



enertexbayern gmbh
simulation entwicklung consulting

Manual and Configuration

MeTa



for Premium, Standard and Starter versions

Note

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Notes

- Installation and assembly of electrical equipment may only be carried out by qualified electricians.
- When connecting KNX / EIB interfaces, KNX TM training is required.
- Failure to observe this instruction may result in damage to the unit, fire or other hazards.
- This guide is part of the product and must remain with the end user.
- The manufacturer is not liable for costs or damages caused to the user or third parties by the use of this device, misuse or interference of the connection, malfunctions of the device or of the subscriber devices.
- The opening of the housing, other unauthorized modifications and / or conversions to the device will void the guarantee!
- The manufacturer shall not be liable for any inappropriate use.

Functionality

Design variants

The MeTa room controller KNX is available in three versions

1. **Premium** with

- Built-in temperature and humidity sensor,
- Built-in RGBW light sensor,
- Large LCD display,
- Four electronically inscribable, mechanical switching rockers with max. 32 switching functions,
- The menu button at the bottom of the device,
- Flush socket for supplying the device via the KNX bus (no auxiliary supply necessary),
- External switching contact (binary input),
- Room controllers for heating and cooling,
- Frame size 90x161x14,6mm height

2. **Standard** with

- Built-in temperature and humidity sensor,
- Built-in RGBW light sensor,
- Two electronically inscribable, mechanical switching rockers with max. 16 switching functions,
- The menu button at the bottom of the device,
- Flush socket for supplying the device via the KNX bus (no auxiliary supply necessary),
- External switching contact (binary input),
- Room controllers for heating and cooling,
- Frame size 90x90x14,6mm height

3. **Starter** with

- Built-in RGBW light sensor,
- Two electronically inscribable, mechanical switching rockers with max. 16 switching functions,
- The menu button at the bottom of the device,
- Flush socket for supplying the device via the KNX bus (no auxiliary supply necessary),
- External switching contact (binary input),
- Frame size 90x90x14,6mm height

Operation and Displays

Multiple selection at the ETS

Many of the following settings can be parameterized individually for each rocker. If the same settings are the same for all rockers, this can be done simply by means of the multiple selection in the ETS by means of a single configuration (cf.

http://www.it-gmbh.de/fileadmin/AWT2015/Pr%C3%A4sentationen/Elvis_Anwendertag_ETS5_HWK.pdf).

This and other possibilities, e.g. Working with templates from the ETS makes the parameterization enormously easier here and should be taken into account due to the extensive application.

Rockers and buttons

The MeTa room controller KNX is a touch sensor with mechanical rockers whose labeling field allows the display of the action to be executed when actuated.

Each rocker has, at the two corners, two pressure points for actuation which can be assigned to various functions (for example, left ON / OFF, right VALUE) as individual keys, or can be assigned as operating rocker of a function group (e.g., dimming). Each rocker can be assigned four times. Each allocation of all rockers corresponds to one operating level. The rocker built into the bottom of the housing serves as a menu button, which changes through the operating level (see Figure 1 and Figure 2).

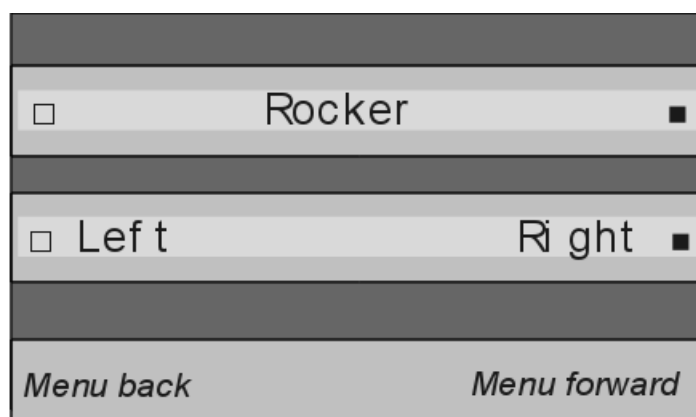


Figure 1: The menu button and the two lower rockers (schematic)



Figure 2: The menu button and the two lower rockers (real)

Rocker displays

Description

The labeling of the fields as well as the operation can be parameterized separately for each level. When parameterizing as operating rocker, the maximum labeling width is 14 characters. In addition, the labels can be changed dynamically for each level via group addresses via the KNX bus, e.g. To change the language of the display. Umlauts and special characters (accents) are possible, whereby lowercase letters are represented as uppercase letters.

When used as a single rocker, depending on the parameterization e.g. as value encoder, the current value - also with feedback via group address - is displayed. The entire display (label text

plus feedback) is centered (see Figure 3). On the left and right edges of the display is a status display for 1-bit objects. This display can be displayed over 1-bit objects separated for left and right. The status displays are the same for all levels

The control display with its own symbols, e.g. For HIGH / DOWN is arranged next to the 1-bit status display and is differently adapted to the respective function for each operating level. The symbols can also be individually parameterized in the ETS.

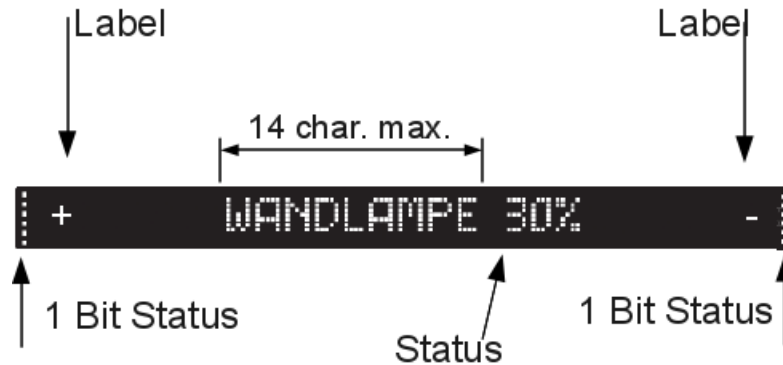


Figure 3: Labeling rocker with feedback as encoder

When parameterizing as left or right single button, the label for the left button is aligned to the left, and the label for the right button is aligned to the right. If the two label fields contain more than 10 characters, the label field on the left and right can overlap (see hatched area in Figure 4). If the user at this point inserts the shorter field with fewer characters, the representation is still possible (Figure 4). The feedback is displayed in the operating display for 1-bit operations.

