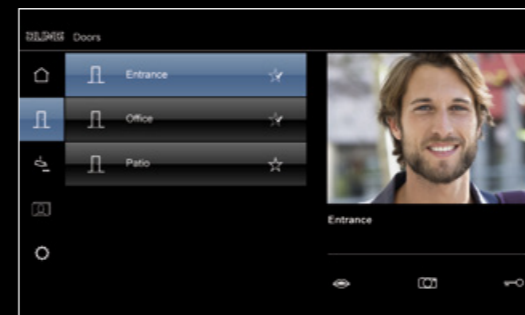
The indoor station for compact surface installation: call, speak, open the door – the standard version eloquently fulfils all the most important requirements. Internal calls, privacy function, eleven different call sounds and call volume adjustable to five levels up to 83 dB(A) round off its features.

Door communication with the Smart Control 7"

Function as a video indoor station



The new JUNG Smart Control 7" becomes a video station for door communication via the Siedle Smart Gateway. The clearly structured interface enables simple and convenient operation – and the large, clear display provides increased safety at a glance. Via its integration in the JUNG Launcher, the application has the well-known JUNG design at its disposal. The Smart Controls 10", 15" and 19" can of course also be used here, depending on requirements and spatial conditions.

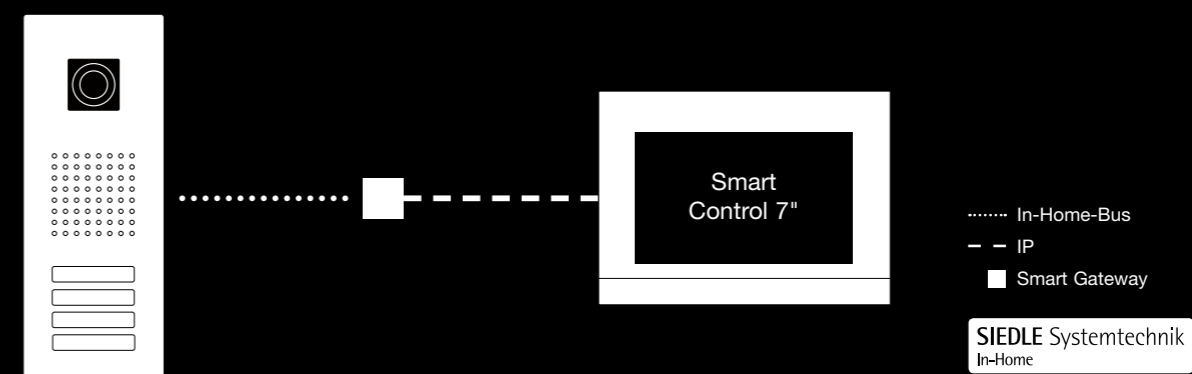


Convenience

Drop-down list of the doors: a video/audio connection can be set up at any time to monitor all the entrance doors. Before establishing voice communication, the resident can see who is standing in front of the door. If required, the microphone on the panel can be muted so that the visitor cannot hear what is being said in the house. The ringtone on the panel can also be switched off.

Security

Increased security: each time a call is made at the door, an image of the visitor is automatically recorded and saved. Live images from the camera can be retrieved at any time and an image can be saved manually if required in the memory. You can therefore detect at a glance what is happening in front of the door.



Compatibility

The JUNG Smart Control 7" is linked to the outdoor stations via the Siedle Smart Gateway. The In-Home bus serves as the basis and fundamentally guarantees the compatibility between JUNG indoor stations and Siedle door stations.

Movement/Presence detector

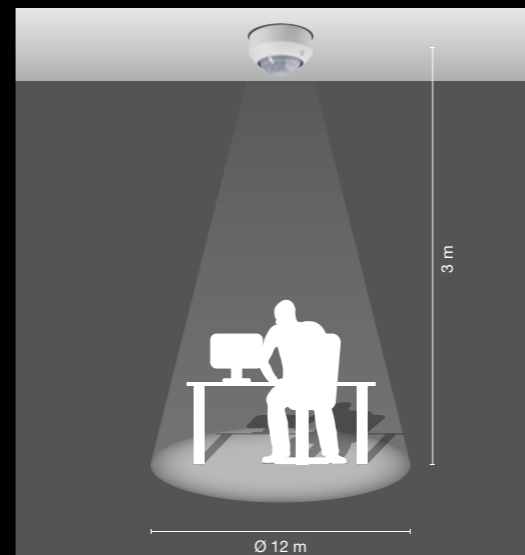
Two operating modes in one device



A compact device with a twin function: the new movement/presence detector for automatic switching of the lighting, dependent on brightness and movement. It is persuasive due to its excellent detection properties (360° detection range) at mounting heights up to six metres.

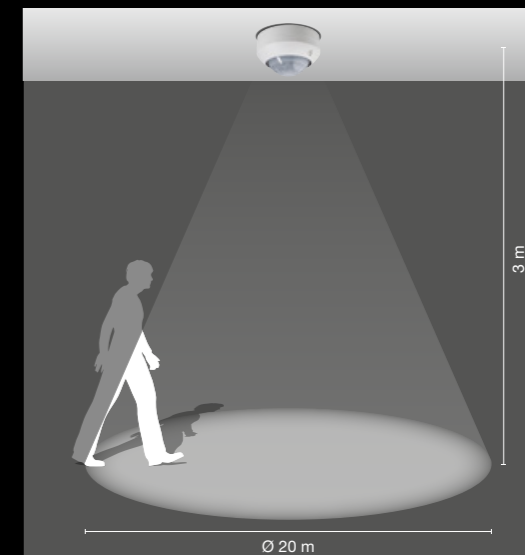
The movement/presence detector has three independent PIR sensors for movement detection. Each of these sensors is assigned to an individually activated range (each with a detection angle of 120°). In addition the detection range can be considerably extended by grouping up to five devices. It is therefore possible to adapt the device to the room conditions or to the specific application. Due to the integrated brightness sensor, the device can also be used as a twilight switch.

Already available



Presence detector function

When it is used as a presence detector, the device provides energy-efficient lighting e.g. in the workplace. At a mounting height of 3 m, a detection range of 360° is covered with a diameter of 12 m. Even the smallest movements – such as moving the mouse while working at the PC – are detected.



Movement detector function

When it is used as a movement detector, the device has a detection range of 360° with a diameter of 20 m (at a mounting height of 3 m). This extensive detection range is perfect for use in corridors/hallways. In this mode, the lighting is also switched dependent on the brightness which in turn saves energy.

Carrying out the settings at ground level: two IR remote controls increase the level of convenience when operating the presence detector. The user can activate different functions with his remote control (switching on/off, automatic mode and presence simulation etc.). The installer carries out the commissioning beforehand using a remote control that can be purchased separately.



ZigBee wall and hand-held transmitters

Create atmospheric light scenes



Re-experience light control: the JUNG ZigBee hand-held transmitters and wall transmitters in switch design control modern, radio-controlled illuminants according to individual wishes. Atmospheric light scenes may be easily configured according to your personal preferences and conveniently operated. So the meal can be prepared in the kitchen that is illuminated daylight white, while the light above the dining table is already dimmed warm white. RGB colour light effects skilfully place emphasis on other areas – matching each atmosphere and ambience.

Available from July 2016



Switching/Dimming

Control light intensity as desired by pressing buttons – according to the particular situation.



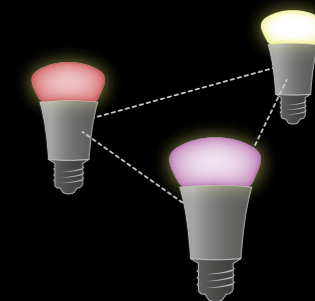
Colour temperature

Use the Tunable White feature to set warm, neutral, or daylight white.



Colour values

Control RGB colour light for each room and set tones in lighting.



Scenes

Use programmed scenes to retrieve your personal favourite setups.

Illuminant teach-in is conveniently carried out through “Touchlink” by pressing buttons at the unit. Additional functions such as “Factory Reset” are selected using shortcuts as well. This way, also the second operating level for advanced parametrisations (e.g. change of colour temperature) is accessed.

The following illuminants/manufacturers support the ZigBee Light Link protocol:

- Philips Hue
- Osram LIGHTIFY
- LG Electronics
- General Electric Company



The flat ZigBee wall transmitters are simply affixed in positions where you need them – on plaster, wood, or glass, ideal for retrofitting.

DALI potentiometer

Brightness and colour temperature control



The new Power DALI potentiometer for the manual operation of luminaires with a DALI interface, including the option to adjust the colour temperature (tunable white): the device uses the well-known operating principle of a rotary dimmer. The switching, dimming and regulation of compatible luminaires is possible for up to 26 DALI devices. A maximum of four devices can be combined to increase the number of DALI devices and to guarantee operation from different locations. This technology is typically used in offices and commercial buildings. The standard covers for rotary dimmers in the AS, A CD, LS and SL ranges are used for the Power DALI potentiometer.

Available from May 2016

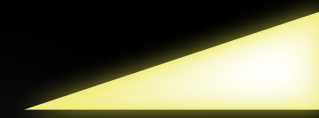


Colour temperature control from DALI device type 8 for tunable white in accordance with IEC 62386-209.



Switching

The connected DALI luminaire is switched by pressing the rotary button.



Dimming

The stepless dimming of the energy-efficient luminaire with a DALI interface is regulated simply by turning the knob.



Tunable white

Warm, neutral or daylight white as required: the colour temperature is adjusted by pressing and turning the knob at the same time. The limits of the colour temperature range of the luminaire can be set directly on the device itself which enables precise control.

USB charger

Increased charging power

Optimised replacement for the well-known USB charger: The new unit provides an output current of up to 2100mA. This current is sufficient to quickly and safely charge mobile devices of the latest generation. The output current is either completely delivered to one USB socket or distributed across both USB sockets as necessary. The new USB charger is available in all JUNG ranges and ideally suited for retrofitting.

Available from May 2016



Available in the AS, A, CD, LS, and SL ranges in different materials and colours, the new USB charger smoothly integrates into the existing electrical insulation in the room.

F 50 eNet wall transmitter

Flat wall transmitters in a new look

Operate eNet in a new design: the new flat wall transmitters rely on the well-known F 50 concept which provides buttons on the left-hand and right-hand sides and a large-area cover in the centre. This cover is available either as a transparent labelling area or as a design cover matching the button colour. The buttons may be labelled using the Graphic Tool which helps identify the buttons and associated functions so that functions and scenes can be intuitively controlled by pressing buttons. The 1-gang to 4-gang eNet wall transmitters are available in the AS, A, CD, and LS design ranges. Commissioning is performed either manually between transmitter and receiver or through the eNet Server, which is the more convenient way. Tip: the wall transmitters are featured by a battery life of up to 10 years. After that period of time, the commercially available battery is easily and quickly replaced: simply remove the design cover, replace the battery, and re-install the cover – done.

Available from September 2016



The flat eNet wall transmitters are simply affixed in the positions where you need them – on plaster, wood, or glass.

eNet with the 7" Smart Control

Visualisation and operation

With the 7" Smart Control unit, a new, convenient control is available also for the eNet wireless system: the JUNG Launcher is used to invoke the connection to the eNet server or eNet IP gateway, respectively. The user simply needs to touch the screen to intuitively control any eNet functions or scenes through the visualisation. The Smart Control 7" touchscreen display provides enough space. Moreover, the JUNG graphical user interface is clearly structured for ease of operation.



Secure Remote Access

Connected to the eNet Smart Home from everywhere

Using a JUNG server located in Germany, JUNG offers secure access to eNet building technology from one source. The user creates a MyJUNG account at www.jung.de and, using this data, activates access to the eNet server once only. Secure remote access is available from that moment on. This way the user can check at a glance, and from any location, whether he has left the lighting on or he can lower the shutters at home when it gets dark. Of course, several JUNG eNet Smart Home systems can be managed by remote access if required. For intuitive operation, the uniform JUNG interface is also available to the user. Here he/she can operate all functions simply and safely as usual.

Using the remote access requires the JUNG eNet Server to be implemented – the smart control centre for the system. Purchase of the JUNG eNet Server includes 24 months of free use of secure remote access.



Safety first: the JUNG remote access feature is VDE tested and certified.



ID. 40043453





eNet Allianz for More Comfort and Security

The market for smart home solutions is booming. Several million households are expected to use smart networked technology by 2020. We want the specialist distribution partners to benefit from this situation. We provide the end customer with reliable Made in Germany solutions. We have therefore become an eNet Allianz partner.

SMART HOME FROM MASTER CRAFTSMEN

For creating their smart home, many end customers want to get professional advice and reliable service. Within the eNet Allianz association, we count on the performance of expert craft businesses. Together, we actively want to shape the smart home market. Join us at: www.enet-allianz.de

A WIRELESS STANDARD PROVIDING A LOT OF OPTIONS

eNet is designed as an industry standard for specialist craft businesses. Leading brands in the specialist building technology distribution are invited to join this industry standard. This will enable solutions across brands and trades as well as electrical craft businesses to play a key role in modernising existing buildings and erecting new ones.



A GOOD BASIS FOR THE NETWORKED HOME



eNet is the bidirectional wireless system for smart networking and control of building technology. Based on this technology, our products and solutions may be easily incorporated and controlled – even from remote when you are on your way, using the eNet server. eNet is easily installed and retrofitted.




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Products are marked with the following symbols, when laser engraving or print labelling is possible on the surface.

-  Laser engraving possible
-  Print labelling possible

-  Protection level IP 44 ensured
-  Colour printing possible
-  Laser labelling possible

Ref.-no.

Sockets with cover 50 x 50 mm, for hinged lid**Socket, French/Belgian system**

2-pole + male earth pin, 16 A / 250 V ~

with child protection (shutter)Screwless terminals for wires up to 2.5 mm²

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss



ivory	5120 FBFKI
white	5120 FBFKI WW

AS range**SCHUKO® socket 16 A / 250 V ~****with pilot light (green LED) ref.-no.: 193-LED GN****with child protection (shutter)**Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory	 A 1520 BFKO
white	 A 1520 BFKO WW
green	A 1520 BFKO GN
orange	A 1520 BFKO O
red	A 1520 BFKO RT

Duroplastic (scratch-proof) glossy – antibacterial

ivory	ABA 1520 KO
white	ABA 1520 KO WW

Thermoplastic (breakproof) high-gloss – antibacterial

green	ABA 1520 BFKO GN
orange	ABA 1520 BFKO O

Spare pilot light frontside exchangeable without disconnecting the mains

LED lamp

(Spare part)

for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO..

green 230 V ~, approx. 0.3 mA	193-LED GN
-------------------------------	------------

average life approx. 100,000 h

SCHUKO® socket with RCD (residual current device) 16 A / 250 V ~**according to DIN EN 61008-1 (VDE 0664-10) and DIN EN 61008-2-1 (VDE 0664-11)****Rated residual current: 30 mA****with child protection (shutter)**Screwless terminals for wires up to 2.5 mm²

The SCHUKO socket with RCD is suitable to replace sockets in older installations.

Sockets that are connected to the RCD-protected output terminals (L' N') are likewise RCD-protected.

The electrical installation up to the SCHUKO® socket with RCD is not protected.

The socket can also be switched on and off manually, using the built-in switch.

Thermoplastic (breakproof) high-gloss

ivory	A 5520.30
white	A 5520.30 WW




Technical data

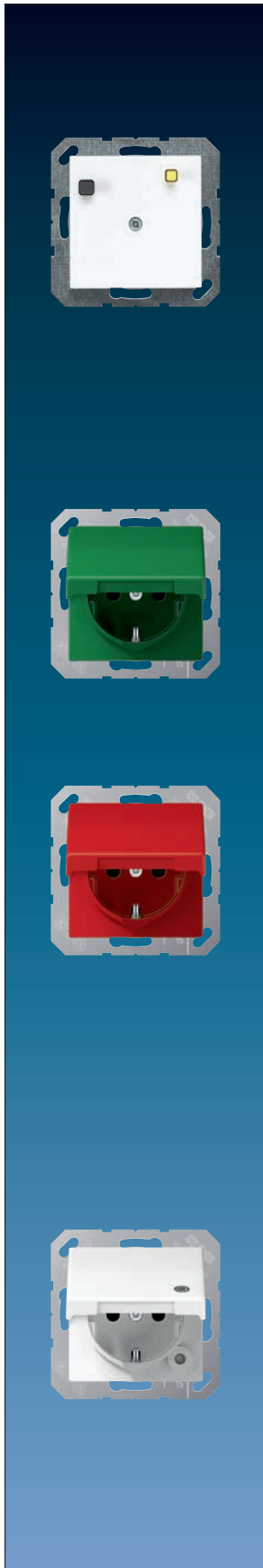
Rated voltage:	AC 230 V ~, 50/60 Hz
Rated current:	16 A
Rated residual current:	30 mA
Ambient temperature:	-25 ... +40 °C



Sockets

AS range

-  Protection level IP 44 ensured
-  Colour printing possible
-  Laser labelling possible



Ref.-no.

