Busch EIB sensors. Operation and display the direct way.

There are always more than one way to a target. Networked structures guarantee high efficiency and profitability. In both residential and functional buildings, you can optimise the use of energy and thus operating costs. The Busch EIB sensors embed buildings in a network of units communicating with each other and regulate the use of light, heat and fresh air, as well as the window-blind control. For this purpose, ABB i-bus® EIB uses a separate two-wire line, whereas ABB Powernet EIB uses the existing power supply. Both systems can be installed with little trouble and offer all possibilities for future expansion – both for new buildings and renovations.

The EIB sensors for operation and display can be flexibly adapted to different designs and tastes, and offer several functions for comfortable and secure living and working.
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EIB sensor solo®. Unmistakable aesthetics.

Not only for individual private areas, but also in modern industrial and public architecture, everywhere sophisticated forms are preferred, the EIB solo® is used. The complete range from the solo® switch programme is available, so there are no limits to the possible combinations.

The single, double and quadruple operating elements with labelling area form the basic sensors of the new EIB solo® range.

solo® colour harmony
In the solo® colour concept, every shade is defined as an optical unit.
The shades of colour, designated as mixed shades or so-called non-colours, purposely seek no direct relation to the furnishings and fittings. For all uniformity is boring.

EIB sensor solo®
Single, double and quadruple

Functions
- Switching
- Dimming
- Blinds
- Button

Features
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable switches
- Lighting
**EIB sensor solo®**
Quadruple operating element, multi-function with labelling area

**EIB sensor solo®**
Room thermostat with 2-fold sensor

**EIB sensor solo®**
IR sensor with triple operating element

**EIB sensor solo®**
Flush-mounted movement detector

**EIB sensor solo®**
RS 232 interface USB-interface

---

This **multi-function sensor** is freely programmable and, in contrast to the basic sensors, has additional separate light scene and valuable objects.

**Functions**
- Light scenes
- Light scene - secondary point
- Valuable objects
- Switching
- Dimming
- Blinds
- Button

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable switches
- Lighting

**EIB sensor solo®**
Room thermostat

The **room thermostat** has an LCD display which indicates the current temperature and the respective operating status.*

**Functions**
- Comfort
- Stand-by
- Night operation
- Frost protection
- Specified temperature
- Time
- Date
- Heating
- Cooling
- Light scenes
- Light scene - secondary point
- Valuable objects

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Illuminated display
- Lighting

**EIB sensor solo®**
IR sensor with triple operating element

The **sensor** has 5 IR channels, of which channels 1–3 are directly coupled with the toggle functions and channels 4 and 5 are freely assignable.

**Functions**
- 5 IR channels
- 3 IR channels connected directly to the toggle switches
- 2 IR channels freely assignable
- Switching
- Dimming
- Blinds
- Button
- Light scenes
- Light scene secondary point
- Valuable objects

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Illuminated display
- Lighting

---

**EIB sensor solo®**
Flush-mounted movement detector

The **movement detector** is equipped with a comfort lens which allows not only horizontal detection but also at an angle downwards of 7°.

**Functions**
- 5 IR channels
- 3 IR channels connected directly to the toggle switches
- 2 IR channels freely assignable
- Switching
- Dimming
- Blinds
- Button
- Light scenes
- Light scene secondary point
- Valuable objects

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Illuminated display
- Lighting

---

The **interfaces** allow access to the ABB i-bus® EIB.

The range is enlarged by the flush-mounted USB interface. The USB interface enabled programming and commissioning for ABB i-bus® EIB with PC or laptop, suitable only for ETS version 3.0.

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*Additional operation via 2-fold switch sensor

*product without picture. Please see product range overview.
The EIB sensor future/future linear is used in particular in functional buildings. Timeless design is combined with the elementary advantage of excellent practical value. In office buildings such as banks and in the public sector, the formal reduction in their uncompromising clarity forms an attractive oneness with the stylistic purism of modern architecture.

The single, double and quadruple operating elements with labelling area form the basic sensors of the new EIB future linear range.

**Functions**
- Switching
- Dimming
- Blinds
- Button

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable switches
- Lighting
This multi-function sensor is freely programmable and, in contrast to the basic sensors, has additional separate light scene and valuable objects.