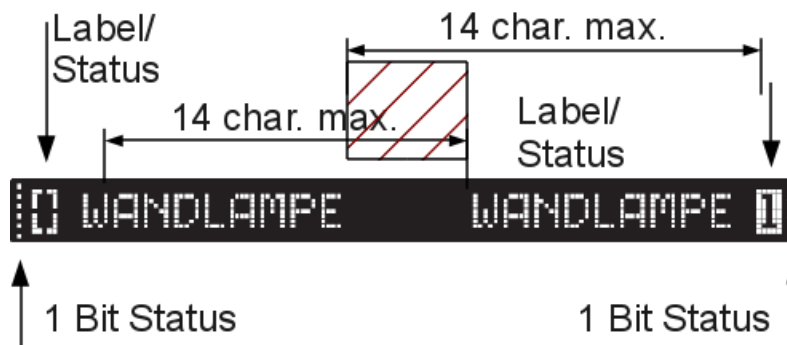


Figure 4: Labeling single buttons – with overlapping

Display mode

The rocker display operates in the following operating modes, which are parameterized via the ETS in the menu rocker X / button X / Y for each individual rocker:

- No display
No display is used, the display always remains unlabeled
- Labeling display
Only the label is displayed
- Operating display
The label and the operator panel are displayed

The following symbols can be used as operating displays on the rocker:

Button mode	Rocker switch
Status display rocker switch (B1)	Label and status display
Label rocker switch (max. 14 characters)	Enertex
Group address for label	No
Rocker switch symbol (B1, B2)	Plus/Minus
Direction	Plus/Minus
Function	Switch (On / Off)
Feedback (C)	Arrows (Left / Right)
Value on pressing left rocker switch	Arrows (Up / Down)
	Awning Open/Closed
	Angle Open/Closed
	Vertical/Horizontal
	Locked/Unlocked

Figure 5: Symbols rocker

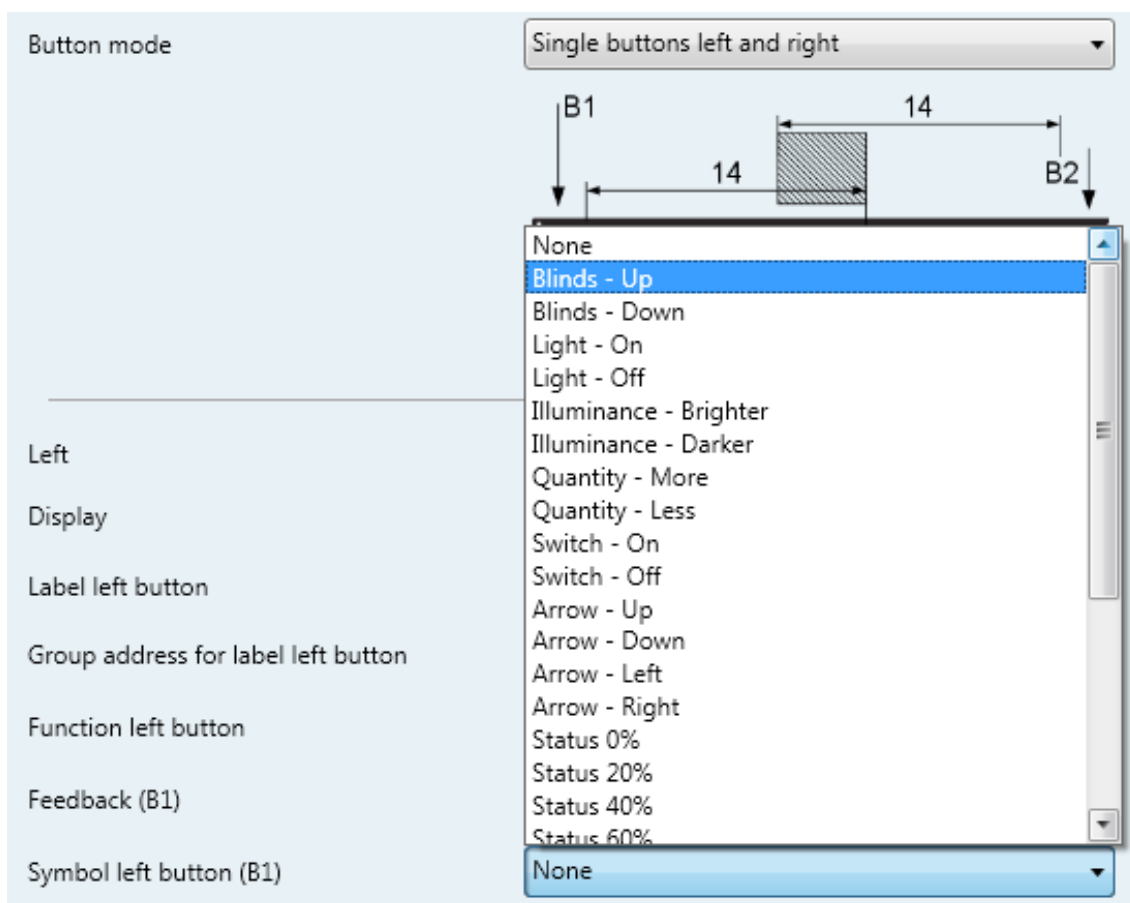


Figure 6: Symbols Single button

In the same menu you can specify whether the display works

- with feedback
- without feedback

(see Figure 3 and Figure 4). Feedback is indicated for 8 or 16 bit group addresses as value next to the label, for 1 bit objects the symbols are:

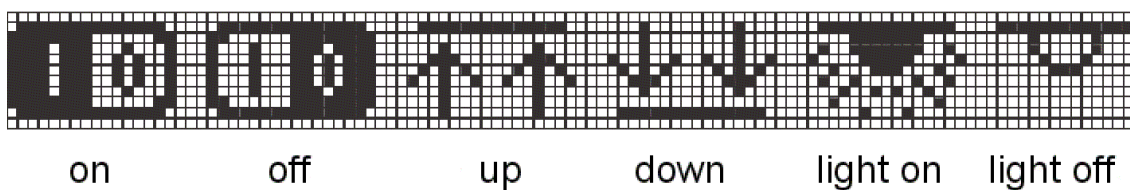


Figure 7: Feedback 1 Bit

In addition, you can parameterize whether a status display is additionally displayed in the menu Rockers (see Figure 3 and Figure 4).

- Without status display
No status is displayed
- With status display
A status is displayed

The display of the rockers can be activated by means of a group address ON and can either be switched off inactive by means of the same group address or can be deactivated inactive for a parameterizable time.

Inactive here means either that the brightness of the display falls back to the value of the lighting control (cf. Light measuring and lighting control) or is dimmed to a value below it. Active means that the displays with the maximum brightness setting are lit.

If "Activate on pressing any key" was parametrized to ON, the display is also enabled for the same parameterized time.

The communication objects "24 brightness rockers" and "28 brightness LCD" are used to change the maximum brightness values of the corresponding displays. These values can also be changed in the MeTa system menu.

If a value greater than 0 is parameterised for "Rockers autom. off at brightness value (x0.1 lx)", the rocker displays are deactivated when the brightness falls below this threshold. If 0 is parameterized here or "Always active" under "Enable rocker labeling", this function is deactivated.

The function "Rocker automatically OFF at brightness value (x0.1 lx)" overwrites the value written via KO 22 "Activation of rocker labelling". If you want to use the latter KO, the automatic function must be deactivated ("Rocker autom. OFF at brightness value (x0.1 lx)" set to 0).

The parameterization of "Display on deactivation" "Display all" only makes sense if a value greater than 0 is parameterized for "Display on deactivation darker dim to (%)".

The energy-saving mode switches off LCD and rocker displays completely in each parameterization. In this case, the value parameterized under "Dim displays darker when deactivated to (%)" is ignored.

Operating levels

Operating menus

Each operating level can be parameterized independently, that is, e.g. the first rocker can be used in level 1 as the left / right button and in the second as a grouped operating rocker. By scrolling through the menus (see Figure 8) and the associated labeling on the rockers, the respective function is easily visible to the user.

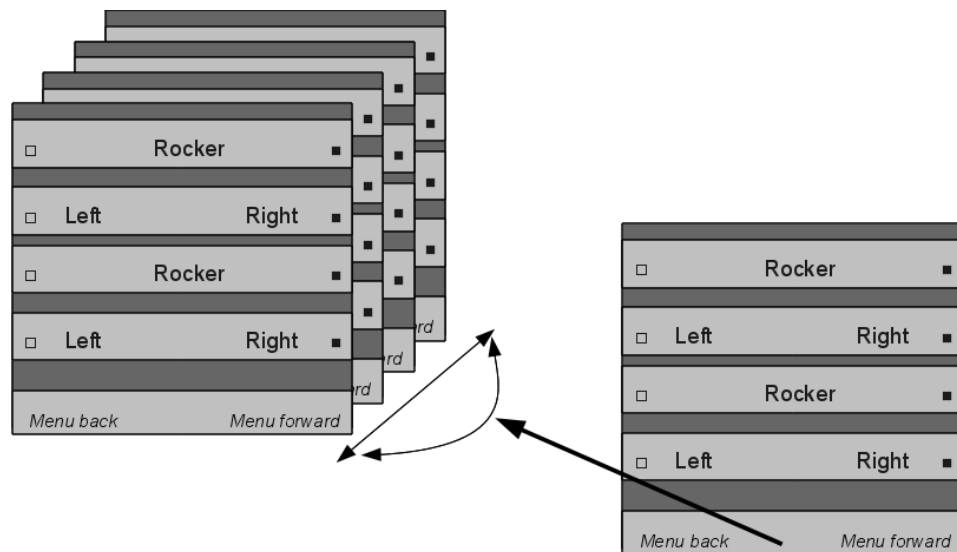


Figure 8: „Scrolling“ the menus with the menu button

The left menu button switches the levels to a smaller level (counting as in the ETS parameterization), the right to the larger level. If the left button is pressed again at level 1, the highest level is used again. The behavior for the right button of the menu button is analogous.

Alternatively, each labelable button can also be the jump target of a level. As Figure 9 shows, the operating level can also be changed via the normal rocker buttons (only for single button programming). However, one of the four user operating levels is required for this function.

It is possible to combine jumping targets and normal function execution in an operating level and rocker e.g. the right button can serve as a jump target, while the right button can switch a light.

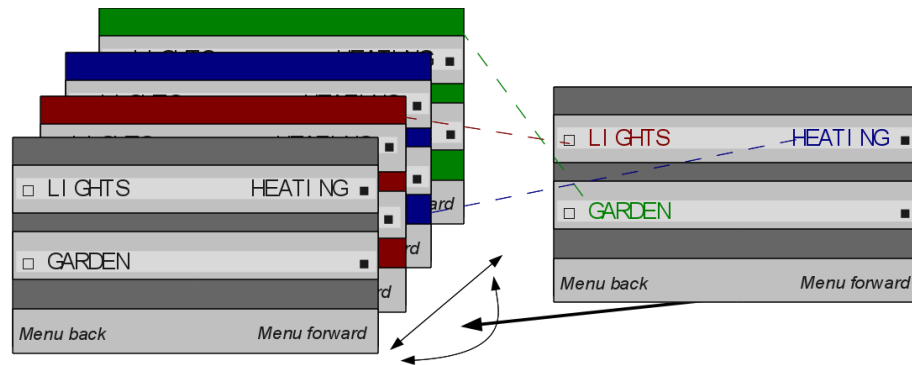


Figure 9: Select jump targets using the buttons

System menus

In addition to the max. four levels to operate the rockers there are additional system menus

- Menu basic value
- Menu heating
- Menu cooling
- Menu LCD

in the device.