RCD (residual current device) 16 A / 250 V ~
according to DIN EN 61008-1 (VDE 0664-10) and DIN EN 61008-2-1 (VDE 0664-11)
Rated residual current: 30 mA

Screwless terminals for wires up to 2.5 mm²
 suitable for cables with 2 or 3 conductors
 Installation into flush box with a depth of 60 mm is recommended.
 Protection device with voltage-independent function. The sockets connected to the output terminals
 are protected acc. to DIN VDE 0100-410. The electrical installation up to the RCD is not protected!

Thermoplastic (breakproof) high-gloss

ivory	A 5530 FIB
white	A 5530 FIB WW



Technical data

Rated voltage:	AC 230 V ~, 50/60 Hz
Rated current:	16 A
Rated residual current:	30 mA
Ambient temperature:	-25 ... +40 °C

SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)

Screwless terminals for wires up to 2.5 mm²
 Without claws: ref.-no. with additional "N", e.g.: ..1520 N..
 Supporting frame, claws and claw screws are integrated into the earth protection.


Thermoplastic (breakproof) high-gloss – antibacterial

green		ABAS 1520 BFKL GN
orange		ABAS 1520 BFKL O



SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with child protection (shutter)

Screwless terminals for wires up to 2.5 mm²
 Without claws: ref.-no. with additional "N", e.g.: ..1520 N..
 Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

red		AS 1520 BFKIKL RT
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Thermoplastic (breakproof) high-gloss – antibacterial

green		ABAS 1520 KIKL GN
orange		ABAS 1520 KIKL O



SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with pilot light (green LED) ref.-no.: 193-LED GN
with child protection (shutter)

Screwless terminals for wires up to 2.5 mm²
 Without claws: ref.-no. with additional "N", e.g.: ..1520 N..
 Supporting frame, claws and claw screws are integrated into the earth protection.



Thermoplastic (breakproof) high-gloss

ivory			AS 1520 BFKLKO
white			AS 1520 BFKLKO WW
green			AS 1520 BFKLKO GN
orange			AS 1520 BFKLKO O
red			AS 1520 BFKLKO RT

Duroplastic (scratch-proof) glossy – antibacterial

ivory			ABAS 1520 KLKO
white			ABAS 1520 KLKO WW

Thermoplastic (breakproof) high-gloss – antibacterial

green			ABAS 1520 KLKO GN
orange			ABAS 1520 KLKO O




Spare pilot light frontside exchangeable without disconnecting the mains

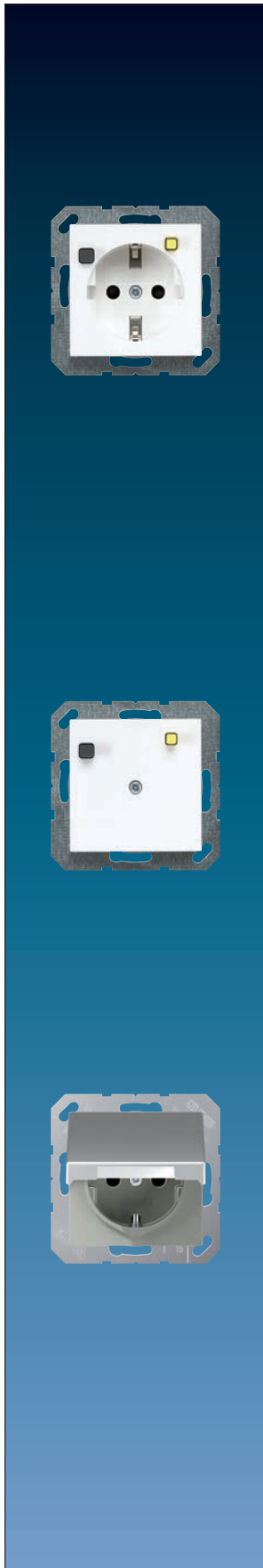
	Ref.-no.
LED lamp (Spare part) for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO.. green 230 V ~, approx. 0.3 mA average life approx. 100,000 h	193-LED GN
SCHUKO® socket 16 A / 250 V ~ with hinged lid (with spring) with safety lock (24 different locks) with child protection (shutter) Screwless terminals for wires up to 2.5 mm ² Without claws: ref.-no. with additional "N", e.g.: ..1520 N.. Supporting frame, claws and claw screws are integrated into the earth protection. Thermoplastic (breakproof) high-gloss red	P AS 1520 BFKLSL RT
Socket, French/Belgian system 2-pole + male earth pin, 16 A / 250 V ~ with child protection (shutter) Screwless terminals for wires up to 2.5 mm ² Supporting frame, claws and claw screws are integrated into the earth protection. Duroplastic (scratch-proof) glossy ivory	P A 1520 FKI
white	P A 1520 FKI WW
Thermoplastic (breakproof) high-gloss white	L A 1520 FBFKI WW
Hinged lid with spring 80.5 x 80.5 mm with safety lock (24 different locks) for sockets, switches and push-buttons with centre plate of the AS / A ranges. Thermoplastic (breakproof) high-gloss ivory full plate	L AS 581 BFKLSL
white full plate	L AS 581 BFKLSL WW
A range SCHUKO® socket 16 A / 250 V ~ with pilot light (green LED) ref.-no.: 193-LED GN with child protection (shutter) Screwless terminals for wires up to 2.5 mm ² Without claws: ref.-no. with additional "N", e.g.: ..1520 N.. Supporting frame, claws and claw screws are integrated into the earth protection. Thermoplastic (breakproof) high-gloss white	L A 1520 BFKO WW
green	A 1520 BFKO GN
orange	A 1520 BFKO O
red	A 1520 BFKO RT
Spare pilot light frontside exchangeable without disconnecting the mains	
LED lamp (Spare part) for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO.. green 230 V ~, approx. 0.3 mA average life approx. 100,000 h	193-LED GN



Sockets

A range

-  Protection level IP 44 ensured
-  Colour printing possible
-  Laser labelling possible



Ref.-no.

SCHUKO® socket with RCD (residual current device) 16 A / 250 V ~
according to DIN EN 61008-1 (VDE 0664-10) and DIN EN 61008-2-1 (VDE 0664-11)
Rated residual current: 30 mA
with child protection (shutter)

Screwless terminals for wires up to 2.5 mm²

The SCHUKO socket with RCD is suitable to replace sockets in older installations.

Sockets that are connected to the RCD-protected output terminals (L' N) are likewise RCD-protected.

The electrical installation up to the SCHUKO® socket with RCD is not protected.

The socket can also be switched on and off manually, using the built-in switch.

Thermoplastic (breakproof) high-gloss

white	A 5520.30 WW
black	A 5520.30 SW

Thermoplastic (breakproof) lacquered

aluminium	A 5520.30 AL
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Technical data

Rated voltage:	AC 230 V ~, 50/60 Hz
Rated current:	16 A
Rated residual current:	30 mA
Ambient temperature:	-25 ... +40 °C

RCD (residual current device) 16 A / 250 V ~
according to DIN EN 61008-1 (VDE 0664-10) and DIN EN 61008-2-1 (VDE 0664-11)
Rated residual current: 30 mA

Screwless terminals for wires up to 2.5 mm²

suitable for cables with 2 or 3 conductors

Installation into flush box with a depth of 60 mm is recommended.

Protection device with voltage-independent function. The sockets connected to the output terminals are protected acc. to DIN VDE 0100-410. The electrical installation up to the RCD is not protected!

Thermoplastic (breakproof) high-gloss

white	A 5530 FIB WW
black	A 5530 FIB SW

Thermoplastic (breakproof) lacquered

aluminium	A 5530 FIB AL
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Technical data

Rated voltage:	AC 230 V ~, 50/60 Hz
Rated current:	16 A
Rated residual current:	30 mA
Ambient temperature:	-25 ... +40 °C







SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)

Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) lacquered

aluminium	  	A 1520 BFKL AL
champagne	 	A 1520 BFKL CH
mocha		A 1520 BFKL MO

Ref.-no.

SCHUKO® socket 16 A / 250 V ~**with hinged lid (with spring)
with child protection (shutter)**Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) lacquered

aluminium	P P L	A 1520 BFKIKL AL
champagne	P P	A 1520 BFKIKLCH
mocha	P	A 1520 BFKIKLMO

SCHUKO® socket 16 A / 250 V ~**with hinged lid (with spring)
with pilot light (green LED) ref.-no.: 193-LED GN
with child protection (shutter)**Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

white	P L	A 1520 BFKLKO WW
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Spare pilot light frontside exchangeable without disconnecting the mains

LED lamp

(Spare part)

for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO..

green 230 V ~, approx. 0.3 mA

193-LED GN

average life approx. 100,000 h

Socket, French/Belgian system

2-pole + male earth pin, 16 A / 250 V ~

with child protection (shutter)Screwless terminals for wires up to 2.5 mm²

Supporting frame, claws and claw screws are integrated into the earth protection.

Duroplastic (scratch-proof) glossy

white	P	A 1520 FKI WW
black		A 1520 FKI SW

Duroplastic lacquered

aluminium	P L	A 1520 FKI AL
champagne	P	A 1520 FKI CH
mocha		A 1520 FKI MO

Thermoplastic (breakproof) high-gloss

white	L	A 1520 FBFKI WW
black	L	A 1520 FBFKI SW

Thermoplastic (breakproof) lacquered

matt anthracite	L	A 1520 FBFKI ANM
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Hinged lid with spring 80.5 x 80.5 mm**with safety lock (24 different locks)**

for sockets, switches and push-buttons with centre plate of the AS / A ranges.

Thermoplastic (breakproof) high-gloss

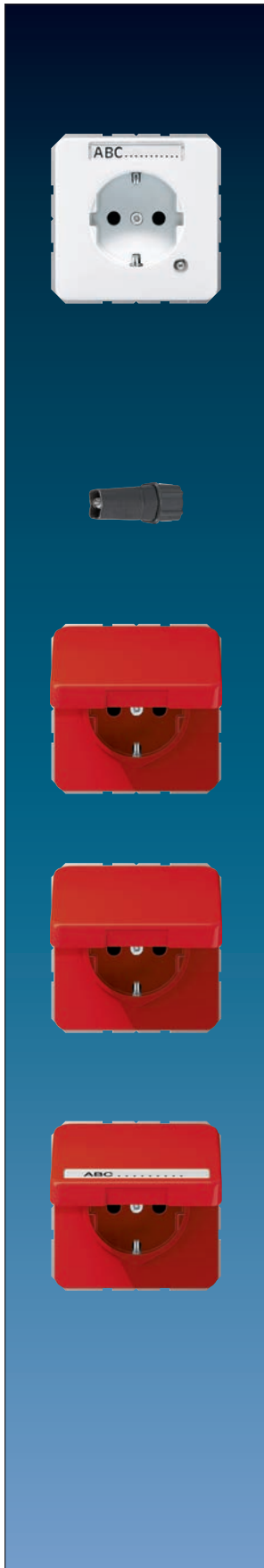
white	full plate	L	AS 581 BFKLSL WW
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Sockets

CD range

available from June 2016



Ref.-no.

**SCHUKO® socket 16 A / 250 V ~
with pilot light (green LED) ref.-no.: 193-LED GN
with child protection (shutter)
with inscription field 6 x 37 mm**

Screwless terminals for wires up to 2.5 mm²
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..
Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory		CD 1520 BFNAKO
white		CD 1520 BFNAKO WW
green		CD 1520 BFNAKO GN
orange		CD 1520 BFNAKO O
red		CD 1520 BFNAKO RT

Spare pilot light frontside exchangeable without disconnecting the mains

LED lamp

(Spare part)
for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO..
green 230 V ~, approx. 0.3 mA
average life approx. 100,000 h

193-LED GN

**SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)**

Screwless terminals for wires up to 2.5 mm²
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..
Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

red		CD 1520 BFKL RT
black		CD 1520 BFKL SW

**SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with child protection (shutter)**

Screwless terminals for wires up to 2.5 mm²
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..
Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss




red		CD 1520 BFKIKL RT
black		CD 1520 BFKIKL SW

**SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with inscription field 9 x 58 mm**

Screwless terminals for wires up to 2.5 mm²
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..
Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

red		CD 1520 BFNAKL RT
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-  Protection level IP 44 ensured
-  Colour printing possible
-  Laser labelling possible

Ref.-no.


SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with inscription field 9 x 39 mm
with pilot light (green LED) ref.-no.: 193-LED GN
with child protection (shutter)

Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory			CD 1520 BFKLKO
white			CD 1520 BFKLKO WW
green			CD 1520 BFKLKO GN
orange			CD 1520 BFKLKO O
red			CD 1520 BFKLKO RT

Spare pilot light frontside exchangeable without disconnecting the mains

LED lamp

(Spare part)

for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO..

green 230 V ~, approx. 0.3 mA

average life approx. 100,000 h

193-LED GN

SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with inscription field 9 x 39 mm
with safety lock (24 different locks)
with child protection (shutter)

Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory			CD 1520 BFKLSL
white			CD 1520 BFKLSL WW
brown			CD 1520 BFKLSL BR
grey			CD 1520 BFKLSL GR
green			CD 1520 BFKLSL GN
light grey			CD 1520 BFKLSL LG
orange			CD 1520 BFKLSL O



Socket, French/Belgian system

2-pole + male earth pin, 16 A / 250 V ~

with child protection (shutter)Screwless terminals for wires up to 2.5 mm²

Supporting frame, claws and claw screws are integrated into the earth protection.




Duroplastic (scratch-proof) glossy

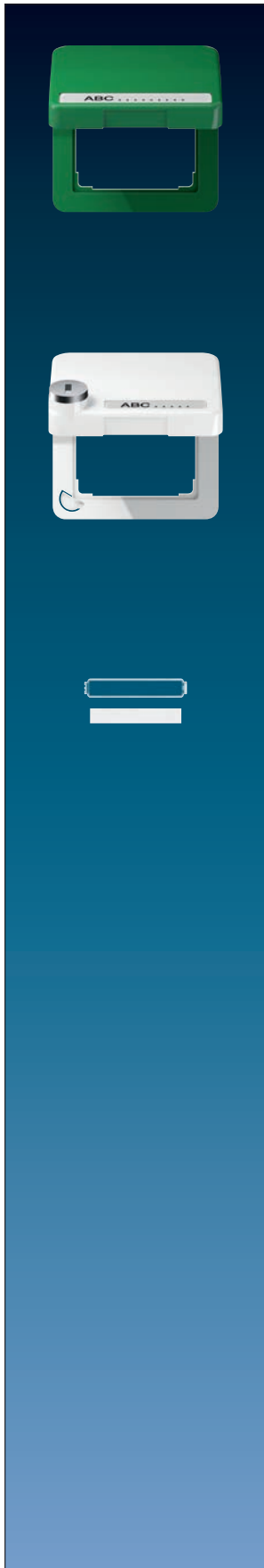
ivory		CD 1520 FKI
white		CD 1520 FKI WW



Sockets

CD range



-  Protection level IP 44 ensured
-  Colour printing possible
-  Laser labelling possible



Ref.-no.