**Functions**
- Light scenes
- Light scene secondary point
- Valuable objects
- Switching
- Dimming
- Blinds
- Button

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable switches
- Lighting

The room thermostat has an LCD display which indicates the current temperature and the respective operating status. *1

**Functions**
- Comfort
- Stand-by
- Night operation
- Frost protection
- Specified temperature
- Time
- Date
- Heating
- Cooling
- Light scenes
- Light scene - secondary point
- Valuable objects

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Illuminated display
- Lighting

*1 Additional operation via 2-fold switch sensor

The sensor has 5 IR channels, of which channels 1–3 are directly coupled with the toggle functions and channels 4 and 5 are freely assignable.

**Functions**
- 5 IR channels
- 3 IR channels connected directly to the toggle switches
- 2 IR channels freely assignable
- Switching
- Dimming
- Blinds
- Button
- Light scenes
- Light scene secondary point
- Valuable objects

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Illuminated display
- Lighting

The movement detector is equipped with a comfort lens which allows not only horizontal detection but also at an angle downwards of 7°.

**Functions**
- Comfort
- Night operation
- Frost protection
- Specified temperature
- Time
- Date
- Heating
- Cooling
- Light scenes
- Light scene - secondary point
- Valuable objects

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Illuminated display
- Lighting

The interfaces allow access to the ABB i-bus® EIB.

The range is enlarged by the flush-mounted USB interface. The USB interface enabled programming and commissioning for ABB i-bus® EIB with PC or laptop, suitable only for ETS version 3.0.

Its straight and elegant shape combined with high-grade natural materials makes carat an absolute eye-catcher. On account of its various materials and possible colour variations, the range is appropriate both for sober, design-oriented environments and in timelessly modern, classically stylistic ambiences.

EIB sensor carat
Single, double and quadruple

The single, double and quadruple operating elements with labelling area forms the basic sensor system of the new EIB solo® range.

EIB sensor carat
Quadruple operating element Multifunction with labelling area

This multifunction sensor is freely programmable and, in contrast to the basic sensors, has additional separate light scenes and valuable objects.

Functions
- Switching
- Dimming
- Blinds
- Button

Features
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable buttons
- Lighting in acc. with Ordinance on Workplaces

EIB sensor carat
Colour harmony

Only high-grade genuine materials are used for the frame. The range can be combined with the many colour options of the solo® and future (supplemented with anthracite).

Functions
- Light scenes
- Light scene - secondary point
- Valuable objects
- Switching
- Dimming
- Blinds
- Buttons

Features
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable buttons
- Lighting in acc. with Ordinance on Workplaces
The **room thermostat** has an LCD display that indicates the current temperature and the respective operating mode.

**Functions**
- Comfort
- Stand-by
- Night mode
- Frost protection
- Specified temperature
- Time
- Date
- Heating
- Cooling
- Light scenes
- Light scene - secondary point
- Valuable objects
- Fan control

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Illuminated display
- Lighting in acc. with Ordinance on Workplaces

The **sensor** has 5 IR channels, of which channels 1-3 are directly connected to the toggle switches, and channels 4 and 5 are freely assignable.

**Functions**
- 5 IR channels
- 3 IR channels directly connected to operating toggle switches
- 2 IR channels, freely assignable
- Switching
- Dimming
- Blinds
- Button
- Light scenes
- Light scene - secondary point
- Valuable objects

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable control panels
- Lighting in acc. with Ordinance on Workplaces

The **movement detector** is equipped with a comfort lens, which allows not only horizontal detection, but also at an angle of 7° downwards.

**Features**
- Inscribable toggle switches
- Anti-theft protection
- Freely programmable control panels
- Lighting in acc. with Ordinance on Workplaces

The **interfaces** allow access to the ABB i-bus® EIB.

The range is enlarged by the flush-mounted USB interface. The USB interface enabled programming and commissioning for ABB i-bus® EIB with PC or laptop, suitable only for ETS version 3.0.
The EIB sensor Busch-triton® is probably the most innovative operating element for building system technology in residential buildings and representative areas, e.g. in hotels. It has freely programmable switches, is multi-functional and is flexibly adjustable to the habits of the users.

**EIB sensor Busch-triton® Single operating element with rear-illuminated labelling area**

By means of the additional key, it is possible to store light scenes, deactivate the switching error protection and activate the labelling area rear illumination.