These can be parameterized under "Menu structure" in the ETS in such a way that they are added either at the end of the most recently used menu level, or only by long pushing the button on the menu key as a separate menu level. In this context, attaching means that the following order is created when scrolling:

1. Operating level 1
2. Operating level 2
3. Operating level 3
4. Operating level 4
5. Menu basic value
6. Menu heating
7. Menu cooling
8. Menu LCD

The system menus can also be deactivated individually.

If the system menus are to appear on the menu button only with a long push button (> 3s), these three menus are also displayed in the scroll mode. By again long push button or after about 10 seconds without operation Meta falls back to the main mode.

Main mode	System menus
Operating level 1	Menu heaing
Operating level 2	Menu cooling
Operating level 3	Menu LCD
Operating level 4	

Table 1: Menu structure with parameterization System Menu "A long press on the menu button"

Display (Premium only)

Overview

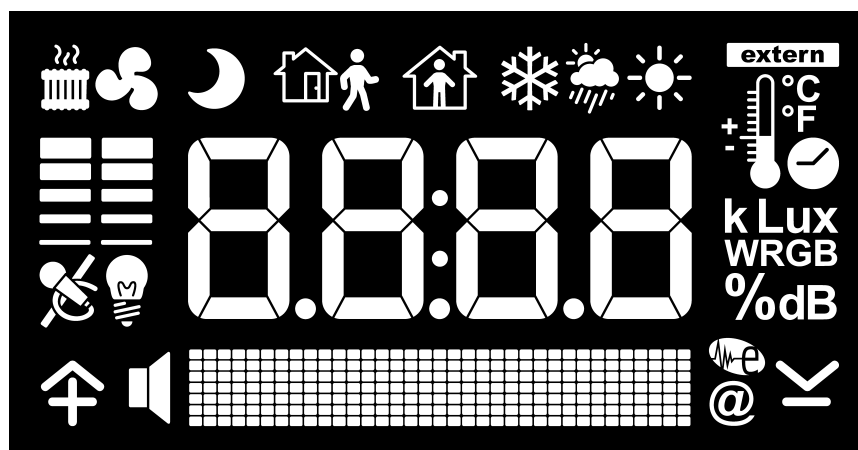


Figure 10: The SynOhr MultiSense KNX Display

The display options for the premium version are shown in Figure 10. The display can be divided into the following areas:

- Display of numeric values, time
- Symbols
- Dot matrix for text display

Display of numerical values

In addition to the time, up to five different values can be displayed, which can be displayed alternately (time can be parameterized).

Symbol	Description
	– Time display: colon – Numeric value / temperature: "." (dot) according to the numerical value
	– If °C or °F is displayed: internally or externally measured temperature, in addition the external symbol in case of external temperature. The internally measured temperature is the input value of the room controller during heating and cooling – Clock symbol when a time is displayed
	– Lux Display of the brightness value in Lux – kLux Display of the brightness value in Kilolux – W: Display of the measured value for white light – R: Display of the measured value for red light – G: Display of the measured value for green light – B: Display of the measured value for blue light – %: Display of humidity

Display of Symbols

The representation of symbols is partly defined by the operating mode (heating, cooling, standby etc.), some of which can be switched by group address.

Symbol	Description
--------	-------------

	Room controller in standby mode
	Room controller in comfort mode
	Room controller in night mode
	The internal controller of the room controller outputs a heating variable greater than 0% on the bus. The height of the bar quantifies the value of the controller quantized to 5 steps (20% steps).
	The internal controller of the room controller outputs the cooling variable greater than 0% on the bus. The height of the bar quantifies the value of the controller quantized to 5 steps (20% steps).
	Weather icons. These can be controlled separately by group address.
	– Plus (+) for operation/value adjustment – Up-symbol for the operation of the menus
	– Minus (-) for operation/value adjustment – Down-symbol for the operation of the menus – Enertex symbol and @ symbol for displaying errors
	The lamp symbol is switched on with the deactivation of the automatic dimming of the LCD display, the ring or the ambient lighting.

Text messages

Any text can be displayed in the dot matrix. However, the display of 14 byte (14 characters) long text messages is not always possible per line, depending on the characters used, MeTa scrolls the text message in such a case.

In addition, 28-byte long text messages are processed, which are processed via two separate group addresses. These are automatically scrolled.

Character set

With the parameter "Character set" one of the following character sets can be selected:

#	Character set
0	German ISO 8859-1
1	Polish ISO 8859-2
2	Cyrillic ISO 8859-5
3	Arabic ISO 8859-6
4	Greek ISO 8859-7
5	Hebrew ISO 8859-8

6	Turkish ISO 8859-9
7	Farsi Windows-1256
8	reserved
9	reserved
10	reserved
11	reserved
12	reserved
13	reserved
14	reserved
15	reserved

Table 2: Available character sets

If the Windows system language differs from the character set desired on the MeTa rocker display or if ETS does not recognize the Windows system language correctly and therefore display errors occur on the meta, it is recommended to set the "Codepage" to a defined value in the project properties of the ETS project. To do this, in the ETS project overview, single click on the project, then on the right on the "Details" tab and under "Codepage" set the desired character set, e.g. "Western European (ISO 8859-1)" for German with umlauts. After this changeover, the input fields for the rocker labels must be deleted once and rewritten, and the application must then be transferred to the MeTa again.