Hinged lid with spring
with inscription field 9 x 58 mm
 for sockets and devices with 50 x 50 mm cover

Thermoplastic (breakproof) high-gloss

green		CD 590 BFNACL GN
orange		CD 590 BFNACL O

Hinged lid with spring
with safety lock (24 different locks)
with inscription field 9 x 39 mm
 for sockets and devices with 50 x 50 mm cover

Thermoplastic (breakproof) high-gloss

ivory			CD 590 BFKLSL
white			CD 590 BFKLSL WW
brown			CD 590 BFKLSL BR
grey			CD 590 BFKLSL GR
green			CD 590 BFKLSL GN
light grey			CD 590 BFKLSL LG
orange			CD 590 BFKLSL O
red			CD 590 BFKLSL RT

Transparent cover with paper inlay

for inscription field 9 x 39 mm
 (Spare part)

paper inlay white		LS 90 NA
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available from June 2016

	Ref.-no.
SCHUKO® socket 16 A / 250 V ~	
Screwless terminals for wires up to 2.5 mm ²	
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..	
Supporting frame, claws and claw screws are integrated into the earth protection.	
Thermoplastic (breakproof) high-gloss	
green	LS 1520 BF GN
orange	LS 1520 BF O
red	LS 1520 BF RT

SCHUKO® socket 16 A / 250 V ~ with child protection (shutter)	
Screwless terminals for wires up to 2.5 mm ²	
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..	
Supporting frame, claws and claw screws are integrated into the earth protection.	
Thermoplastic (breakproof) high-gloss	
green	LS 1520 BFKI GN
orange	LS 1520 BFKI O
red	LS 1520 BFKI RT

SCHUKO® socket 16 A / 250 V ~ with pilot light (green LED) ref.-no.: 193-LED GN with child protection (shutter) with inscription field 9 x 58 mm	
Screwless terminals for wires up to 2.5 mm ²	
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..	
Supporting frame, claws and claw screws are integrated into the earth protection.	
Duroplastic (scratch-proof) glossy	
ivory	P LS 1520 NAKO
white	P LS 1520 NAKO WW
light grey	P LS 1520 NAKO LG
black	LS 1520 NAKO SW
Spare pilot light frontside exchangeable without disconnecting the mains	




SCHUKO® socket 16 A / 250 V ~ with pilot light (green LED) ref.-no.: 193-LED GN with child protection (shutter) with inscription field 12 x 55 mm	
Screwless terminals for wires up to 2.5 mm ²	
Without claws: ref.-no. with additional "N", e.g.: ..1520 N..	
Supporting frame, claws and claw screws are integrated into the earth protection.	
metal versions	
aluminium	P L AL 1520 NAKO
stainless steel	L ES 1520 NAKO
anthracite (aluminium lacquered)	L AL 1520 NAKO AN
dark (aluminium lacquered)	L AL 1520 NAKO D
Spare pilot light frontside exchangeable without disconnecting the mains	

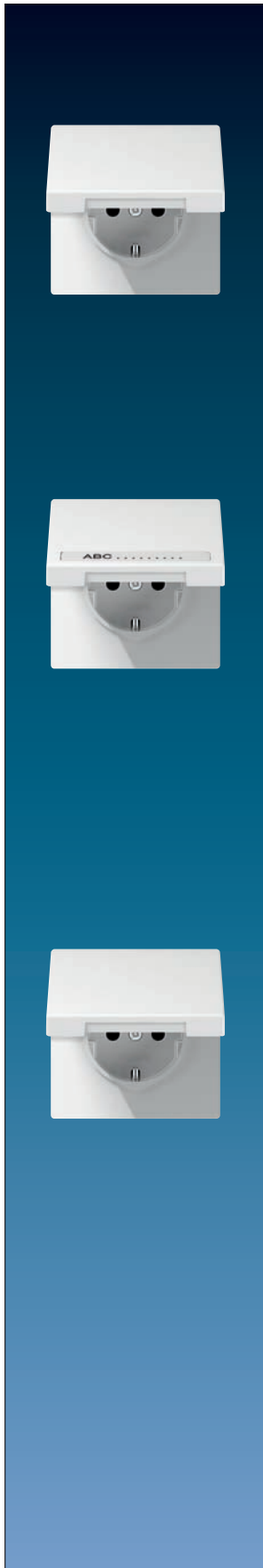
LED lamp (Spare part) for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO..	
green 230 V ~, approx. 0.3 mA average life approx. 100,000 h	193-LED GN



Sockets

LS range

-  Protection level IP 44 ensured
-  Colour printing possible
-  Laser labelling possible



Ref.-no.

**SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)**

Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory			LS 1520 BFKL
white			LS 1520 BFKL WW
green			LS 1520 BFKL GN
light grey			LS 1520 BFKL LG
orange			LS 1520 BFKL O
red			LS 1520 BFKL RT
black			LS 1520 BFKL SW

**SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with inscription field 9 x 58 mm**

Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory			LS 1520 BFNAKL
white			LS 1520 BFNAKL WW
green			LS 1520 BFNAKL GN
light grey			LS 1520 BFNAKL LG
orange			LS 1520 BFNAKL O
red			LS 1520 BFNAKL RT
black			LS 1520 BFNAKL SW

**SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with child protection (shutter)**







Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..



Metal versions not suitable for ceiling installation.

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory			LS 1520 BFKIKL
white			LS 1520 BFKIKL WW
green			LS 1520 BFKIKL GN
light grey			LS 1520 BFKIKL LG
orange			LS 1520 BFKIKL O
red			LS 1520 BFKIKL RT
black			LS 1520 BFKIKL SW

metal versions

dark (aluminium lacquered)			AL 1520 KIKL D
gold-coloured			GO 1520 KIKL

available from June 2016

Ref.-no.

SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with inscription field 9 x 39 mm
with pilot light (green LED) ref.-no.: 193-LED GN
with child protection (shutter)

Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory			LS 1520 BFKLKO
white			LS 1520 BFKLKO WW
green			LS 1520 BFKLKO GN
light grey			LS 1520 BFKLKO LG
orange			LS 1520 BFKLKO O
red			LS 1520 BFKLKO RT
black			LS 1520 BFKLKO SW

Spare pilot light frontside exchangeable without disconnecting the mains

LED lamp

(Spare part)

for SCHUKO® socket with pilot light ref.-no. ..1520 ..KO..

green 230 V ~, approx. 0.3 mA

193-LED GN

average life approx. 100,000 h









SCHUKO® socket 16 A / 250 V ~
with hinged lid (with spring)
with inscription field 9 x 39 mm
with safety lock (24 different locks)
with child protection (shutter)

Screwless terminals for wires up to 2.5 mm²

Without claws: ref.-no. with additional "N", e.g.: ..1520 N..

Supporting frame, claws and claw screws are integrated into the earth protection.

Thermoplastic (breakproof) high-gloss

ivory			LS 1520 BFKLSL
white			LS 1520 BFKLSL WW
light grey			LS 1520 BFKLSL LG
black			LS 1520 BFKLSL SW

metal versions

aluminium (lacquered)			AL 1520 BFKLSL
stainless steel (lacquered)			ES 1520 BFKLSL
anthracite (lacquered)			AL 1520 BFKLSL AN
dark (lacquered)			AL 1520 BFKLSL D
classic brass (lacquered)			ME 1520 BFKLSL C
antique brass (lacquered)			ME 1520 BFKLSL AT

Transparent cover with paper inlay

for inscription field 9 x 39 mm




(Spare part)

paper inlay white

LS 90 NA

Sockets

LS range

-  Protection level IP 44 ensured
-  Colour printing possible
-  Laser labelling possible

Ref.-no.

Socket, French/Belgian system




2-pole + male earth pin, 16 A / 250 V ~

with child protection (shutter)



Screwless terminals for wires up to 2.5 mm²

Supporting frame, claws and claw screws are integrated into the earth protection.

Duroplastic (scratch-proof) glossy

ivory		LS 1520 FKI
white		LS 1520 FKI WW
light grey		LS 1520 FKI LG
black		LS 1520 FKI SW












metal versions

aluminium			AL 1520 FKI
stainless steel			ES 1520 FKI
anthracite (aluminium lacquered)			AL 1520 FKI AN
dark (aluminium lacquered)			AL 1520 FKI D
classic brass			ME 1520 FKI C
antique brass			ME 1520 FKI AT

Hinged lid with spring

for sockets and devices with 50 x 50 mm cover

Thermoplastic (breakproof) high-gloss












ivory			LS 990 BFKL
white			LS 990 BFKL WW
light grey			LS 990 BFKL LG
black			LS 990 BFKL SW
green			LS 990 BFKL GN
orange			LS 990 BFKL O
red			LS 990 BFKL RT

Hinged lid with spring

with inscription field 9 x 58 mm

for sockets and devices with 50 x 50 mm cover

Thermoplastic (breakproof) high-gloss

ivory			LS 990 BFNAKL
white			LS 990 BFNAKL WW
light grey			LS 990 BFNAKL LG
black			LS 990 BFNAKL SW
green			LS 990 BFNAKL GN
orange			LS 990 BFNAKL O
red			LS 990 BFNAKL RT



Ref.-no.

Frame

for the installation of devices and covers of the LS range into the plastering frame ref.-no.: PA 98..
for horizontal and vertical installation

Thermoplastic (breakproof) high-gloss

white

1-gang	81 x 81 mm	LSZ 981 BF WW
2-gang	81 x 152 mm	LSZ 982 BF WW
3-gang	81 x 223 mm	LSZ 983 BF WW

Les Couleurs® Le Corbusier on request.

Plastering frame

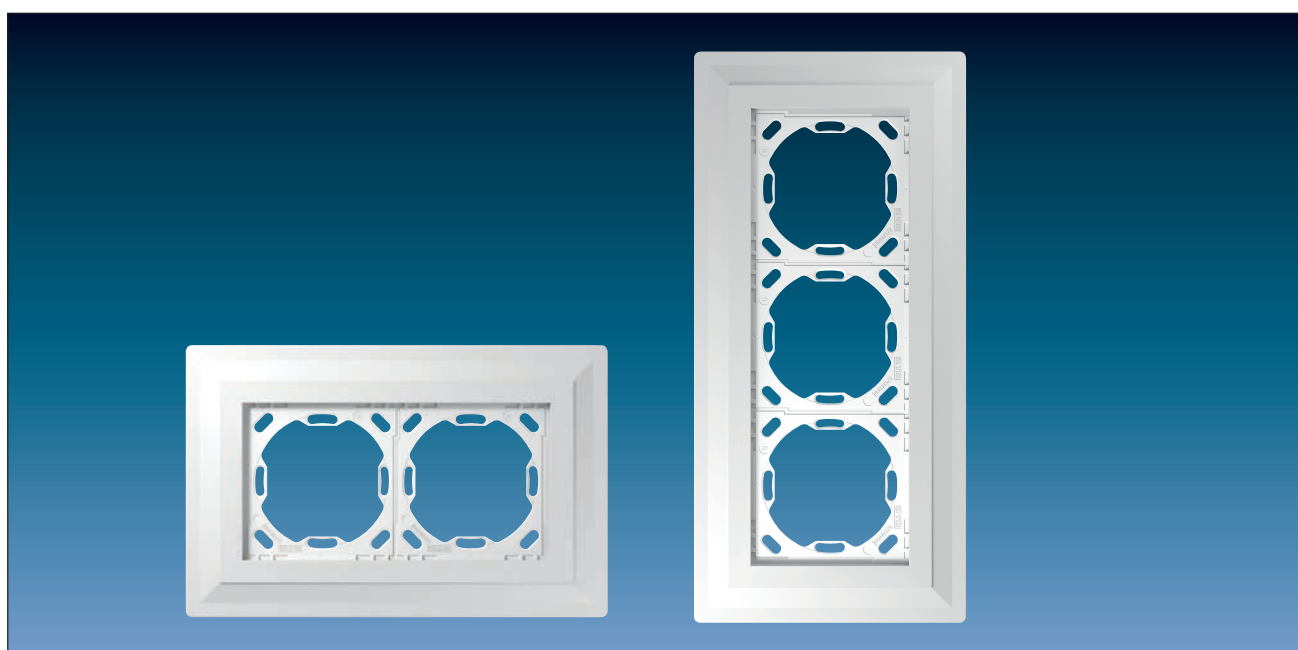
for the flush-mounting installation of devices and covers of the LS range
into appliance box according to DIN 49073
suitable for plaster or plasterboard thickness of 12.5 mm
for horizontal and vertical installation
including plaster aid

1-gang	130 x 130 x 12.5 mm	PA 981 G 125-0
2-gang	130 x 201 x 12.5 mm	PA 982 G 125-0
3-gang	130 x 272 x 12.5 mm	PA 983 G 125-0

Plaster frame (3 mm version)

for a 3 mm flush installation of devices and covers of the LS range
into appliance box according to DIN 49073 (3 mm structure height on the wall)
suitable for plaster or plasterboard thickness of 12.5 mm
for horizontal and vertical installation
including plaster aid

1-gang	130 x 130 x 12.5 mm	PA 981 G 125-3
2-gang	130 x 201 x 12.5 mm	PA 982 G 125-3
3-gang	130 x 272 x 12.5 mm	PA 983 G 125-3



Multimedia terminals

AS / A ranges

CD range

LS range

available from June 2016

Ref.-no.

Multimedia terminals with USB 3.0

For the connection of mobile terminal devices such as computer accessories or digital cameras.

Technical data USB 3.0

Standard:	3.0
Terminal:	Type A, 180°
Installation depth:	28 mm
Ambient temperature:	-5 ... +45 °C
Installation note:	Consider bending radius and various plug types. Ensure sufficient installation space.

USB 3.0

with supporting frame, screw fixing only

for AS range

Thermoplastic (breakproof) high-gloss

ivory	MA A 1123
white	MA A 1123 WW

for A range

Thermoplastic (breakproof) high-gloss

white	MA A 1123 WW
black	MA A 1123 SW

Thermoplastic (breakproof) lacquered

aluminium	MA A 1123 AL
matt anthracite	MA A 1123 ANM

for CD range

Thermoplastic (breakproof) high-gloss

white	MA CD 1123 WW
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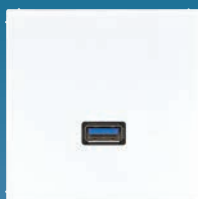
for LS range

Thermoplastic (breakproof) high-gloss

ivory	MA LS 1123
white	MA LS 1123 WW
light grey	MA LS 1123 LG
black	MA LS 1123 SW

metal versions

aluminium	MA AL 1123
stainless steel	MA ES 1123
anthracite (aluminium lacquered)	MA AL 1123 AN



Multimedia terminals

AS / A ranges
CD range
LS range

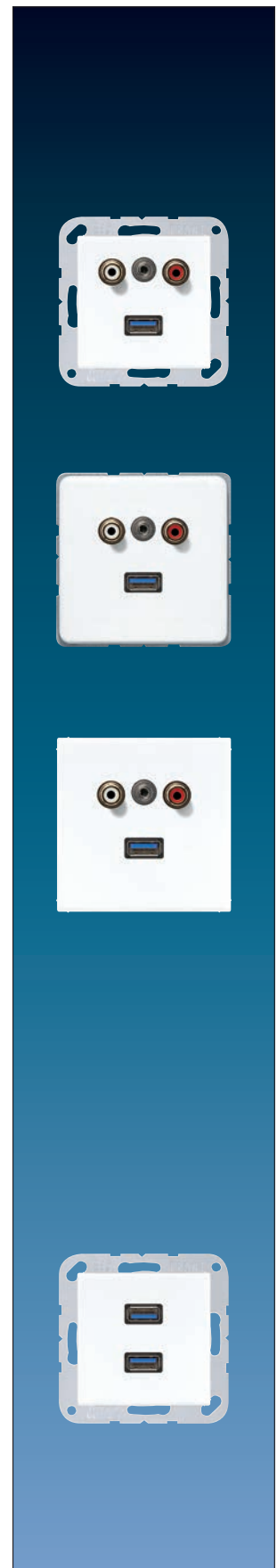
available from June 2016

	Ref.-no.
Cinch Audio (RCA) / Stereo Jack (TRS 3.5 mm) / USB 3.0 with supporting frame, screw fixing only	
for AS range	
Thermoplastic (breakproof) high-gloss	
ivory	MA A 1093
white	MA A 1093 WW
for A range	
Thermoplastic (breakproof) high-gloss	
white	MA A 1093 WW
black	MA A 1093 SW
Thermoplastic (breakproof) lacquered	
aluminium	MA A 1093 AL
matt anthracite	MA A 1093 ANM
for CD range	
Thermoplastic (breakproof) high-gloss	
white	MA CD 1093 WW
for LS range	
Thermoplastic (breakproof) high-gloss	
ivory	MA LS 1093
white	MA LS 1093 WW
light grey	MA LS 1093 LG
black	MA LS 1093 SW
metal versions	
aluminium	MA AL 1093
stainless steel	MA ES 1093
anthracite (aluminium lacquered)	MA AL 1093 AN

2 x USB 3.0

with supporting frame, screw fixing only

for AS range	
Thermoplastic (breakproof) high-gloss	
ivory	MA A 1154
white	MA A 1154 WW
for A range	
Thermoplastic (breakproof) high-gloss	
white	MA A 1154 WW
black	MA A 1154 SW
Thermoplastic (breakproof) lacquered	
aluminium	MA A 1154 AL
matt anthracite	MA A 1154 ANM



Multimedia terminals

AS / A ranges

CD range

LS range

available from June 2016



Ref.-no.