**Functions**
- Switching
- Dimming
- Blinds
- Light scenes
- Switching error protection
- 3 IR channels connected directly to the toggle switches

**Features**
- Inscribable toggle switches
- Rear-illuminated labelling field
- Anti-theft protection
- Freely programmable switches
- Lighting
- Combinable with flush-mounted actuators

**EIB sensor Busch-triton® Triple operating element with rear-illuminated labelling field and IR reception**

By means of the additional key, it is possible to store light scenes, activate the labelling field rear illumination and scroll the display texts.

**Functions**
- Independent LCD display for 5 text/value messages
- Alarm messages
- Switching
- Dimming
- Blinds
- Light scenes
- 3 IR channels connected directly to the toggle switches

**Features**
- Inscribable toggle switches
- Rear-illuminated labelling field
- Anti-theft protection
- Freely programmable switches
- Lighting
- IR remote-controllable
- Additional key

**EIB sensor Busch-triton® Triple operating element with rear-illuminated labelling field, LCD display and IR reception**

The operating element has two operating levels. In the first level, the local operations are triggered, the additional key is used to access the second operating level with which the heating control can be operated.

**Functions**
- LCD display for room thermostat functions
- Comfort
- Stand-by
- Night operation
- Frost protection
- Heating
- Cooling
- Fan control
- Switching
- Dimming
- Blinds
- One operating element per room

**Features**
- Inscribable toggle switches
- Rear-illuminated labelling field
- Anti-theft protection
- Freely programmable switches
- Lighting
- IR remote-controllable
- Additional key

**EIB sensor Busch-triton® Triple operating element with rear-illuminated labelling field, integrated room thermostat without IR reception**

The single operating element is equipped with a freely programmable 'large' switch. It can be assigned to one subject and carry out a maximum of two commands.

**Functions**
- Switching
- Dimming
- Blinds
- Valuable object
- Button

**Features**
- Inscribable toggle switch
- Rear-illuminated labelling field
- Anti-theft protection
- Freely programmable switches
- Lighting
- Combining with flush-mounted actuators
EIB sensor Busch-triton®
5-fold operating element with rear-illuminated labelling area and IR reception

By means of the additional key, it is possible to store light scenes or to activate the labelling field rear illumination.

Functions
- Switching
- Dimming
- Blinds
- Light scenes
- 5 IR channels connected directly to toggle switches

Features
- Inscribable toggle switches
- Rear-illuminated labelling field
- Anti-theft protection
- Freely programmable switches
- Lighting
- IR remote-controllable
- Additional key

EIB sensor Busch-triton®
5-fold operating element with rear-illuminated labelling field, LCD display and IR reception

By means of the additional key, it is possible to store light scenes, activate the labelling field rear illumination and scroll the display texts.

Functions
In addition to the functions of the 5-fold operating element:
- Independent display for 5 text/value messages
- Displays and alarm messages

Features
- LCD display
- Alarm messages

EIB Sensor Busch-triton®
5-fold operating element with rear-illuminated labelling field, integrated room thermostat incl. IR reception.

The operating element has two operating levels. In the first level, the local operations are triggered, the additional key is used to access the second operating level with which the heating control can be operated.

Functions
- LCD display for room thermostat functions
- Comfort
- Stand-by
- Night operation
- Frost protection
- Heating
- Cooling
- Fan control
- Switching
- Dimming
- Blinds
- Valuable objects
- Light scenes

Features
- Inscribable toggle switches
- Rear-illuminated labelling field
- Anti-theft protection
- Freely programmable switches
- Lighting
- One operating element per room
Sets the tone for an individual style in residential and functional buildings. The alpha exclusive® is superior and unconventional in shape. It can adapt to the style of its environment and still prove its individuality. In its shape it combines elegance and extravagance, and sets the tone in an exclusive environment.

**alpha exclusive® colour harmony**

The colours of this series of switches rely on individuality in detail. They stand for materials with everlasting charm – from prehistoric rock to high-grade metal. Its clarity and power of expression are as unique as nature itself.

- alabaster
- ivory
- titanium
- palladium
- obsidian
- chrome/amber

**EIB sensor alpha exclusive®**

Single, double and quadruple operating elements form, as standard operating elements, the basis of the alpha exclusive® range.

**Functions**
- Switching
- Dimming
- Blinds
- Button
- Valuable objects

**Features**
- Vertical operating
toggle switches
- Lighting
The room thermostat has LEDs which display the individual operating modes. The specified temperature is set by means of the dial on the front of the unit.