The character set can also be changed at runtime by means of KO 2 (see chapter Communication objects). The rocker labels must then also be retransmitted (using the corresponding KO), as the character sets differ in their coding.

External Contact

An external contact (binary input) can be connected via the installation box. Via the parameterization, a KNX telegram can be triggered for each switching edge (OPEN → CLOSED or CLOSED → OPEN).

An arbitrary potential-free installation switch is suitable as an external switching contact of the binary input. The switching voltage (s. Technical specifications) is provided by the room controller.

Energex® Bayern GmbH offers a framework program AluRa for the 55 series of JUNG and GIRA. These are available in three surface versions (brushed aluminum, black anodised aluminum and powder coated aluminum). Each of the color variants is available in a single, double and triple version. Double means that two 55 inserts can be installed in the frame, triple means that three inserts can be installed.

Energex® AluRa – single, Al brushed	1162-1-al
Energex® AluRa – single, black anodised	1162-1-sw
Energex® AluRa – single, white powder coated	1162-1-ws
Energex® AluRa – double, Al brushed	1162-2-al
Energex® AluRa – double, black anodised	1162-2-sw
Energex® AluRa – double, white powder coated	1162-2-ws
Energex® AluRa – triple, Al brushed	1162-3-al
Energex® AluRa – triple, black anodised	1162-3-sw
Energex® AluRa – triple, white powder coated	1162-3-ws

Table 3: Order description AluRa



Figure 11: MeTa with frame program AluRa with JUNG switch rocker

Measurement sensors (Premium and Standard)

Temperature

The temperature sensor, which is installed in the Premium and Standard Edition, serves as an input for the room controller, in cooling and heating mode. The temperature input of the room controller can alternatively also be derived from an external temperature sensor or from the values of the built-in and external temperature sensor.

Humidity

The humidity sensor, which is installed in the Premium and Standard Edition, allows the measurement of the relative humidity.

Light measuring and lighting control

The built-in light measurement is done in four areas: Red, Green, Blue and White. The measurement is performed as shown in Figure 12 (Clear = White).

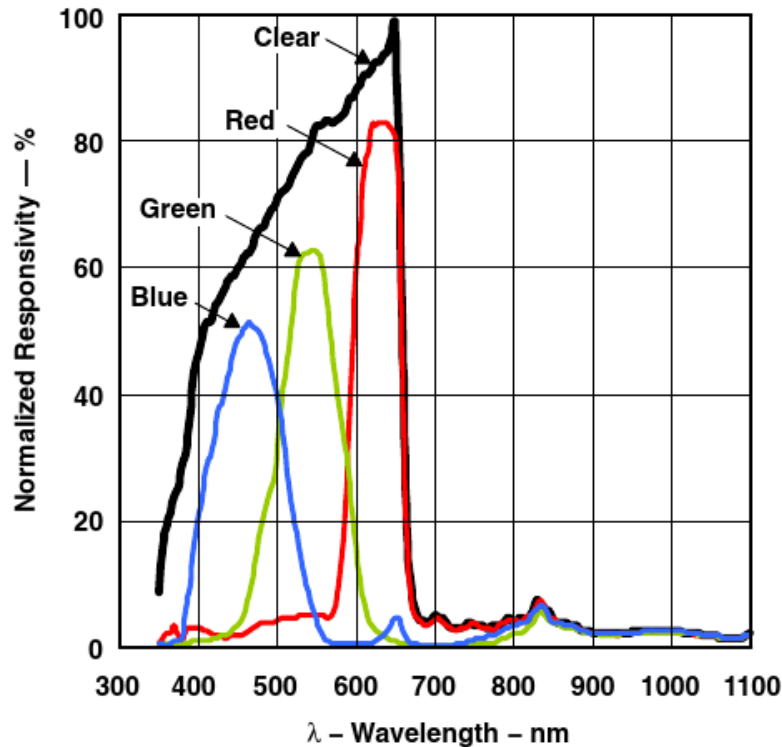


Figure 12: Light measurement

Automatic Control

For the display screen (only premium variant) and the rocking label, an automatic lighting control dependent on the ambient brightness can be activated. Starting from the maximum illuminance, which is defined by the ETS, the background lighting is increased to the maximum with increasing ambient light.

Display (Premium only)

The intensity of the display backlight can be set by the user in steps of 0 to 100%. This is parameterized via the ETS or the internal menu. There is also the possibility to control the brightness automatically via the light sensor.

Rocker display

The intensity of the display backlighting of the rocker displays can be set by the user in steps of 0 to 100%. This is parameterized via the ETS or the internal menu. There is also the possibility to control the brightness automatically via the light sensor.

Function groups

Rocker

The rockers provide the following functions:

Switch

- 1-bit telegram when pressing the right and left rocker buttons: ON / OFF / UM
- 1-bit telegram when releasing the right and left rocker buttons :: ON / OFF / UM

Dimming

In addition to generating a 4-bit dimming telegram for dimming, the dimming mode also allows the writing of a 1-bit telegram beforehand. The time between the relative dimming telegram and the 1-bit telegram can be parameterized.