2 x USB 3.0

with supporting frame, screw fixing only

for CD range

Thermoplastic (breakproof) high-gloss

white	MA CD 1154 WW
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for LS range

Thermoplastic (breakproof) high-gloss

ivory	MA LS 1154
white	MA LS 1154 WW
light grey	MA LS 1154 LG
black	MA LS 1154 SW

metal versions

aluminium	MA AL 1154
stainless steel	MA ES 1154
anthracite (aluminium lacquered)	MA AL 1154 AN

HDMI / USB 3.0

with supporting frame, screw fixing only

for AS range

Thermoplastic (breakproof) high-gloss

ivory	MA A 1164
white	MA A 1164 WW

for A range

Thermoplastic (breakproof) high-gloss

white	MA A 1164 WW
black	MA A 1164 SW

Thermoplastic (breakproof) lacquered

aluminium	MA A 1164 AL
matt anthracite	MA A 1164 ANM

for CD range

Thermoplastic (breakproof) high-gloss

white	MA CD 1164 WW
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for LS range

Thermoplastic (breakproof) high-gloss

ivory	MA LS 1164
white	MA LS 1164 WW
light grey	MA LS 1164 LG
black	MA LS 1164 SW

metal versions

aluminium	MA AL 1164
stainless steel	MA ES 1164
anthracite (aluminium lacquered)	MA AL 1164 AN

Multimedia terminals

AS / A ranges
CD range
LS range

available from June 2016

	Ref.-no.
USB 3.0 / VGA	
with supporting frame, screw fixing only	
for AS range	
Thermoplastic (breakproof) high-gloss	
ivory	MA A 1184
white	MA A 1184 WW
for A range	
Thermoplastic (breakproof) high-gloss	
white	MA A 1184 WW
black	MA A 1184 SW
Thermoplastic (breakproof) lacquered	
aluminium	MA A 1184 AL
matt anthracite	MA A 1184 ANM
for CD range	
Thermoplastic (breakproof) high-gloss	
white	MA CD 1184 WW
for LS range	
Thermoplastic (breakproof) high-gloss	
ivory	MA LS 1184
white	MA LS 1184 WW
light grey	MA LS 1184 LG
black	MA LS 1184 SW
metal versions	
aluminium	MA AL 1184
stainless steel	MA ES 1184
anthracite (aluminium lacquered)	MA AL 1184 AN



Smart Radio

A range

Ref.-no.

Smart Radio – stereo set

with two loudspeakers

with black display

loudspeaker matt anthracite

RAD A 528 ANM



Smart Radio – mono set

with one loudspeaker

with black display

loudspeaker matt anthracite

RAD A 518 ANM



Loudspeaker module

for the connection of 100 V transformer ref.-no. LSM 100 V

for connection to the Smart Radio ref.-no. RAD ..

high-quality tone and great loudspeaker dynamics

optimised acoustics through the use of a bass-reflex enclosure

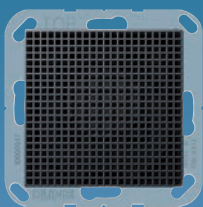
Technical data

Rated nominal power:	approx. 2.5 W
Impedance:	4 Ω
Frequency range:	120 ... 15000 Hz (-10 dB)
Relative humidity:	max. 95 %
Storage/transport temperature:	-25 ... +60 °C
Connection:	screw terminals
Terminals for:	1.5 mm ²

Thermoplastic (breakproof) lacquered

matt anthracite

LSM A 4 ANM



Ref.-no.

Bluetooth Connect – stereo set

with two loudspeakers

with black display

loudspeaker matt anthracite

BTC A 528 ANM



Bluetooth Connect – mono set

with one loudspeaker

with black display

loudspeaker matt anthracite

BTC A 518 ANM



Loudspeaker module

for the connection of 100 V transformer ref.-no. LSM 100 V

for connection to Bluetooth Connect ref.-no.: BTC ..

high-quality tone and great loudspeaker dynamics

optimised acoustics through the use of a bass-reflex enclosure

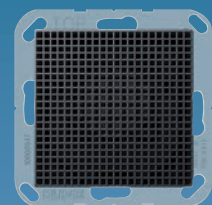
Technical data

Rated nominal power:	approx. 2.5 W
Impedance:	4 Ω
Frequency range:	120 ... 15000 Hz (-10 dB)
Relative humidity:	max. 95 %
Storage/transport temperature:	-25 ... +60 °C
Connection:	screw terminals
Terminals for:	1.5 mm ²

Thermoplastic (breakproof) lacquered

matt anthracite

LSM A 4 ANM



available from May 2016



Ref.-no.

USB charger

screw fixing only, without claws
with 2 USB ports type A
for charging and power supply of portable devices

USB 21-2

Covers:

AS / A ranges: ref.-no. A 569 PLT ..
CD range: ref.-no. CD 569 T ..
SL range: ref.-no. SL 569 T ..
LS range: ref.-no. .. 969 T .., .. 2969 T ..

Technical data

Input voltage:	AC 100 ... 240 V ~, 50/60 Hz
Output voltage:	DC 5 V
Output current:	2 x 1050 mA or 1 x 2100 mA overload-proof
Connection:	screw terminals
Terminals for:	1 x 2.5 mm ² or 2 x 1.5 mm ²

Power DALI potentiometer insert "tunable white"

240 PDPE TW

Intended use

- Brightness setting for luminaires with DALI interface
- Setting of colour temperature for luminaires with DALI Device Type 8 for tunable white acc. to IEC 62386-209

Product characteristics

- If connected to the mains supply ("active operation") the potentiometer supplies the required control current for 26 DALI devices.
- Without connection to the mains supply ("passive operation") the potentiometer draws its supply from the DALI voltage and serves as an additional control unit.
- Parallel connection of 4 "active" DALI potentiometers offers the possibility of controlling up to 104 DALI devices.
- Possibility of storing a basic brightness, a fixed switch-on brightness and the minimum (warmest) and maximum (coldest) colour temperature

Technical data

Rated voltage:	AC 230 V ~, 50/60 Hz
DALI system voltage:	DC 16 V
Max. output current:	52 mA
Power consumption:	max. 2 W
Max. number of DALI devices	
with 1 DALI potentiometer:	26
with 4 DALI potentiometers in parallel:	104
Max. number of	
DALI potentiometers in parallel:	4
Controllable colour temperature:	2000 ... 10000 K
Connection:	screw terminals
Terminals for:	2 x 2.5 mm ² or 1 x 4 mm ²
Approvals:	VDE

Presence detector

	Ref.-no.
Motion and presence detector with integrated relay switch	
including IR remote control ref.-no.: DWPM FB IR K	
white	DWPM K 360 WW
aluminium (lacquered)	DWPM K 360 AL
Intended use	
<ul style="list-style-type: none"> • Automatic switching of lighting depending on the heat motion and ambient brightness • Indoor ceiling mounting, surface-mounted 	
Product characteristics	
<ul style="list-style-type: none"> • 2-point light control • Functions settable with IR remote controls • Restriction of the detection field by switching off individual sensors or push-on cover • Operation with IR remote control, 2-wire extension or installation button • Teach function for adjustment of the brightness threshold, in combination with IR remote controls • Switch-off warning • Short-time operation, e.g. to activate acoustic signal transmitters • Display LEDs • Presence simulation • Function as twilight switch • Dynamic run-on time • Extension of the detection area through parallel switching of multiple devices 	



Technical data

Rated voltage:	AC 110 ... 230 V ~	Connected load at AC 110 V ~ and 35 °C	
Mains frequency:	50 / 60 Hz	Incandescent lamps:	1150 W
Ambient temperature:	-5 ... +45 °C	HV halogen lamps:	1000 W
Stand-by power:	max. 0.3 W	TRONIC transformers:	750 W
Circuit breaker:	max. 16 A	inductive transformers:	500 VA
Contact type:	μ	HV LED lamps:	typical 200 W
Detection angle:	360°	Compact fluorescent lamps:	typical 200 W
Dimensions (Ø x H):	103 x 66 mm	Fluorescent lamps non-compensated:	460 VA
Mounting height:	3 m	capacitive load:	345 VA (560 μF)
Detection range:	Ø approx. 20 m	Connection:	
Sensitivity:	25 ... 100 %	single wire:	1 ... 2.5 mm ²
Brightness setting:	approx. 5 ... 2000 lx (and daytime operation)	stranded with tin-plated conductor ends:	0.75 ... 1.5 mm ²
Shut-off delay:	approx. 10 s ... 30 min	Number of satellite units	
Short-time operation		unlit installation buttons:	unlimited
Pulse duration:	approx. 0.5 s	Satellite insert 2-wire ref.-no. 1220 NE:	unlimited
Pulse interval:	approx. 3 s	Total length of extension unit cable:	max. 100 m
Switching current at 35 °C		Total length power cable:	max. 100 m
ohmic:	16 A (AC1)		
Fluorescent lamps:	4 AX		
Min. switching current AC:	100 mA		

	Ref.-no.
IR remote control	
for motion and presence detector ref.-no.: DWPM K 360 ..	
(Spare part)	
	DWPM FB IR K
Battery operation with one included lithium button cell (CR 2025).	
IR remote control (electrician)	
for motion and presence detector ref.-no.: DWPM K 360 ..	
	DWPM FB IR I
Battery operation with one included lithium button cell (CR 2025).	



Smoke alarm device

available from July 2016

Ref.-no.

Smoke alarm device

Product characteristics

- Replaceable insect screen
- Lithium battery with protective passivation
- 12 years battery life
- Bi-sensor processor technology (smoke + heat)
- Real alarm with maximum precision
- Qualified for kitchens
- 88 dB alarm signal at 3 m distance
- Dimensions (Ø x H): 10 x 3.8 cm
- Detection range: up to 60 m² (depending on installation location)
- Optimum storing temperature: +10 ... +35 °C, <70 % relative humidity
- Large user-friendly test/stop button (78 cm²)
- Magnetic mount for adhesive fixing or screw fixing
- Complies with the increased requirements vdfb Directive 14-01
- CE according to EN 14604:2005/AC:2008
- TÜV Nord Cert (Kriwan no. 1772-CPR-150500)

Smoke alarm device

white

RWM 200 WW

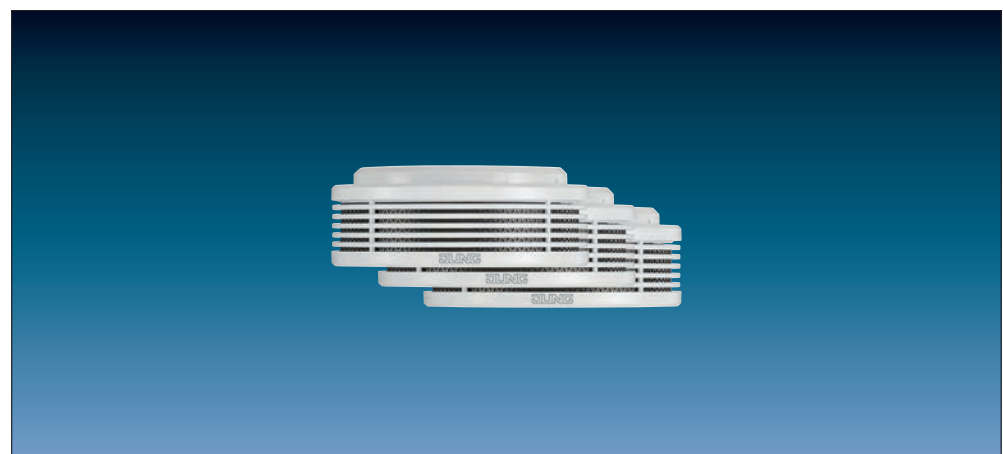
black

RWM 200 SW

Smoke alarm device set, 3 pieces

white

RWM 200-S3 WW



CD range
LS range

Ref.-no.

Video indoor stations

including cover kit and labelling foil
without frame

The modules of the indoor station can be installed into multiple frames (horizontally or vertically).
Installation in separate frames or surface caps is possible.

A supplementary supply is required for the operation of the video indoor station.

Recommendation: VNG 602 from Siedle (see Siedle planning manual).

Product characteristics

- TFT colour monitor
- Screen diagonal 70 mm (2.7")
- 320 x 240 pixels
- Brightness and colour setting
- Video connection cable (black, 220 mm) included

Video indoor station 2.7"

for CD range

Thermoplastic (breakproof) high-gloss

ivory	SI VI CD 627 W
white	SI VI CD 627 WW

Video indoor station 2.7"

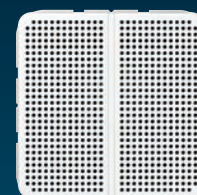
for LS range

Thermoplastic (breakproof) high-gloss

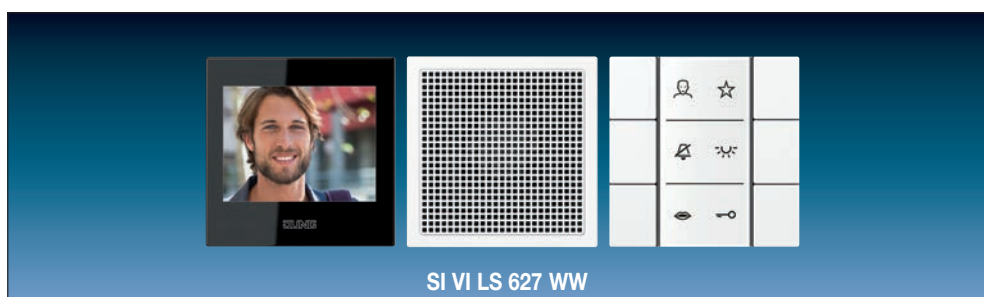
ivory	SI VI LS 627 W
white	SI VI LS 627 WW
light grey	SI VI LS 627 LG
black	SI VI LS 627 SW

metal versions

aluminium	SI VI AL 627
stainless steel	SI VI ES 627
anthracite (aluminium lacquered)	SI VI AL 627 AN
dark (aluminium lacquered)	SI VI AL 627 D



SI VI CD 627 WW



SI VI LS 627 WW

Video module 2.7"

Product characteristics

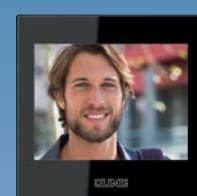
- TFT colour monitor
- Screen diagonal 70 mm (2.7")
- 320 x 240 pixels
- Brightness and colour setting
- Video connection cable (black, 220 mm) included
- Operation only in combination with universal push-button module and audio module

for CD range

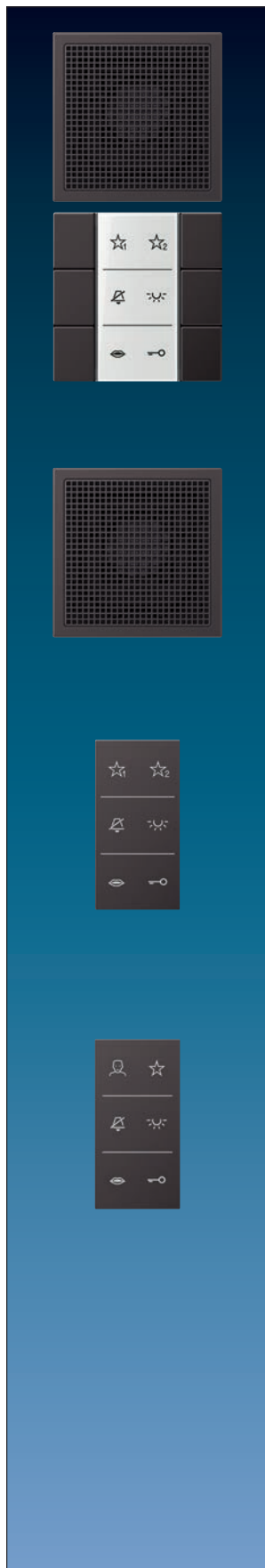
SI VM 27 CD

for LS range

SI VM 27 LS



LS range



Ref.-no.

Audio indoor station

including cover kit and labelling foil
without frame

The modules of the indoor station can be installed into multiple frames
(horizontally or vertically).