**Functions**
- Comfort
- Stand-by
- Night operation
- Frost protection
- Dew point object
- Heating
- Cooling

**Features**
- Specified temperature adjusted by dial
- Anti-theft protection
- Operating modes shown by status LEDs

---

The movement detector is equipped with a comfort or multiple lens. The comfort lens has a horizontal surveillance zone. The multiple lens provides, in addition to the horizontal surveillance zone, surveillance at an angle of 7° downwards.

**Functions**
- Continuous light
- Adjustable sensitivity
- Adjustable afterrun control

**Features**
- Potentiometer
- Sliding ON/OFF switch

---

The interfaces allow access to the ABB i-bus® EIB. The range is enlarged by the flush-mounted USB interface. The USB interface enabled programming and commissioning for ABB i-bus® EIB with PC or laptop, suitable only for ETS version 3.0.

**Functions**
- 2 x 4 line display of 16 characters
- Switch objects
- Valuable objects
- Alarm messages
- Sensor function

**Features**
- Display rear illumination
- Switch functions
- Rear-illuminated display

---

The LCD display serves to display texts, values and operating statuses. By means of the keys, functions can be activated directly and scrolling between the individual displays of the 8-line display is possible.

**Functions**
- 2 x 4 line display of 16 characters
- Switch objects
- Valuable objects
- Alarm messages
- Sensor function

**Features**
- Display rear illumination
- Switch functions
- Rear-illuminated display
EIB sensor *alpha nea*®. Harmonious proportions.

This series of switches for residential and functional buildings combines comfort and atmosphere in equal proportion. Thanks to the significantly reduced form and expressive details, such as the gently rounded edges, the *alpha nea*® can be integrated in nearly every furnishing concept.

**alpha nea®**

*pure aesthetics*

The *alpha nea*® colour concept underlines the harmony of any architectural environment. Colours for people whose love of detail is evident in the environment of a comfortable atmosphere.

- **studio white**
- **studio white, matt**
- **ivory**
- **bronze**
- **platinum**
- **marine blue**

**EIB sensor alpha nea®**

Single, double and quadruple operating elements form, as standard operating elements, the basis of the *alpha nea*® range.

**Functions**
- Switching
- Dimming
- Blinds
- Button
- Valuable objects

**Features**
- Vertical operating toggle switches
- Lighting
The **room thermostat** has LEDs which display the individual operating modes. The specified temperature is set by means of the dial on the front of the unit.

**Functions**
- Comfort
- Stand-by
- Night operation
- Frost protection
- Dew point object
- Heating
- Cooling

**Features**
- Specified temperature adjusted by dial
- Anti-theft protection
- Operating modes shown by status LEDs

The **movement detector** is equipped with a comfort or multiple lens. The comfort lens has a horizontal surveillance zone. The multiple lens provides, in addition to the horizontal surveillance zone, surveillance at an angle of 7° downwards.

**Functions**
- Continuous light
- Adjustable sensitivity
- Adjustable afterrun control

**Features**
- Potentiometer
- Sliding ON/OFF switch

The **interfaces** allow access to the ABB i-bus® EIB.

The range is enlarged by the flush-mounted USB interface. The USB interface enabled programming and commissioning for ABB i-bus® EIB with PC or laptop, suitable only for ETS version 3.0.

**Functions**
- 2 x 4 line display of 16 characters
- Switch objects
- Valuable objects
- Alarm messages
- Sensor function

**Features**
- Display rear illumination
- Switch functions
- Rear-illuminated display

The **LCD display** serves to display texts, values and operating statuses. By means of the keys, functions can be activated directly and scrolling between the individual displays of the 8 line display is possible.

**Functions**
- Potentiometer
- Sliding ON/OFF switch

**Features**
- Display rear illumination
- Switch functions
- Rear-illuminated display

---

*Product without picture. Please see product range overview.*
This series of switches for residential and functional buildings combines comfort and atmosphere in equal proportion. Thanks to the significantly reduced form and expressive details, such as the gently rounded edges, the alpha bs® can be integrated in nearly every furnishing concept.

EIB sensor alpha bs®

Single, double and quadruple

The single, double and quadruple operating elements form, as standard operating elements, the basis of the alpha bs® range.

Functions
- Switching
- Dimming
- Blinds
- Button
- Valuable objects

Features
- Vertical operating toggle switches
- Lighting

alpha bs®
different by design

The alpha bs® colour concept underlines the harmony of any architectural environment.