- 1-bit telegram for switching the dimmer
 - 1-bit telegram when pressing the right and left rocker buttons: ON / OFF / UM
 - 1-bit telegram for releasing the right and left rocker buttons: ON / OFF / UM
- Relative dimming telegram in change of 1%, 3%, 6%, 12%, 25%, 50%, 100% (BRIGHTER/DARKER)
- Time between switching and dimming in 0.2s steps
- Repeating telegrams at a sustained press
- Stop telegram on release

Blinds

- 1-bit telegram when pressing the right and left rocker buttons: UP / DOWN / UM
- Use in long-term operation
 - Short-long-short
 - Long-short
 - Short-long
- Time can be changed between short long-term operation in 0.1s steps

Value provider 1 Byte

- With short-term operation:
1-byte telegram when pressing right and left rocker buttons with any value or fixed increase/decrease
- Without short-term operation:
Display of the value via feedback (see Figure 3 and Figure 4). Select as percent, number 0..255 or color angle 0 ° to 360 °.
- With long-term operation
Presetting of the direction (up or down) of the adjustment during continuous pressing with a parameterizable time between two telegrams

Value provider 2 Byte

- With short-term operation:
2-byte floating-point telegram for pressing right and left rockers with any value or fixed increase / decrease
- Without short-term operation:
Display of the value via feedback. Select as number with scaling 1:1 or 1:1000.
- With long-term operation
 - Presetting of the direction (up or down) of the adjustment during continuous pressing with a parameterizable time between two telegrams.
 - Presetting limits of adjustment
 - Presetting of increase

Scene

- 8-bit scene location with / without memory telegram for right and left rocker buttons

- When the pushbutton is briefly pressed telegram for starting the scene
- With long push button (3 s): memory telegram

Two channel operation

The two channel operation allows the sending of a 1-bit telegram (1. channel) and a 1-bit, a 1-byte, a 2-byte or a scene telegram (2. channel) upon actuation. The delay between the channels can be parameterized in any order.

- 1-bit telegram when pressing the right and left rocker buttons: ON/OFF/UM
- 1-byte telegram when pressing the right and left rocker buttons with any desired value as percent, number 0..255 or color angle 0 ° to 360 °.
- 2-byte telegram when pressing the right and left rocker buttons with any value or fixed increase / decrease and limits of adjustment
- scene telegram with preset scene number
- Time between channel A and B.

Operating mode of the controller

This function switches

- Switch to the predefined operating mode of the internal controller or an extension (8-bit control) for left or right rocker
- Change COMFORT, STANDBY, NIGHT Mode in endless loop of the internal controller or an extension (8-bit control), control of the left and right rocker in different "direction"
- Display via feedback signal

Single buttons

Switch

- 1-bit telegram by pressing: ON / OFF / UM
- 1-bit telegram when the button is released: ON / OFF / UM

Dimming

In addition to generating a 4-bit dimming telegram for dimming, the dimming mode also allows the writing of a 1-bit telegram beforehand. The time between the relative dimming program and the 1-bit telegram can be parameterized.

- 1-bit telegram for connecting the dimmer
 - 1-bit telegram when pressing the right and left rocker buttons: ON / OFF / UM
 - 1-bit telegram for releasing the right and left rocker buttons: ON / OFF / UM
- Relative dimming telegram in a change of 1%, 3%, 6%, 12%, 25%, 50%, 100% (BRIGHTER / DARKER) with changeover function
- Time between switching and dimming in 0.2s steps
- Repeating telegrams at a sustained press
- Stop telegram on release

Blind

- 1-bit telegram by pressing: ON / OFF / UM
- Use in long-term operation

- Short-long-short
- Long-short
- Short-long
- Time can be changed between short long-term operation in 0.1s steps

Value provider 1 Byte

- With short-term operation:
1-byte telegram when pressing with any value or fixed increase/decrease
- Without short-term operation:
Display of the value via feedback (see Figure 3 and Figure 4) when operating the long-term operation. In this case, the label is faded out for the time of actuation.
- With long-term operation:
Presetting of the direction (up or down) of the adjustment during permanent pressing with a parameterizable time between two telegrams, overflow possible.

Value provider 2 Byte

- With short-term operation:
2-byte floating point telegram when pressed with any value or fixed increase / decrease
- Without short-term operation:
Display of the value via feedback. Select as number with scaling 1:1 or 1:1000.
- With long-term operation:
- Presetting of the direction (up or down) of the adjustment during permanent pressing with a parameterizable time between two telegrams
 - Presetting limits of adjustment
 - Presetting of increase
 - overflow possible.

Scene

- 8-bit scene location with / without memory telegram
 - When the pushbutton is briefly pressed telegram for starting the scene
 - With long push button (3 s) memory telegram

Two channel operation

The two channel operation allows the sending of a 1-bit telegram (1. channel) and a 1-bit, a 1-byte, a 2-byte or a scene telegram (2. channel) upon actuation. The delay between the channels can be parameterized in any order.

- 1-bit telegram when pressing: ON / OFF / UM
- 1-byte telegram when pressing the with any desired value as percent, number 0..255 or color angle 0 ° to 360 °.
- 2-byte telegram when pressing with any value or fixed increase / decrease and limits of adjustment
- scene telegram with preset scene number
- Time between channel A and B.

Operating mode of the controller

This function switches

- Switch to the predefined operating mode of the internal controller or an extension (8-bit control) for the left or right rocker

- Change COMFORT, STANDBY, NIGHT mode in endless loop of the internal controller or an extension (8-bit control), control in a "direction"
- Display via feedback signal

Select operating level

When the rocker is pressed, the operating level or the system menu is started.

Commissioning

Installation

The bus coupling unit is integrated in the installation box (Figure 13)), which is to be installed in a standard hollow wall box. In addition to the communication to the KNXTM bus, this also provides the voltage supply for the MeTa room controller KNX main module. For the exact procedure during assembly, please refer to the Quick Reference Guide.

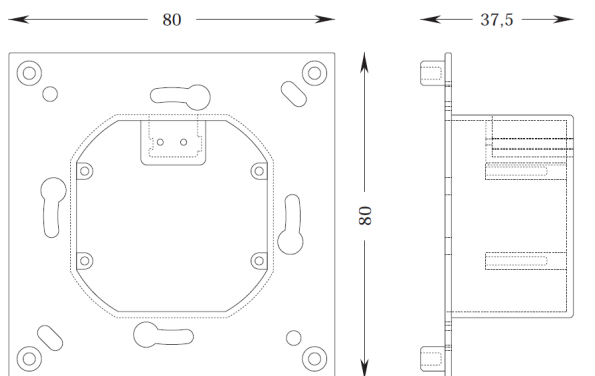


Figure 13: Dimensions of the built-in box – bus coupler

Programming mode

Use the ETS to change the physical address of the Enertex® MeTa® KNX. To place the unit in the programming mode, hold the supplied magnet to the right of the menu button until the programming LED on the bottom of the menu button on the lower right lights red.