Installation in separate frames or surface caps is possible.

metal versions

dark (aluminium lacquered)

SI AI AL 6 D

Audio module

metal versions

dark (aluminium lacquered)

SI AM AL 5 D

Symbol cover audio

with printed symbols

to clip on audio indoor station (ref.-no.: SI AI LS 6 ..., SI AI AL 6 ..., SI AI ES 6) or

push-button modules (ref.-no.: SI TM LS 5073, SI TM LS 5093)

dimensions: 33 x 70.5 mm

metal versions

dark (lacquered)

SI A6 AL DC D

Symbol cover video

with printed symbols

to clip on video indoor station (ref.-no.: SI VI LS 627 ..., SI VI AL 627, SI VI ES 627)

or push-button modules (ref.-no.: SI TM LS 5073, SI TM LS 5093)

dimensions: 33 x 70.5 mm

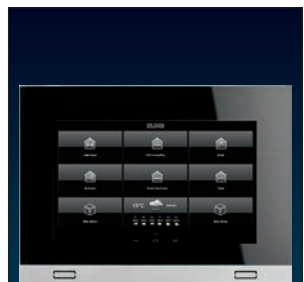
metal versions

dark (lacquered)

SI V6 AL DC D

other colours on request

	Ref.-no.
Smart Control 7"	
aspect ratio 16:9	
for installation in walls, capacitive touch screen fanless, without rotating parts	
aluminium	SC 7 AL
black	SC 7 SW
<ul style="list-style-type: none"> • Door call function only in combination with Siedle Smart Gateway SG 650-.. • Smart Gateway with integrated image storage • For vertical or horizontal installation Further functions: <ul style="list-style-type: none"> • KNX visualisation in combination with Facility Pilot Server (ref.-no.: FAPV SERVER REG GB) • KNX visualisation in combination with Smart Visu Server (ref.-no.: SV-SERVER-INT) • Pre-installed iHaus-Server-App; iHaus-KNX connection exclusively via IP router (ref.-no.: IPR 200 REG) or IP interface (ref.-no.: IPS 200 REG) • eNet visualisation in combination with eNet server for rail mounting (ref.-no.: ENET-SERVER) • eNet visualisation in combination with eNet radio IP gateway IP (ref.-no.: FM-GATE-IP) • Pre-installed weather page 	
eNet radio transmitter modules F 50	
Intended use	
<ul style="list-style-type: none"> • Radio sensor for transmission of switching, dimming, blind movement and scene commands • Operation with radio actuators from the eNet system • Mounting on appliance box according to DIN 49073, screw fixing on walls or adhesive fixing on smooth, even surfaces (glass) 	
Product characteristics	
<ul style="list-style-type: none"> • Two adjacent buttons each belong to one channel • Display of the actuator status for status poll by a green LED per channel • Display of the transmission status by a red LED • Switch-on brightness of dimmer actuators can be saved • Battery-powered device (battery compartment accessible from front) • Signalling of transmission errors can be switched off • Manual commissioning 	
Technical data	
Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450N (included)
Ambient temperature:	-5 ... +45 °C
Radio frequency:	868.3 MHz
Transmitting power:	max. 20 mW
Transmission range in free field:	typical 100 m
for AS and A ranges	
eNet radio transmitter module	
including transparent cover ref.-no.: A 50 NA	
1-gang	
for cover kit 1-gang, complete, ref.-no.: A 501 TSA ..	
	FM A 5001 M
2-gang	
for cover kit 2-gang, complete, ref.-no.: A 502 TSA ..	
	FM A 5002 M
3-gang	
for cover kit 3-gang, complete, ref.-no.: A 503 TSA ..	
	FM A 5003 M
4-gang	
for cover kit 4-gang, complete, ref.-no.: A 504 TSA ..	
	FM A 5004 M



available from September 2016

Ref.-no.

eNet radio transmitter modules F 50

Intended use

- Radio sensor for transmission of switching, dimming, blind movement and scene commands
- Operation with radio actuators from the eNet system
- Mounting on appliance box according to DIN 49073, screw fixing on walls or adhesive fixing on smooth, even surfaces (glass)

Product characteristics

- Two adjacent buttons each belong to one channel
- Display of the actuator status for status poll by a green LED per channel
- Display of the transmission status by a red LED
- Switch-on brightness of dimmer actuators can be saved
- Battery-powered device (battery compartment accessible from front)
- Signalling of transmission errors can be switched off
- Manual commissioning

Technical data

Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450N (included)
Ambient temperature:	-5 ... +45 °C
Radio frequency:	868.3 MHz
Transmitting power:	max. 20 mW
Transmission range in free field:	typical 100 m

for CD range

eNet radio transmitter module

including transparent cover ref.-no.: CD 50 NA

1-gang

for cover kit 1-gang, complete, ref.-no.: CD 501 TSA ..

FM CD 5001 M

2-gang

for cover kit 2-gang, complete, ref.-no.: CD 502 TSA ..

FM CD 5002 M

3-gang

for cover kit 3-gang, complete, ref.-no.: CD 503 TSA ..

FM CD 5003 M

4-gang

for cover kit 4-gang, complete, ref.-no.: CD 504 TSA ..

FM CD 5004 M



available from September 2016

Ref.-no.

eNet radio transmitter modules F 50**Intended use**

- Radio sensor for transmission of switching, dimming, blind movement and scene commands
- Operation with radio actuators from the eNet system
- Mounting on appliance box according to DIN 49073, screw fixing on walls or adhesive fixing on smooth, even surfaces (glass)

Product characteristics

- Two adjacent buttons each belong to one channel
- Display of the actuator status for status poll by a green LED per channel
- Display of the transmission status by a red LED
- Switch-on brightness of dimmer actuators can be saved
- Battery-powered device (battery compartment accessible from front)
- Signalling of transmission errors can be switched off
- Manual commissioning

Technical data

Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450N (included)
Ambient temperature:	-5 ... +45 °C
Radio frequency:	868.3 MHz
Transmitting power:	max. 20 mW
Transmission range in free field:	typical 100 m

for LS range**eNet radio transmitter module**

including transparent cover ref.-no.: LS 50 NA

1-gang

for cover kit 1-gang, complete, ref.-no.: ..501 TSA .. in the LS range

FM LS 5001 M**2-gang**

for cover kit 2-gang, complete, ref.-no.: ..502 TSA .. in the LS range

FM LS 5002 M**3-gang**

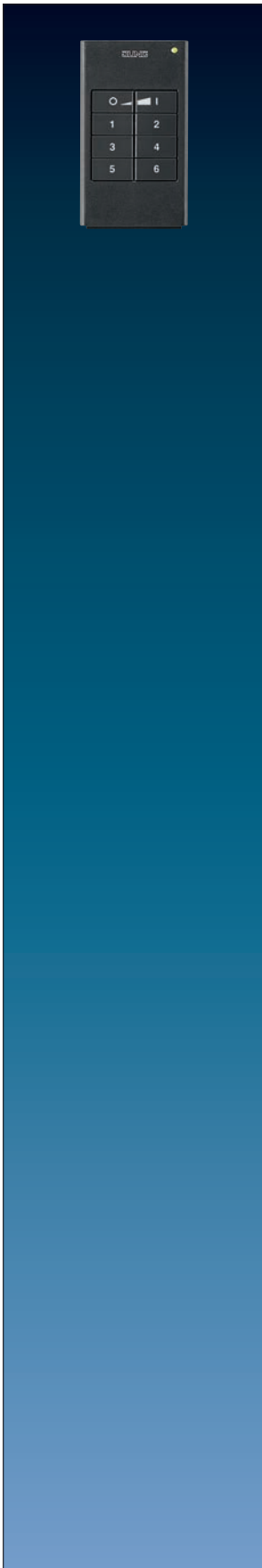
for cover kit 3-gang, complete, ref.-no.: ..503 TSA .. in the LS range

FM LS 5003 M**4-gang**

for cover kit 4-gang, complete, ref.-no.: ..504 TSA .. in the LS range

FM LS 5004 M

available from July 2016



Ref.-no.

ZigBee radio hand-held transmitter

4-gang

anthracite

ZLL HS 4

Intended use

- ZigBee hand-held transmitter for transmission of switching, dimming and scene commands
- Control of colour temperature (tunable white), colour value (RGB) and colour saturation, depending on the illuminant
- Operating with illuminants that support the ZigBee Light Link Protocol, such as Philips Hue or Osram Lightify
- Also serves as a commissioning tool for installed wall transmitters and new ZigBee illuminants

Product characteristics

- Switching and dimming (1 channel)
- Saving and calling-up of up to 6 scenes
- Teaching in illuminants with "Touchlink"
- Reset of illuminants with "Factory New"
- Reset of hand-held transmitter with "Factory Reset"
- Parameterisation of colour value ("Colour Cycle"), colour saturation and colour temperature ("Tunable White") for all or individual illuminants
- Function "Commissioning" (commissioning tool)
- Status indicator with LED
- Battery-powered device

Technical data

Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450N (included)
Ambient temperature:	-5 ... +45 °C
Number of lamps:	max. 10
Dimensions (L x W x H):	93 x 53 x 15.5 mm
Radio frequency:	2.4 ... 2.483 GHz
Transmitting power:	< 10 mW
Transmission range in free field:	typical 100 m

available from July 2016

Ref.-no.

ZigBee radio transmitter modules F 50

Intended use

- ZigBee wall transmitter for transmission of switching, dimming and scene commands
- Control of colour temperature (tunable white), colour value (RGB) and colour saturation, depending on the illuminant
- Operating with illuminants that support the ZigBee Light Link Protocol, such as Philips Hue or Osram Lightify
- Also serves as a commissioning tool for installed wall transmitters and new ZigBee illuminants

Product characteristics

- Switching and dimming (1 channel)
- Saving and calling-up of up to 6 scenes
- Teaching in illuminants with "Touchlink"
- Reset of illuminants with "Factory New"
- Reset of transmitter with "Factory Reset"
- Parameterisation of colour value ("Colour Cycle"), colour saturation and colour temperature ("Tunable White") for all or individual illuminants
- Status indicator with LED
- Battery-powered device (battery compartment accessible from front)

Technical data

Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450N (included)
Ambient temperature:	-5 ... +45 °C
Radio frequency:	2.4 ... 2.483 GHz
Transmitting power:	< 10 mW
Transmission range in free field:	typical 100 m

for AS and A ranges

ZigBee radio transmitter module 4-gang

including transparent cover ref.-no.: A 50 NA
for cover kit 4-gang, complete, ref.-no.: A 504 TSA ..

ZLL A 5004 M

for CD range

ZigBee radio transmitter module 4-gang

including transparent cover ref.-no.: CD 50 NA
for cover kit 4-gang, complete, ref.-no.: CD 504 TSA ..

ZLL CD 5004 M

for LS range

ZigBee radio transmitter module 4-gang

including transparent cover ref.-no.: LS 50 NA
for cover kit 4-gang, complete, ref.-no.: ..504 TSA .. in the LS range

ZLL LS 5004 M



AS range

A range



Ref.-no.

Room controller display compact modules F 50

recommended mounting height: 1.5 m

Intended use

- Measurement and feedback control of the room temperature
- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Installation in wall box according to DIN 49073

Product characteristics

Each button can be used for push-button sensor of controller functions.

- Backlit LC display
- One or two functions per button
- To be completed with cover kit
- Eight status LED – red, green or blue
- Brightness of status LED and LCD adjustable
- Integrated bus coupling unit
- Connection of extension modules
- Integrated room temperature sensor
- External sensor can be connected
- Room temperature control with setpoint value specification
- Two internal independent controllers for two independent areas – in connection with extension modules
- Display of room or set temperature (°C or °F)
- Display of outdoor temperature – with external sensor, e.g. weather station
- Display of time, in conjunction with KNX time encoder
- Push-button function or rocker function
- Inhibit function: blocking or change of function of the entire or single button functions
- Alarm function, optional with acknowledge by pressing any button

for AS and A ranges

Room controller display compact module 2-gang

for cover kit 2-gang, complete, ref.-no.: A 502 TSA ..

can be extended by means of a room controller extension module, ref.-no.: A 5178 TSEM

can be extended by means of a push-button extension module, ref.-no.: A 509.. TSEM

A 5192 KRM TS D

Room controller display compact module 4-gang

for cover kit 4-gang, complete, ref.-no.: A 504 TSA ..

can be extended by means of a room controller extension module, ref.-no.: A 5178 TSEM

can be extended by means of a push-button extension module, ref.-no.: A 509.. TSEM

A 5194 KRM TS D

Room controller extension module 2-gang

for cover kit 2-gang, complete, ref.-no.: A 502 TSA ..

for the extension of a room controller module (ref.-no.: A 5192 KRM TS D, A 5194 KRM TS D) with a second room temperature control unit

A 5178 TSEM

Intended use

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Measurement of room temperature
- Extension for room controller modules (.. 5192 KRM TS D, .. 5194 KRM TS D)
- Installation in wall box according to DIN 49073
- Cable lengths: max. 30 m, cable type: J-Y(St)Y 2 x 2 x 0.8 mm²

Ref.-no.

Room controller display compact modules F 50

recommended mounting height: 1.5 m

Intended use

- Measurement and feedback control of the room temperature
- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Installation in wall box according to DIN 49073

Product characteristics

Each button can be used for push-button sensor of controller functions.

- Backlit LC display
- One or two functions per button
- To be completed with cover kit
- Eight status LED – red, green or blue
- Brightness of status LED and LCD adjustable
- Integrated bus coupling unit
- Connection of extension modules
- Integrated room temperature sensor
- External sensor can be connected
- Room temperature control with setpoint value specification
- Two internal independent controllers for two independent areas – in connection with extension modules
- Display of room or set temperature (°C or °F)
- Display of outdoor temperature – with external sensor, e.g. weather station
- Display of time, in conjunction with KNX time encoder
- Push-button function or rocker function
- Inhibit function: blocking or change of function of the entire or single button functions
- Alarm function, optional with acknowledge by pressing any button

for CD range

Room controller display compact module 2-gang

for cover kit 2-gang, complete, ref.-no.: CD 502 TSA ..

can be extended by means of a room controller extension module, ref.-no.: CD 5178 TSEM

can be extended by means of a push-button extension module, ref.-no.: CD 509.. TSEM

CD 5192 KRM TS D

- Function symbols can be shown

Room controller display compact module 4-gang

for cover kit 4-gang, complete, ref.-no.: CD 504 TSA ..

can be extended by means of a room controller extension module, ref.-no.: CD 5178 TSEM

can be extended by means of a push-button extension module, ref.-no.: CD 509.. TSEM

CD 5194 KRM TS D

- Function symbols can be shown

Room controller extension module 2-gang

for cover kit 2-gang, complete, ref.-no.: CD 502 TSA ..

for the extension of a room controller module (ref.-no.: CD 5192 KRM TS D, CD 5194 KRM TS D)

with a second room temperature control unit

CD 5178 TSEM

Intended use

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Measurement of room temperature
- Extension for room controller modules (.. 5192 KRM TS D, .. 5194 KRM TS D)
- Installation in wall box according to DIN 49073
- Cable lengths: max. 30 m, cable type: J-Y(St)Y 2 x 2 x 0.8 mm²





Ref.-no.

Room controller display compact modules F 50

recommended mounting height: 1.5 m

Intended use

- Measurement and feedback control of the room temperature
- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Installation in wall box according to DIN 49073

Product characteristics

Each button can be used for push-button sensor of controller functions.