Colours for people whose love of detail is evident in the environment of a comfortable atmosphere.

- ivory
- studio white
- gold/ivory
- palladium
- platinum
- bronze
Specialities, like electronic devices, are to be installed with the help of an adapter plate.

**EIB sensor alpha bs**

Step 1: Choose your insert

Step 2: Choose your frame

Step 3: Choose your coverplate

Final product
The Switch Connection Unit offers the opportunity to design economical solutions with EIB in commercial Projects, which have a basic budget for the electrical installation system. It is fully compatible to the wiring accessories of ABB. Illumination integrated. ABB wiring accessories are available for VDE (e.g. Germany, Spain, France, …) and British Standard.

Examples of functional options

<table>
<thead>
<tr>
<th>1 gang Switch</th>
<th>2 gang Switch</th>
<th>1 gang push switch</th>
<th>2 gang push switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x Switch</td>
<td>2 x Switch</td>
<td>1 x Switch</td>
<td>2 x Switch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x Dimmer</td>
<td>2 x Dimmer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 x shutter</td>
</tr>
</tbody>
</table>

Multiple combination option*

German Range

Spanish Range

Czech Range

*the mentioned range is a collection of ABB ranges worldwide.
Please ask your local distributor for the available ranges in your country.
The Universal Interface allows the integration of EIB in buildings worldwide and independent from the local installation standards. Lots of common EIB functions are covered by use of the Universal Interface, as Switch-, and Dimmfunctions, but as well shutter control, Scenes … Illumination of traditional wiring accessories is possible.

The Universal Interface with 2 or 4 channels respectively which can parameterised as input or output. Conventional push-buttons, auxiliary contacts, LEDs and electronic relays can be used together with the device to fulfil a wide variety of applications worldwide.

**Installation standards worldwide**

- **60 mm** VDE-System
- **80 x 80 mm** UK-System
- **96 x 59 mm** NEMA System
- **59 x 96 mm** Italian System
- **95 x 76 mm** Australian System
- **Mixture of various Systems**
The Busch-Jaeger LEAN- and SMARTtouch do not just look good, they also offer numerous functions for switching and controlling an EIB or Powernet system. This versatile display and operating unit can be used simply and with intuition.

The LEAN- and SMARTtouch offer a number of functions, depending on version, e.g. switching, dimming, blind control, measurement value display, switch time control, light scene control or display and storage of alarm and disturbance signals. In addition, the panel can be used as a room thermostat or timer/alar clock, and has an additional information function with which information can be recorded. Operation is simple and intuitive. By means of the PDA pen, the functions are carried out by means of the touchscreen buttons labelled in clear text. Control of the functions is facilitated by a clear menu structure. The LEAN- and SMARTtouch can be operated conveniently by means of an infrared hand-held transmitter, which allows the equipment or functions to be controlled from a distance. The panel is available in three versions: as LEANtouch with monochrome display for approx. 30 functions, and as SMARTtouch with monochrome or colour display for approx. 100 functions.
On the Start page of the SMARTtouch, there are up to 10 touchscreens, which, for example, reflect the room layout of a house. With the buttons of the footer, the room temperature and time can be read off at any time, and also direct access to the integrated individual room thermostat and time programs is possible. If a touch button on the start page is touched with the PDA pen, you go directly to the overview of the individual functions of the room (e.g. of the living room) or function group. On the display, the current statuses, e.g. the switch functions or measurement values, are displayed in clear text. With another touch on the respective individual function, an operation window opens, by means of which, for example, the brightness of the ceiling light can be altered. By means of the "Home" button in the footer, you can return from the operation page back to the start page. In addition, the LEAN-/SMARTtouch has a "child-proofing device", with which the entire operation can be blocked. The respective locking symbol is displayed in the header.

Behind the chromium-plated flap (illustration on Page 20), there are function elements such as the PDA pen for operating the touchscreen.
This panel provides maximum control and is fast, easy and obvious to operate. The functions of the ABB i-Bus® EIB are flexible and can be tailored to meet individual needs.

Because the ABB i-Bus® EIB operates using decentral methods, the panel, from which all functions can be monitored and controlled, can be integrated and initiated any time and with little effort.

Simultaneously, it takes control of the display functions and provides information regarding the current states of the EIB system. It maintains the programmed configurations of the user interface even if a power failure occurs.