Software description

Specification

Configuration: S-Mode without Plug-In

ETS: from Version 4

Data base file

At <http://www.enertex.de/d-downloads01.html> you can find the current ETS database file as well as the current product description.

ETS Application

Specification

ETS: from Version 4

Data base file

At <http://www.enertex.de/d-downloads01.html> you can find the current ETS database file as well as the current product description.

Parameter

Note: Depending on the parameterization, some setting options may not be available. They are not shown in these cases in the ETS.

Version

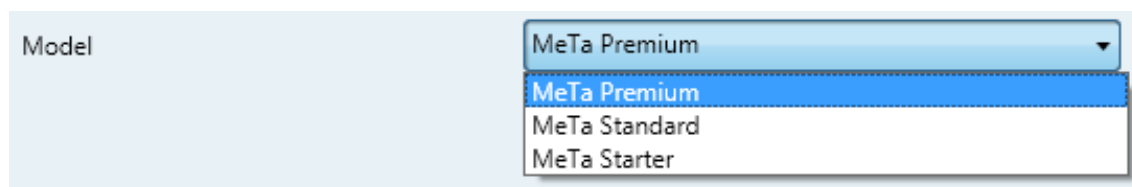


Figure 14: Version

The correct version of the MeTa room controller must be selected at the beginning of parameterization.

Controller

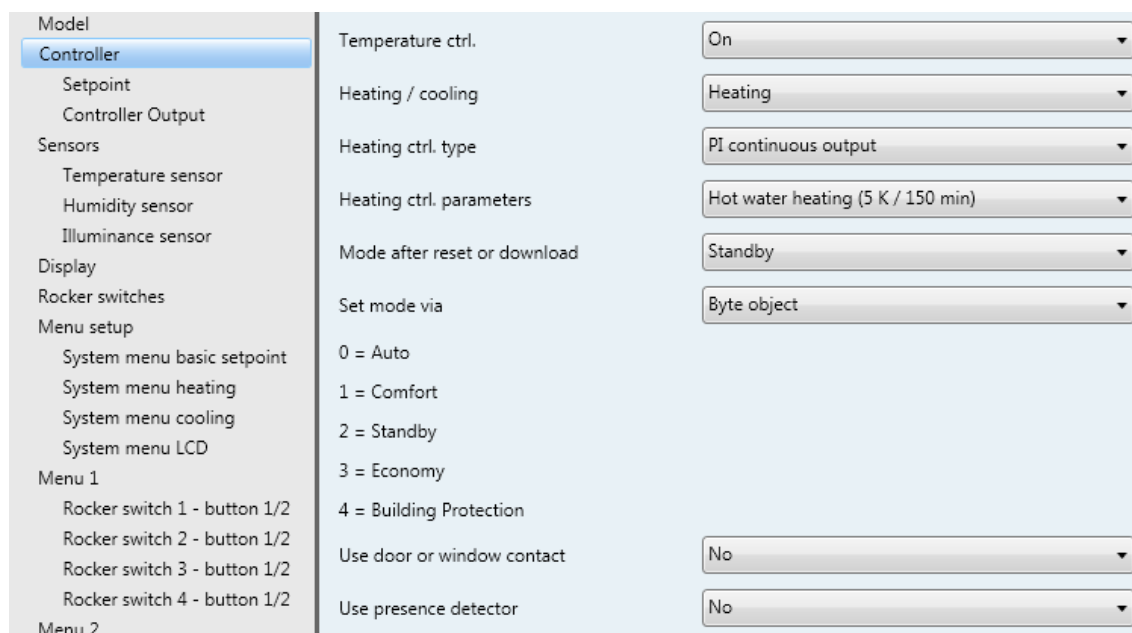


Figure 15: Controller

The room controller (only available in the variants MeTa Premium and MeTa Standard) has the following features:

- Various operating modes can be activated for the room controller: comfort, standby, night and building protection.
- Individual temperature setpoints (for heating and / or cooling) can be assigned to each

operating mode.

- Parameterizable duration of comfort extension.
- Switching of the operating modes by a 1 byte object according to KONNEX or by up to 4 individual 1 bit objects.
- Frost / heat protection switching through window status.
- Room temperature controller information via the device display.
- Operating modes "Heating", "Cooling", "Heating and cooling", with or without auxiliary stage.
- Different control types can be configured for each heating or cooling stage: PI control (continuous or switching PWM) or 2-point control (switching).
- The control variables for the temperature controller have the following functions:
- PI controller with analog control variable:
 - Object 3 = Control variable of the analog heating actuator [0..255]
 - Object 4 = Status of the analog heating actuator [0..1]
 - Object 5 = Control variable of the analog cooling actuator [0..255]
 - Object 6 = Status of the analog cooling actuator [0..1]
 - Object 7 = Control variable of the analog additional heating actuator [0..255]
 - Object 8 = Status of the analog additional heating actuator [0..1]
 - Object 9 = Control variable of the analog additional cooling actuator [0..255]
 - Object 10 = Status of the analog additional cooling actuator [0..1]
- PI controller with switching variable:
 - Object 3 = Analog value, which corresponds to the PWM of the switching heating actuator, as status [0..255]
 - Object 4 = Control variable of the switching heating actuator [0..1]
 - Object 5 = Analog value, which corresponds to the PWM of the switching cooling actuator, as status [0..255]
 - Object 6 = Control variable of the switching cooling actuator [0..1]
 - Object 7 = Analog value, which corresponds to the PWM of the switching auxiliary heating actuator, as status [0..255]
 - Object 8 = Control variable of the switching auxiliary heating actuator [0..1]
 - Object 9 = Analogue value, which corresponds to the PWM of the additional switching cooling actuator, as status [0..255]
 - Object 10 = Control variable of the switching auxiliary cooling actuator [0..1]
- 2-Point controller:
 - Object 3 = has no significance here, since there is no equivalent to an analog value as the PI controller with switching correcting variable
 - Object 4 = Control variable of the switching heating actuator
 - Object 5 = has no significance here, since there is no equivalent to an analog value as the PI controller with switching correcting variable
 - Object 6 = Control variable of the switching cooling actuator