- Backlit LC display
- One or two functions per button
- To be completed with cover kit
- Eight status LED – red, green or blue
- Brightness of status LED and LCD adjustable
- Integrated bus coupling unit
- Connection of extension modules
- Integrated room temperature sensor
- External sensor can be connected
- Room temperature control with setpoint value specification
- Two internal independent controllers for two independent areas – in connection with extension modules
- Display of room or set temperature (°C or °F)
- Display of outdoor temperature – with external sensor, e.g. weather station
- Display of time, in conjunction with KNX time encoder
- Push-button function or rocker function
- Inhibit function: blocking or change of function of the entire or single button functions
- Alarm function, optional with acknowledge by pressing any button

for LS range

Room controller display compact module 2-gang

for cover kit 2-gang, complete, ref.-no.: ..502 TSA .. in the LS range

can be extended by means of a room controller extension module, ref.-no.: LS 5178 TSEM

can be extended by means of a push-button extension module, ref.-no.: LS 509.. TSEM

LS 5192 KRM TS D

- Function symbols can be shown

Room controller display compact module 4-gang

for cover kit 4-gang, complete, ref.-no.: ..504 TSA .. in the LS range

can be extended by means of a room controller extension module, ref.-no.: LS 5178 TSEM

can be extended by means of a push-button extension module, ref.-no.: LS 509.. TSEM

LS 5194 KRM TS D

- Function symbols can be shown

Room controller extension module 2-gang

for cover kit 2-gang, complete, ref.-no.: ..502 TSA .. in the LS range

for the extension of a room controller module (ref.-no.: LS 5192 KRM TS D, LS 5194 KRM TS D)

with a second room temperature control unit

LS 5178 TSEM

Intended use

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Measurement of room temperature
- Extension for room controller modules (.. 5192 KRM TS D, .. 5194 KRM TS D)
- Installation in wall box according to DIN 49073
- Cable lengths: max. 30 m, cable type: J-Y(St)Y 2 x 2 x 0.8 mm²

available from May 2016

Ref.-no.

Universal push-button module

Intended use

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Installation in wall box according to DIN 49073

Product characteristics

- The push-button functions switching, dimming, controlling blinds, valuator, calling up scenes, etc.
- To be completed with cover kit
- Two red status LEDs for each button
- A blue operation LED as an orientation light and to indicate the programming status
- Measurement of room temperature
- Integrated bus coupling unit
- Transparent cover kit (included) for temporary site use without design covers
- One, two or three functions per button
- Push-button function or rockers function, vertical or horizontal
- Connection of push-button extension module to extend the universal push-button sensor module to include four additional buttons

Universal push-button module, 1-gang

for cover kit 1-gang, complete, ref.-no.: .. 401 TSA ..

for cover 1-gang with symbols, ref.-no.: .. 401 TSAP ..

can be extended by means of a push-button extension module, ref.-no.: 409.. TSEM

Adapter frames are included in delivery: ref.-no. LS 4 AR for LS range (pre-mounted) and ref.-no. CD 4 AR for CD range. AS / A ranges without adapter frame.

Only with the ETS 3.0d version or later versions the full functionality will be available.

ETS product family: Push-button

Product type: 1-gang push-button

1 blue LED: operation indication

2 red LED: status indication

4191 TSM

Universal push-button module, 2-gang

for cover kit 2-gang, complete, ref.-no.: .. 402 TSA ..

for cover 2-gang with symbols, ref.-no.: .. 402 TSAP ..

can be extended by means of a push-button extension module, ref.-no.: 409.. TSEM

Adapter frames are included in delivery: ref.-no. LS 4 AR for LS range (pre-mounted) and ref.-no. CD 4 AR for CD range. AS / A ranges without adapter frame.

Only with the ETS 3.0d version or later versions the full functionality will be available.

ETS product family: Push-button

Product type: 2-gang push-button

1 blue LED: operation indication

4 red LED: status indication

4192 TSM

Universal push-button module, 3-gang

for cover kit 3-gang, complete, ref.-no.: .. 403 TSA ..

for cover 2-gang with symbols, ref.-no.: .. 402 TSAP ..

for cover 4-gang with symbols, ref.-no.: .. 404 TSAP ..

can be extended by means of a push-button extension module, ref.-no.: 409.. TSEM

Adapter frames are included in delivery: ref.-no. LS 4 AR for LS range (pre-mounted) and ref.-no. CD 4 AR for CD range. AS / A ranges without adapter frame.

Only with the ETS 3.0d version or later versions the full functionality will be available.

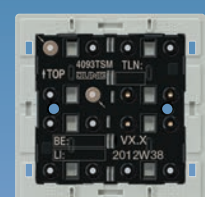
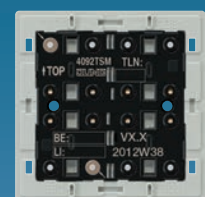
ETS product family: Push-button

Product type: 3-gang push-button

1 blue LED: operation indication

6 red LED: status indication

4193 TSM



KNX Universal push-button module

A range
CD range
LS range

available from May 2016



Ref.-no.

Universal push-button module, 4-gang

for cover kit 4-gang, complete, ref.-no.: .. 404 TSA ..
for cover 4-gang with symbols, ref.-no.: .. 404 TSAP ..
can be extended by means of a push-button extension module, ref.-no.: 409.. TSEM
Adapter frames are included in delivery: ref.-no. LS 4 AR for LS range (pre-mounted)
and ref.-no. CD 4 AR for CD range. AS / A ranges without adapter frame.
Only with the ETS 3.0d version or later versions the full functionality will be available.
ETS product family: Push-button
Product type: 4-gang push-button
1 blue LED: operation indication
8 red LED: status indication

4194 TSM

Cover with temperature symbol

to exchange the display cover of the cover kit ref.-no.: A 4093 TSA..

Thermoplastic (breakproof) high-gloss

A 409 T

Cover with temperature symbol

to exchange the display cover of the cover kit ref.-no.: CD 4093 TSA..

Thermoplastic (breakproof) high-gloss

CD 409 T

Cover with temperature symbol

to exchange the display cover of the cover kit ref.-no.: .. 4093 TSA .. in the LS range

Thermoplastic (breakproof) high-gloss

LS 409 T

available from September 2016

Ref.-no.

KNX RF radio transmitter modules F 50**Intended use**

- Radio sensor for transmission of switching, dimming, blind movement and scene commands in KNX installations
- Operation in cabled KNX systems via radio converter (ref.-no.: MK 100 RF)

Product characteristics

- Installation with the appropriate frame directly onto a level surface (plaster, wood, glass, mirror or flush box) using adhesive or screws
- Push-button functions switching, dimming, Venetian blind control, value transmitter, scene recall
- Button pairs for push-button function or rocker function
- Status indication via status LED
- Battery-powered device

Technical data

Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450 (included)
Ambient temperature:	-5 ... +45 °C
Radio frequency:	868.3 MHz
Transmitting power:	max. 20 mW
Transmission range in free field:	typical 100 m

KNX RF radio transmitter module 1-gang

including transparent cover ref.-no.: A 50 NA

for cover kit 1-gang, complete, ref.-no.: A 501 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 1-gang push-button

1 green LED: actuator status

1 red LED: transmission status

A 5071 RF TSM**KNX RF radio transmitter module 2-gang**

including transparent cover ref.-no.: A 50 NA

for cover kit 2-gang, complete, ref.-no.: A 502 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 2-gang push-button

2 green LED: actuator status

1 red LED: transmission status

A 5072 RF TSM**KNX RF radio transmitter module 3-gang**

including transparent cover ref.-no.: A 50 NA

for cover kit 3-gang, complete, ref.-no.: A 503 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 3-gang push-button

3 green LED: actuator status

1 red LED: transmission status

A 5073 RF TSM**KNX RF radio transmitter module 4-gang**

including transparent cover ref.-no.: A 50 NA

for cover kit 4-gang, complete, ref.-no.: A 504 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 4-gang push-button

4 green LED: actuator status

1 red LED: transmission status

A 5074 RF TSM

CD range

available from September 2016

Ref.-no.

KNX RF radio transmitter modules F 50

Intended use

- Radio sensor for transmission of switching, dimming, blind movement and scene commands in KNX installations
- Operation in cabled KNX systems via radio converter (ref.-no.: MK 100 RF)

Product characteristics

- Installation with the appropriate frame directly onto a level surface (plaster, wood, glass, mirror or flush box) using adhesive or screws
- Push-button functions switching, dimming, Venetian blind control, value transmitter, scene recall
- Button pairs for push-button function or rocker function
- Status indication via status LED
- Battery-powered device

Technical data

Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450 (included)
Ambient temperature:	-5 ... +45 °C
Radio frequency:	868.3 MHz
Transmitting power:	max. 20 mW
Transmission range in free field:	typical 100 m

KNX RF radio transmitter module 1-gang

including transparent cover ref.-no.: CD 50 NA

for cover kit 1-gang, complete, ref.-no.: CD 501 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 1-gang push-button

1 green LED: actuator status

1 red LED: transmission status

CD 5071 RF TSM



KNX RF radio transmitter module 2-gang

including transparent cover ref.-no.: CD 50 NA

for cover kit 2-gang, complete, ref.-no.: CD 502 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 2-gang push-button

2 green LED: actuator status

1 red LED: transmission status

CD 5072 RF TSM



KNX RF radio transmitter module 3-gang

including transparent cover ref.-no.: CD 50 NA

for cover kit 3-gang, complete, ref.-no.: CD 503 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 3-gang push-button

3 green LED: actuator status

1 red LED: transmission status

CD 5073 RF TSM



KNX RF radio transmitter module 4-gang

including transparent cover ref.-no.: CD 50 NA

for cover kit 4-gang, complete, ref.-no.: CD 504 TSA ..

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 4-gang push-button

4 green LED: actuator status

1 red LED: transmission status

CD 5074 RF TSM



available from September 2016

Ref.-no.

KNX RF radio transmitter modules F 50

Intended use

- Radio sensor for transmission of switching, dimming, blind movement and scene commands in KNX installations
- Operation in cabled KNX systems via radio converter (ref.-no.: MK 100 RF)

Product characteristics

- Installation with the appropriate frame directly onto a level surface (plaster, wood, glass, mirror or flush box) using adhesive or screws
- Push-button functions switching, dimming, Venetian blind control, value transmitter, scene recall
- Button pairs for push-button function or rocker function
- Status indication via status LED
- Battery-powered device

Technical data

Rated voltage:	DC 3 V
Battery type:	1 x lithium CR 2450 (included)
Ambient temperature:	-5 ... +45 °C
Radio frequency:	868.3 MHz
Transmitting power:	max. 20 mW
Transmission range in free field:	typical 100 m

KNX RF radio transmitter module 1-gang

including transparent cover ref.-no.: LS 50 NA

for cover kit 1-gang, complete, ref.-no.: ..501 TSA .. in the LS range

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 1-gang push-button

1 green LED: actuator status

1 red LED: transmission status

LS 5071 RF TSM

KNX RF radio transmitter module 2-gang

including transparent cover ref.-no.: LS 50 NA

for cover kit 2-gang, complete, ref.-no.: ..502 TSA .. in the LS range

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 2-gang push-button

2 green LED: actuator status

1 red LED: transmission status

LS 5072 RF TSM

KNX RF radio transmitter module 3-gang

including transparent cover ref.-no.: LS 50 NA

for cover kit 3-gang, complete, ref.-no.: ..503 TSA .. in the LS range

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 3-gang push-button

3 green LED: actuator status

1 red LED: transmission status

LS 5073 RF TSM

KNX RF radio transmitter module 4-gang

including transparent cover ref.-no.: LS 50 NA

for cover kit 4-gang, complete, ref.-no.: ..504 TSA .. in the LS range

Project design and commissioning with ETS5 or a more recent version.

ETS product family: Push-button • Product type: 4-gang push-button

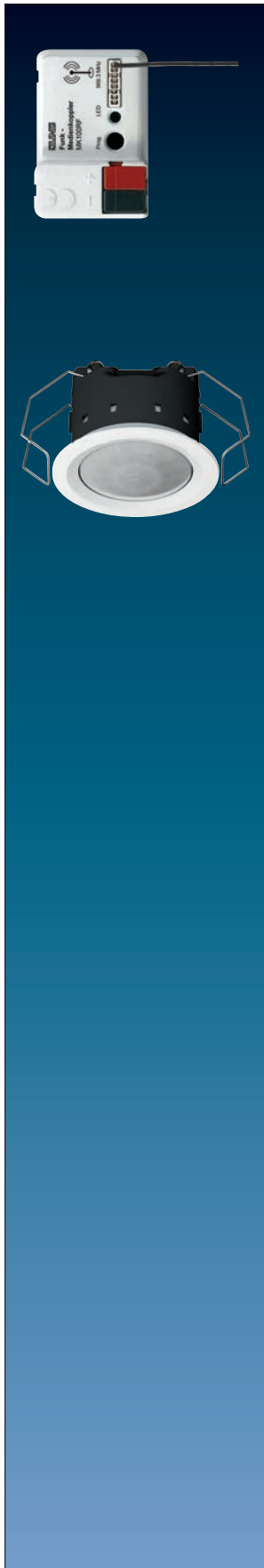
4 green LED: actuator status

1 red LED: transmission status

LS 5074 RF TSM



 Protection level IP 44 ensured



Ref.-no.

KNX RF radio converter

Project design and commissioning with ETS5 or a more recent version.

MK 100 RF

Intended use

- Connection of KNX radio networks with cabled KNX lines
- Extension of the radio range in KNX radio networks (repeater operation, external power supply with 24 V AC/DC, e.g. ref.-no. NT 2415 REG VDC)
- Installation in wall box according to DIN 49073 with suitable cover

Presence detector mini with integrated BCU

ETS product family: Physical sensors

Product type: Movement

Standard

white		3361 M WW
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Universal

white		3361-1 M WW
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Intended use

- Requirement-oriented control of lighting, room thermostats and other electrical consumers in interior rooms
- Clamp mounting in suspended ceilings
- Ceiling mounting on fixed ceilings in flush-mounted box according to DIN 49073 (with flush mounting set, ref.-no.: PMM-UP-SET-WW) or in surface-mounted housing (surface mounting set, ref.-no.: PMM-AP-SET-WW)

Product characteristics

- Integrated bus coupling unit
- 3 PIR sensors
- Detection field 360°
- Integrated brightness sensor
- Deployed as presence detector, motion detector, or for alert operation
- Output functions: Switching, staircase function, switching with forced position, value transmitter, light scene extension, operating mode setting for room temperature controller
- Detection area extendible by parallel switching of several devices as main unit or extension unit
- Manual sensitivity adjustment
- Status LED: Flashes during motion detection; depending on programming in normal operation or only during the walking test mode

Additional characteristics of "Universal" version:

- Manual operation with IR remote control possible (ref.-no.: KNX PM FB IR)
- 5 function blocks for motion or presence detection each with 2 outputs
- Function blocks switchable, e.g. for day/night operation
- PIR sensors can be evaluated separately
- Brightness sensor function with 3 limiting values
- Light control with max. 3 channels, setpoint shift in operation, separate configuration of dimming-up, control and dimming-down phase
- Light control can be combined with presence detector function

Presence detector function:

- Detection of the smallest motions e.g. at a workplace for detecting the presence of persons
- Switch on: Motion detection and brightness threshold not reached
- Switch off: No motion in the detection field and shut-off delay elapsed or brightness threshold exceeded

Motion detector function:

- Motion detection for passageways in buildings
 - Switch on: Motion detection and brightness threshold not reached
 - Switch off: No motion in the detection field and shut-off delay elapsed
- After reacting and switching on, the motion detection works independently of the brightness.

Signalling mode:

- Brightness-independent detection of motions in the detection field
- Switch on: After detection of an adjustable number of motions within the set monitoring period
- Switch off: No persons in the detection field and shut-off delay elapsed

Technical data**Presence detector mini with integrated BCU****ref.-no.: 3361 ...**

Rated voltage KNX:	DC 21 ... 32 V SELV
Current consumption KNX:	max. 10 mA
Connection bus:	terminal
Protection class:	III
Ambient temperature:	-25 ... +55 °C
Storage/transport temperature:	-25 ... +70 °C
Relative humidity:	10 ... 100 % (no condensation)
Protection level:	IP 44
Ceiling cut-out (Ø x D):	44 x 35 mm
Dimensions (Ø x H):	53.5 x 38 mm (with design ring)
Max. thickness of the suspended ceiling:	approx. 25 mm
Installation depth:	min. 35 mm
Distance between concrete ceiling and suspended ceiling:	min. 20 mm
Design ring Ø inside:	35.6 mm
Design ring Ø outside:	53.5 mm
Profile height design ring:	1.8 mm
Profile height lens:	5.5 mm
Motion detection	
Detection angle:	360°
Range:	Ø approx. 12 m (mounting height 3 m)
Brightness sensor	
Measuring range:	10 ... 2000 lx
Accuracy (≤ 80 lx):	± 10 lx
Accuracy (> 80 lx):	± 5 %

Ref.-no.

IR remote control

for KNX presence detector mini universal

ref.-no.: 3361-1 M ..

KNX PM FB IR

Battery operation with one included lithium button cell (CR 2025).



 Protection level IP 44 ensured



Ref.-no.

Brightness controller mini with integrated BCU

ETS-Produktfamilie Phys. Sensoren
Produkttyp Helligkeit



2096 LUX

Intended use

- Measurement and control of lighting in interior areas
- Installation in false ceilings
- Ceiling installation in appliance box according to DIN 49073 with flush mounting set (ref.-no.: PMM-UP-SET-WW)
- Surface-mounted ceiling installation with surface mounting set (ref.-no.: PMM-AP-SET-WW)

Product characteristics

- Integrated bus coupling unit
- Integrated brightness sensor
- Brightness sensor function with 3 limiting values
- Light control with max. 3 channels, setpoint shift in operation, separate configuration of dimming-up, control and dimming-down phase
- On-off control possible for switch actuators
- Power supply via bus voltage

Technical data

Rated voltage KNX:	DC 21 ... 32 V SELV
Current consumption KNX:	max. 10 mA
Connection bus:	terminal
Protection class:	III
Ambient temperature:	-25 ... +55 °C
Storage/transport temperature:	-25 ... +70 °C
Relative humidity:	10 ... 100 % (no condensation)
Protection level:	IP 44
Ceiling cut-out (Ø x D):	44 x 35 mm
Dimensions (Ø x H):	53.5 x 38 mm (with design ring)
Max. thickness of the suspended ceiling:	approx. 25 mm
Installation depth:	min. 35 mm
Distance between concrete ceiling and suspended ceiling:	min. 20 mm
Design ring Ø inside:	35.6 mm
Design ring Ø outside:	53.5 mm
Profile height design ring:	1.8 mm
Profile height lens:	5.5 mm
Brightness measurement	
Measuring range:	10 ... 2000 lx
Accuracy (> 80 lx):	± 5 %
Accuracy (≤ 80 lx):	± 10 lx

Ref.-no.

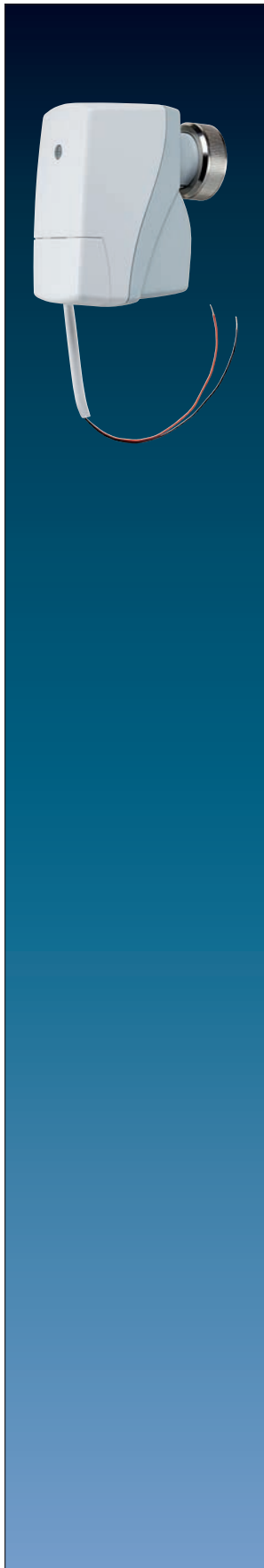
Flush mounting set

for ceiling installation of KNX presence detector mini
(ref.-no.: 3361 M WW, 3361-1 M WW)
and KNX brightness controller mini
(ref.-no.: 2096 LUX)
to be installed into 68 mm flush box
Design ring Ø inside: 35.6 mm, Ø outside: 80 mm
Profile height design ring: 3 mm
Profile height lens: 6.6 mm

PMM-UP-SET-WW**Surface mounting set**

for ceiling installation of KNX presence detector mini
(ref.-no.: 3361 M WW, 3361-1 M WW)
and KNX brightness controller mini
(ref.-no.: 2096 LUX)
Dimensions (Ø x H): 80 / 83 x 49 mm (incl. design ring)
Design ring Ø inside: 35.6 mm, Ø outside: 80 mm

PMM-AP-SET-WW



Ref.-no.

**Valve drive (motor-operated)
with controller**

electromechanical servo drive
ETS product family: Heating, A/C, Ventilation
Product type: Valve

2177 SV R

Intended use

- Motor-operated valve drive for heating or cooling valves
- To be screwed on valve head

Product characteristics

- Integrated temperature sensor
- Room temperature control
- Mechanical indication of valve lift
- Automatic detection of valve lift
- One input, can be used as binary input or for an external temperature sensor
- Use in heating circles possible
- Integrated bus coupling unit
- Valve protection function

Technical data

Rated voltage KNX:	DC 21 ... 32 V SELV
Current consumption KNX:	max. 20 mA
Protection class:	III
Valve connection:	M 30 x 1.5
Valve lift:	1.0 ... 4.2 mm
Actuating power:	80 ... 120 N
Cable type:	J-Y(St)Y 2 x 2 x 0.8 mm ²
Cable length:	1 m
Protection level:	IP 40
Ambient temperature:	0 ... +50 °C
Storage/transport temperature:	-20 ... +70 °C
Relative humidity:	5 ... 95 % (no condensation)

available from July 2016

Ref.-no.

Binary input, 6-gang

Rail mounting device, 2 rail units
 6 inputs AC/DC 10 ... 230 V ~
 (different L conductors possible, e.g.: E1-3 = L1 and E4-E6 = L2)
 with status indicator
 ETS product family: Input
 Product type: Binary input

2116 REG

Intended use

- Polling of conventional switching or push-button contacts in KNX systems, for reporting of states, operation of loads, etc.
- Mounting on DIN rail according to EN 60715 in distribution boxes

Product characteristics

- Status LED for each input
- Evaluation of voltage levels and changes at the input
- Transmitting of input status to the bus
- Transmitting behaviour adjustable
- Functions: switching, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Impuls and switch counter function
- Inputs can be blocked separately
- Connection of external AC or DC voltages

Technical data

Rated voltage KNX:	DC 21 ... 32 V SELV
Current consumption KNX:	max. 7.5 mA
Connection, KNX:	terminal
Ambient temperature:	-5 ... +45 °C
Storage/transport temperature:	-25 ... +75 °C
Relative humidity:	max. 93 % r. h., no condensation
Inputs	
Rated voltage:	AC/DC 10 ... 230 V
Signal level "0" signal:	AC/DC 0 ... 2 V
Signal level "1" signal:	AC/DC 7 ... 265 V
Input current at rated voltage:	approx. 0.7 mA
Rated frequency AC signal:	30 ... 60 Hz
Signal duration pulse counter:	min. 100 ms
Cable length:	max. 100 m
Number of contacts per input	
Make contacts:	max. 50
Break contacts:	max. 50
Mounting width:	36 mm (2 rail units)
Power loss:	max. 1 W
Connection:	
single wire:	0.5 ... 4 mm ²
stranded without ferrule:	0.5 ... 4 mm ²
stranded with ferrule:	0.5 ... 2.5 mm ²



available from April 2016



Ref.-no.

Smart Control 7" aspect ratio 16:9

for installation in walls, capacitive touch screen
fanless, without rotating parts

aluminium

SC 7 AL

black

SC 7 SW

- Door call function only in combination with Siedle Smart Gateway SG 650-..
- Smart Gateway with integrated image storage
- For vertical or horizontal installation

Further functions:

- KNX visualisation in combination with Facility Pilot Server (ref.-no.: FAPV SERVER REG GB)
- KNX visualisation in combination with Smart Visu Server (ref.-no.: SV-SERVER-INT)
- Pre-installed iHaus-Server-App; iHaus-KNX connection exclusively via IP router (ref.-no.: IPR 200 REG) or IP interface (ref.-no.: IPS 200 REG)
- eNet visualisation in combination with eNet server for rail mounting (ref.-no.: ENET-SERVER)
- eNet visualisation in combination with eNet radio IP gateway IP (ref.-no.: FM-GATE-IP)
- Pre-installed weather page

Technical data

Screen size (W x H):	152 x 91 mm
Screen diagonal:	178 mm / 7.0"
Resolution:	WVGA (800 x 480), LED backlight display
Frame dimensions (W x H):	206 x 150 mm
Power consumption:	max. 10 W
Power supply:	PoE acc. to IEEE 802.3at, with Cat5e/Cat6 cable, length max. 100 m or DC 12 ... 32 V via external power supply (ref.-no. NT 2415 REG VDC, not included)
Operating system:	Android 4.2
Processor:	Cortex-A9
Main memory:	2 GB
Mass storage:	8 GB Flash (available disc space depends on operating system)
Loudspeaker:	integrated
Microphone:	integrated
USB ports:	2 x USB 2.0
LAN connections:	1 x 10/100 Mbit/s
Ambient temperature:	0 ... +30 °C

Flush-mounted recessed box

for Smart Control ref.-no.: SC 7
cut-out dimensions (W x H): 202 x 141 mm
installation depth: 67 mm

SC 7 EBG



Ref.-no.

Smart Control 10.1''

aspect ratio 16:9

for installation in walls, capacitive touch screen

fanless, without rotating parts

25,6 cm – 10.1''

SC 10

- Door call function only in combination with Siedle Smart Gateway SG 650-..
- KNX visualisation in combination with Facility Pilot Server (ref.-no.: FAPV SERVER REG GB)
- KNX visualisation in combination with Smart Visu Server (ref.-no.: SV-SERVER-INT)
- Pre-installed iHaus-Server-App; iHaus-KNX connection exclusively via IP router (ref.-no.: IPR 200 REG) or IP interface (ref.-no.: IPS 200 REG)
- eNet visualisation in combination with eNet server for rail mounting (ref.-no.: ENET-SERVER)
- eNet visualisation in combination with eNet radio IP gateway IP (ref.-no.: FM-GATE-IP)
- Pre-installed weather page

Technical data

Screen size (W x H):	223 x 125 mm
Screen diagonal:	256 mm / 10.1''
Resolution:	WSVGA (1024 x 600), LED backlight display
Frame dimensions (W x H):	333 x 200 mm
Power consumption:	max. 15 W
Power supply:	PoE acc. to IEEE 802.3at, with Cat5e/Cat6 cable, length max. 100 m or DC 12 ... 32 V via external power supply (ref.-no. NT 2415 REG VDC, not included)
Operating system:	Android 4.2
Processor:	Cortex-A9
Main memory:	2 GB
Mass storage:	8 GB Flash (available disc space depends on operating system)
Slot of memory card:	microSD
Loudspeaker:	integrated
Microphone:	integrated
USB ports:	2 x USB 2.0 1 x Mini-USB OTG (accessible from the front)
LAN connections:	1 x 10/100 Mbit/s
Ambient temperature:	0 ... +30 °C

Flush-mounted recessed box

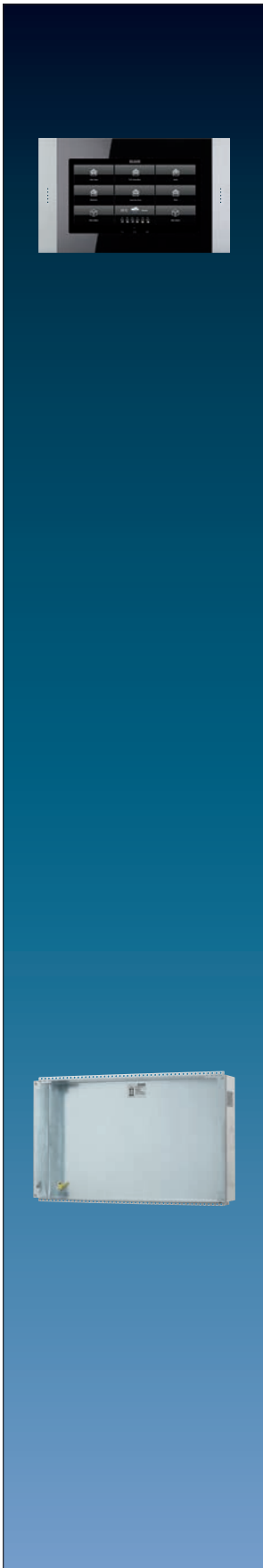
for Smart Control ref.-no.: SC 10

cut-out dimensions (W x H): 315 x 182 mm

installation depth: 80 mm

SC 10 EBG





Ref.-no.

Smart Control 15.6"

aspect ratio 16:9

for installation in walls, capacitive touch screen

fanless, without rotating parts

39.6 cm – 15.6"

SC 15

- Door call function only in combination with Siedle Smart Gateway SG 650-..
- KNX visualisation in combination with Facility Pilot Server (ref.-no.: FAPV SERVER REG GB)
- KNX visualisation in combination with Smart Visu Server (ref.-no.: SV-SERVER-INT)
- Pre-installed iHaus-Server-App; iHaus-KNX connection exclusively via IP router (ref.-no.: IPR 200 REG) or IP interface (ref.-no.: IPS 200 REG)
- eNet visualisation in combination with eNet server for rail mounting (ref.-no.: ENET-SERVER)
- eNet visualisation in combination with eNet radio IP gateway IP (ref.-no.: FM-GATE-IP)
- Pre-installed weather page

Technical data

Screen size (W x H):	344 x 194 mm
Screen diagonal:	396 mm / 15.6"
Resolution:	WXGA (1366 x 768), LED backlight display
Frame dimensions (W x H):	510 x 306 mm
Power consumption:	max. 20 W
Power supply:	PoE acc. to IEEE 802.3at, with Cat5e/Cat6 cable, length max. 100 m or DC 12 ... 32 V via external power supply (ref.-no. NT 2415 REG VDC, not included)
Operating system:	Android 4.2
Processor:	Cortex-A9
Main memory:	2 GB
Mass storage:	8 GB Flash (available disc space depends on operating system)
Slot of memory card:	microSD
Loudspeaker:	integrated
Microphone:	integrated
USB ports:	2 x USB 2.0 1 x Mini-USB OTG (accessible from the front)
LAN connections:	1 x 10/100 Mbit/s
Ambient temperature:	0 ... +30 °C

Flush-mounted recessed box

for Smart Control ref.-no.: SC 15

cut-out dimensions (W x H): 492 x 288 mm

installation depth: 80 mm

SC 15 EBG

Ref.-no.

Smart Control 18.5"

aspect ratio 16:9

for installation in walls, capacitive touch screen

fanless, without rotating parts

47 cm – 18.5"

SC 19

- Door call function only in combination with Siedle Smart Gateway SG 650-..
- KNX visualisation in combination with Facility Pilot Server (ref.-no.: FAPV SERVER REG GB)
- KNX visualisation in combination with Smart Visu Server (ref.-no.: SV-SERVER-INT)
- Pre-installed iHaus-Server-App; iHaus-KNX connection exclusively via IP router (ref.-no.: IPR 200 REG) or IP interface (ref.-no.: IPS 200 REG)
- eNet visualisation in combination with eNet server for rail mounting (ref.-no.: ENET-SERVER)
- eNet visualisation in combination with eNet radio IP gateway IP (ref.-no.: FM-GATE-IP)
- Pre-installed weather page

Technical data

Screen size (W x H):	410 x 230 mm
Screen diagonal:	470 mm / 18.5"
Resolution:	WXGA (1366 x 768), LED backlight display
Frame dimensions (W x H):	600 x 345 mm
Power consumption:	max. 30 W
Power supply:	DC 12 ... 32 V via external power supply (ref.-no. NT 2415 REG VDC, not included)
Operating system:	Android 4.2
Processor:	Cortex-A9
Main memory:	2 GB
Mass storage:	8 GB Flash (available disc space depends on operating system)
Slot of memory card:	microSD
Loudspeaker:	integrated
Microphone:	integrated
USB ports:	2 x USB 2.0 1 x Mini-USB OTG (accessible from the front)
LAN connections:	1 x 10/100 Mbit/s
Ambient temperature:	0 ... +30 °C

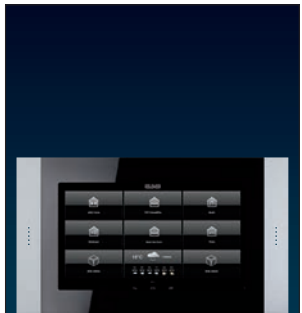
Flush-mounted recessed box

for Smart Control ref.-no.: SC 19

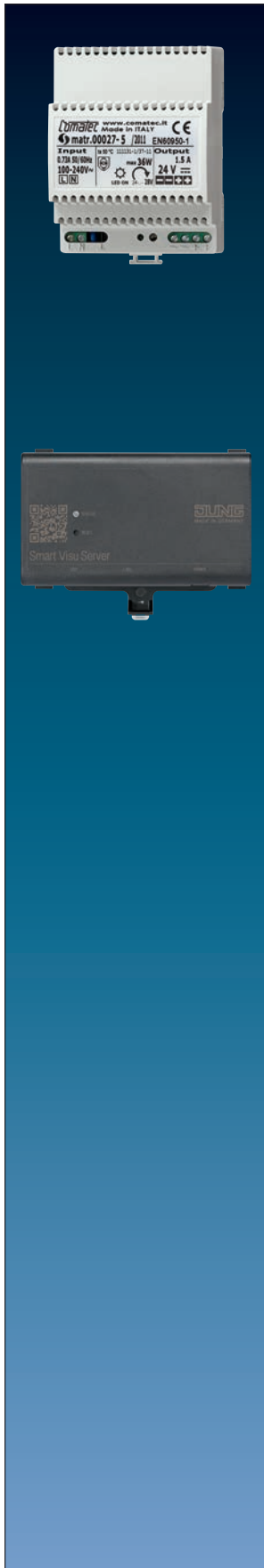
cut-out dimensions (W x H): 582 x 327 mm

installation depth: 80 mm

SC 19 EBG



available from April 2016



Ref.-no.

Power supply for rail mounting

for Smart Control ref.-no.: SC 7, SC 10, SC 15, SC 19

Rail mounting device, 4 rail units

NT 2415 REG VDC

Technical data

Input voltage:	AC 100 ... 240 V ~, 50/60 Hz
Input current:	730 mA
Output voltage:	24 V DC
Output current:	1.5 A
Mounting width:	72 mm (4 rail units)
Connection:	screw terminals

Smart Visu Server

with mounting plate for wall or rail mounting installation

including plug-in power supply

including adapter for UK, China and Europlug

SV-SERVER-INT

Intended use

- Visualisation and operation of KNX systems via devices with HTML5 browser, e.g. Smart Control (ref.-no.: SC 7 ..., SC 10, SC 15, SC 19), smartphone, tablet, laptop, PC, etc.
- Visualisation and operation of Philips Hue systems
- Operation in local IP networks, which support DHCP (Dynamic Host Configuration Protocol) or with a fixed IP address (IPv4)
- Operation indoors

Product characteristics

- Web visualisation of KNX system for status indication and operation (SV-Home)
- Integrated web-based commissioning tool (SV-Control)
- Easy to create a pre-configured user interface, optimised for domestic applications and small commercial facilities
- Graphical control elements: symbols can be selected from supplied libraries
- Import of group addresses (three-stage) via OPC import (ETS3, ETS4, ETS5)
- Manual input of group addresses possible
- 24 areas
- 240 dynamic functions (max. 1200 data points)
- 250 configurable actions (max. 16 functions per action)
 - customised – switching times – status logic – depending on events
- Connection to KNX bus via KNX IP router (ref.-no. IPR 200 REG) or KNX IP interface (ref.-no. IPS 200 REG)
- Integration of Philips Hue systems in the KNX installation
- Connection to Philips Hue via Philips Hue Bridge
- Update and upgrade compatible

Technical data

Rated voltage:	DC 12 V SELV
Power consumption:	typical 3 W, max. 7 W
Ambient temperature:	-5 ... +45 °C
Storage/transport temperature:	-25 ... +70 °C
LAN:	RJ45-socket (10/100 Mbit/s Fast Ethernet)
USB:	USB 2.0 Host
Dimensions:	124 x 72 x 31 mm (without mounting plate) 124 x 92 x 40 mm (with mounting plate)

Plug-in power supply

Primary voltage:	AC 100 ... 240 V ~
Mains frequency:	50 / 60 Hz
Rated current:	max. 1 A
Secondary voltage:	DC 12 V SELV
Protection class:	II
Length of connected cable:	1.5 m

Terms and Conditions of Sale and Supply

I. General provisions

- 1) The mutual written declarations shall determine the scope of the supplies and services (hereinafter: supplies). However, General Terms and Conditions of Business on the part of the customer shall only apply insofar as we have expressly approved the same in writing.
- 2) We shall unrestrictedly reserve our exploitation rights under proprietary right and copyright law to cost estimates, drawings and other documents (hereinafter: documents). Such documents may only be rendered accessible to third parties with our prior consent and, upon request, shall, in the event that we should not be awarded the commission, be returned to us without delay. Sentences 1 and 2 shall apply mutatis mutandis to the customer's submissions, though such submissions may be rendered accessible to third parties to whom we have admissibly assigned responsibility for supplies.
- 3) Partial supplies shall be admissible insofar as the customer may be reasonably expected to accept the same.

II. Prices and Terms and Conditions of Payment

- 1) Prices shall be understood to be ex-works excluding packaging and plus the statutory sales tax obtaining at any given time.
- 2) Packaging shall be invoiced at the lowest possible prices and shall not be taken back.
- 3) Insofar as nothing is agreed to the contrary, payment shall, irrespective of the receipt of the goods involved, be made to us net within thirty days of the invoice date or within eight days with a 2 % discount. In the event that the payment deadline should be exceeded interest shall, without a reminder being required, be calculated pursuant to § 288 German Civil Code.
- 4) We shall be entitled to request advance payments in respect of the invoice amounts at any time prior to the dispatch of goods insofar as we deem such a step to be necessary. Should the customer default on the fulfillment of payment obligations or should the information pertaining to a customer no longer be satisfactory, we shall be entitled to request security for delivered goods or, once a payment deadline has been set, withdraw from the purchase contract.
- 5) The customer may only offset receivables which are undisputed or have been established on a legally binding basis.

III. Reservation of title

Goods shall be supplied subject to reservation of title involving the following extensions:

- 1) All supplied goods shall remain our property until such time as our claims vis-à-vis the customer, including any such claims which may arise from the business link in the future, are settled in full and for such time as the account, including the bill and cheque commitments, has not been settled. This shall also apply in the event that the purchase price for certain deliveries of goods specified by the customer is to be paid. In the case of a current account, the reserved title shall constitute security for our balance claim.
- 2) The customer shall be revocable and, as long as they fulfill their obligations vis-à-vis ourselves and affording consideration to the following provisions, entitled to sell and process during the normal course of business goods which are encumbered with reservation of title. However, the customer shall be forbidden from pledging or assigning as security goods subject to reservation of title which are supplied or processed. The customer shall, insofar as this is compatible with commercial practices, likewise undertake only to resell reserved goods which we have supplied in conjunction with reservation of title. Upon justified request and in the case of default, the customer shall be obliged to apprise us of the name of the third party customer.
- 3) Insofar as goods encumbered with reservation of title are processed, such processing shall, though without any guarantee on our part, be effected for us. In the event of processing by the customer in conjunction with goods which are not our property, we shall be entitled to co-ownership of the new object at the ratio of the value of the reserved goods to the other processed goods on the processing date.
- 4) In the event that goods which we have supplied should be combined with other goods, we shall acquire co-ownership of the amount of the ratio of the value of the reserved goods in the combination date.
- 5) Should the customer sell reserved goods which we have supplied or should such goods be supplied to a third party – irrespective of what value or in which condition – or should such goods be installed within the framework of a work, work performance or a construction contract, the customer shall, until such time as the claims stipulated in subsection 1) are settled in full, hereby assign to us, to the amount of the invoice value of our deliveries, the claim, together with all ancillary rights, including the compensation claims accruing to them from the legal transaction involving the resale or installation, accruing to them vis-à-vis their customer or buyer from such sale, delivery or instalment. In the event of an assignment being obtained in such work, work performance or construction contract and in the event of payment default, the customer shall undertake to apprise their third party customers of the advance assignment.
- 6) In the event that reserved goods which we have supplied should be sold to third parties in conjunction with other goods, we shall be assigned that proportion of the total asking price corresponding to the invoice value of our deliveries.
- 7) The reservation of title with the extensions pursuant to the above provision shall also remain in force in the event of individual claims against their customer on the part of the customer being included in the current account. In this case, the customer shall, at this early juncture, assign to us the balance obtaining to their credit. The customer shall, upon request and particularly in the event of payment default on the part of the purchaser, be obliged to facilitate the direct assertion of the claims involved and apprise the third party debtor of the assignment.
- 8) We shall be appraised without delay of any attachment and every kind of restriction which obtain in respect of our property. In the event that the value of the overall collateral stemming from the business link with which we have been furnished should exceed our delivery claims by more than 20 %, we shall, at the request of the purchaser, be obliged to reassign the assigned claims to such extent.
- 9) In the event of any incidence of damage or other impairment to the equipment supplied on the basis of our terms and conditions, the purchaser shall, at this early juncture, assign to us in advance the compensation claim accruing to them vis-à-vis the insurer from their insurance to the amount of the incidence of damage in question to our reserved property.

IV. Deadline for deliveries; default

- 1) The deadline for deliveries or services shall commence on the day on which written agreement pertaining to the order in question obtains between the customer and ourselves. The observance of such deadline shall presuppose the prompt receipt of all the documents, requisite licences and releases to be furnished by the customer, the prompt clarification and approval of the plans and the observance of the agreed Terms of Conditions of Payment and other obligations. Should these prerequisites not be fulfilled on time, the delivery deadline shall be extended by an adequate period of time; this shall not apply in the event that we should be responsible for a delay.
 - 2) Should the non-observance of deadlines be attributable to force majeure, such as mobilization, war civil commotion or similar occurrences, e.g. strike or lockout, delivery deadlines shall be extended by adequate periods of time.
 - 3) In the event that dispatch or delivery should, at the behest of the customer, be delayed by more than one month following notification of dispatch readiness, the customer may, for every started month, be invoiced storage costs to the amount of 0.5 % of the price of the delivery objects, though no more than a total of 5 %.
- The contracting parties shall be at liberty to prove that lower or higher storage costs have accrued.

V. Transfer of risk

The risk shall also pass to the customer in the event that carriagepaid delivery should have been agreed. In the absence of a written arrangement to the contrary, dispatch shall always be effected according to our best judgement. We shall not assume any responsibility for transportation at market prices. We shall only arrange transport insurance policies the costs of which are borne by the purchaser upon express, written agreement.

VI. Acceptance

The customer may not refuse to accept deliveries on the grounds of the existence of minor defects.

VII. Material defects

- 1) The prerequisite for the assertion of material defects liability shall be the submission to us or our authorized representative of proof of acquisition (delivery note, invoice, etc.). The warranty entitlement may not be transferred to third parties without our consent.
- 2) All those components or services shall, as we see fit, be repaired, resupplied or returned which feature a material defect within the limitation period – irrespective of operating life – insofar as the origin of the same obtained at the point in time of transfer of risk.
- 3) Material defects claims shall lapse after twelve month. This shall not apply insofar as the law pursuant to §§ 438, paragraph 1, no. 2 (constructions and objects for constructions), 479, paragraph 1 (claim under a right of recourse) and 634a, paragraph 1, no. 2 (construction defects) German Civil Code makes provision for longer periods of time, in instances of injury to life, body or health, in the event of a wilful or grossly negligent breach of duty on our part and in the event of the malicious nondisclosure of a defect. The statutory provisions pertaining to the suspension of the running of a period, suspension and commencement of periods shall remain unaffected.
- 4) The customer shall submit complaints pertaining to material defects to us in writing without delay.
- 5) In the event of notifications of defects, payment on the part of the customer may be withheld on a scale which is in a reasonable ratio to the material defects which have occurred. The customer may only withhold payments should a complaint be asserted the justification of which is beyond doubt. Should a complaint have been submitted without justification, we shall be entitled to request that the customer reimburse the costs which we incurred.
- 6) In the first instance, we shall be granted the opportunity to effect subsequent fulfillment within a reasonable period of time.
- 7) Should such subsequent fulfillment be unsuccessful, the customer – any compensation claims pursuant to subsection IX notwithstanding – may withdraw from the contract or reduce the amount of payment.
- 8) Claims arising from defects shall not obtain in respect of a minor deviation from an agreed quality, a minor impairment to usefulness, natural wear and tear or incidences of prejudice which arise subsequent to the risk transfer in consequence of faulty or negligent handling, excessive strain, unsuitable operating facilities, faulty construction operations, unsuitable subsoil and, in particular, any external influences which are not presupposed by the contract, as well as in respect of non-reproducible software defects. In the event that modifications or maintenance operations should be improperly performed by the customer or any third parties, it shall likewise be the case that no claims arising from defects shall obtain for such modifications and maintenance operations or any resulting consequences.
- 9) Any claims on the part of the customer for expenditure which it is necessary to incur for subsequent fulfillment purposes, particularly transport, travelling, labour and material costs, shall be excluded insofar as such expenditure increases due to the fact that a delivery object has been subsequently transported to a location other than the customer's business premises unless such transportation is in line with the normal utilization of such object.
- 10) Claims under rights of recourse vis-à-vis ourselves on the part of the customer pursuant to § 478 German Civil Code (contractor's recourse) shall only obtain insofar as the customer has not agreed any arrangements with their customer exceeding the scope of the statutory claims arising from defects. No. 9 shall additionally apply mutatis mutandis to the scope of the customer's claim under a right of recourse vis-à-vis ourselves pursuant to § 478, paragraph 1 German Civil Code.
- 11) It should be noted that subsection IX (other compensation claims) shall apply to compensation claims. Any more far-reaching claims for a material defect against us and our vicarious agents on the part of the customer and any claims for a material defect against us and our vicarious agents on the part of the customer other than those stipulated in subsection VII shall be excluded.

VIII. Impossibility, contractual revision

- 1) Insofar as a delivery is impossible the customer shall be entitled to claim compensation unless we are not responsible for such impossibility. However, the customer's entitlement to compensation shall be restricted to 10 % of the value of that component of the delivery which cannot be put into appropriate operation in consequence of such impossibility. This entitlement shall not apply insofar as, in cases of wilful intent, gross negligence or injury to life, body or health, compulsory liability obtains; this shall not entail a change in the burden of proof to the detriment of the customer. The right of the customer to withdraw from the contract shall remain unaffected.
- 2) Insofar as any unforeseeable occurrences within the purport of subsection IV, no. 2 considerably alter the economic importance or the object of a delivery or exercise a major influence on our operations, the contract shall be suitably revised in compliance with the principle of good faith. Insofar as this is not economically justifiable, we shall be entitled to withdraw from the contract. In the event that we should wish to exercise this right of withdrawal, we shall apprise the customer accordingly without delay upon becoming cognizant of the implications of the occurrence in question, including in the event that an extension of the delivery period should initially have been agreed with the customer.

IX. Other compensation claims

- 1) Claims for compensation and claims for the compensation of expenses (hereinafter: compensation claims), irrespective of on which legal grounds, particularly for a breach of the duties arising from the contractual obligation and for tortious acts, shall be excluded.
- 2) This shall not apply insofar as compulsory liability obtains, e.g. pursuant to the Product Liability Act, in cases of wilful intent, gross negligence, injury to life, body or health and a breach of major contractual obligations. However, a claim to compensation for a breach of major contractual obligations shall be restricted to the contractually typical, foreseeable prejudice insofar as wilful intent or gross negligence do not obtain or liability obtains due to injury to life, body or health. The above stipulations shall not entail a change in the burden of proof to the detriment of the customer.
- 3) Insofar as the customer is entitled to compensation claims pursuant to subsection IX, such claims shall lapse upon the expiry of the limitation period pursuant to subsection VII, no. 3 applying to claims for material defects. In the case of compensation claims pursuant to the Product Liability Act, the prevailing statutory limitation provisions shall apply.

X. Diagrams, measurements and weights

Diagrams, measurements and weights shall always be regarded as approximate.

XI. Place of performance, place of jurisdiction and applicable law

- 1) Insofar as nothing to the contrary is agreed, the place of performance shall be Schalksmühle.
- 2) In the event of the customer being a businessman, the sole place of jurisdiction for all disputes arising directly or indirectly from the contractual relationship shall be Hagen. However, we shall also be entitled to institute legal proceedings at the place of domicile of the customer.
- 3) German substantive law shall, to the exclusion of the UN Convention on Contracts pertaining to the International Sale of Goods (CISG), apply to the legal relations obtaining in connection with this contract.

XII. The remaining provision of the contract shall continue to have binding force even in the event of the legal invalidity of any of the individual provisions contained in the same. This shall not apply in the event of adherence to the contract constituting unreasonable hardship for one of the contracting parties.



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