- Object 7 = has no significance here, since there is no equivalent to an analog value as the PI controller with switching correcting variable
- Object 8 = Control variable of the switching auxiliary heating actuator
- Object 9 = has no significance here, since there is no equivalent to an analog value as the PI controller with switching correcting variable
- Objekt 10 = Control variable of the switching auxiliary cooling actuator
- Control parameter for PI controller (if desired: proportional range, integral action time) and 2-point controller (hysteresis).
- The temperature setpoint values for the additional stage are derived from the values of the basic stage by means of a parameterizable step interval.
- In the case of controllers with combined heating / cooling mode, the following applies: The setpoint values for heating are lowered by the dead zone / 2, and the set values for cooling by the dead zone / 2 are raised. Applies to comfort, standby and night.

Automatic or object-oriented switching between "heating" and "cooling".

- Setpoint shifting is possible temporarily or permanently by operating the function buttons on the device or by means of communication objects (eg by a controller adjuster).
- Complete (1 byte) or partial (1-bit) status information can be parameterized and transferred via objects to the bus.
- Deactivation of the control or auxiliary stage via separate 1-bit objects is possible.
- Internal and external temperature sensor for room temperature measurement possible.
- The room temperature measurement (actual value) can be adjusted via parameters separately for the internal and external sensor.
- The actual and set temperatures can be output to the bus (also cyclically) after a configurable deviation.
- Separate or common control output in heating and cooling mode. This means that one or two manipulated variable objects per stage (this only applies to heating and cooling of the first stage for PI controllers with a continuous manipulated variable (ie 1-byte object), not for the switching controllers and also for the continuous PI controllers of the second step).
- Normal or inverted variable output can be parameterized.
- Automatic transmission and cycle time can be parameterised for output of variable values (Note: the "cyclic switching (min)" parameter is only relevant if a PI controller with parameterizing variable is also parameterized).

Controller - Setpoint

Model		
Controller		
Setpoint		
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		

Basic setpoint (0.1 °C)	210	▲▼
Standby heating ctrl. decrease (0.1 K)	20	▲▼
Economy heating ctrl. decrease (0.1 K)	40	▲▼
Frost protection setpoint (°C)	7	▲▼
Frost alarm (°C)	4	▲▼

Figure 16: Setpoint

Controller - Control variable

Model	Send on change (%)	2
Controller	Send cyclically (min)	10
Setpoint	Switch cyclically (min)	15
Controller Output	Heating actuator direction	Normal
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		

Figure 17: Control variable

Sensors

Model	Temperature sensor	Yes
Controller	Humidity sensor	Yes
Setpoint	Illuminance sensor	Yes
Controller Output		
Sensors		
Temperature sensor		

Figure 18: Sensors

In order to be able to send the measured values of the sensors, these must be enabled here.

Temperature sensor

Model	Reference temperature	Internal sensor
Controller	Offset of reference temperature (0.1 K)	0
Setpoint	Send int. temp. cyclically (min)	0
Controller Output	Send int. temp. on change (0.1 K)	0
Sensors	Temperature unit on display	°C
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		

Figure 19: Temperature sensor

The reference temperature for the room controller can be obtained from the internal and / or external temperature sensor.

Furthermore, an adjustment of the reference temperature is possible.

The reference temperature can be output to the bus either cyclically or on change.

Humidity sensor

Model	Send cyclically (min)	0
Controller	Send on change (%)	0
Setpoint	Offset for the Humidity Sensor (x 0.1)	0
Controller Output	1 Bit Alarm (On = Exceedance)	No
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		

Figure 20: Humidity sensor

The measured humidity can also be sent cyclically or on change.

In addition, a limit value can be monitored (alarm telegram).

Light sensor

Model		
Controller	Send illuminance (W) cyclically (min)	0
Setpoint	Send illuminance (R) cyclically (min)	0
Controller Output	Send illuminance (G) cyclically (min)	0
Sensors	Send illuminance (B) cyclically (min)	0
Temperature sensor	Send illuminance (W) on change (%)	0
Humidity sensor	Send illuminance (R) on change (%)	0
Illuminance sensor	Send illuminance (G) on change (%)	0
Display	Send illuminance (B) on change (%)	0
Rocker switches	1 Bit Alarm (On = Exceedance)	Yes
Menu setup	Selection Alarm Measurement	White
System menu basic setpoint	Threshold for 1 Bit Alarm in Lux (x0.1)	0
System menu heating	Hysteresis for Falling	0
System menu cooling		
System menu LCD		
Menu 1		
Rocker switch 1 - button 1/2		
Rocker switch 2 - button 1/2		
Rocker switch 3 - button 1/2		
Rocker switch 4 - button 1/2		
Menu 2		
Rocker switch 1 - button 1/2		
Rocker switch 2 - button 1/2		

Figure 21: Light sensor

The red, green, blue and white color channels of the light sensor can be sent on the bus cyclically or when changing.

One of the color channels can be monitored for a limit value (alarm telegram).

Display

Model	Max. LCD brightness (%)	80
Controller	GA for Brightness Control LCD	Yes
Setpoint	LCD brightness (auto)	On
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display	Max. switch display brightness (%)	80
Rocker switches	GA for Brightness Control Switch	Yes
Menu setup	Auto brightness control switch display	On
System menu basic setpoint	Switch auto. OFF at Brightness (x0.1 lx)	0
System menu heating		
System menu cooling		
System menu LCD		
Menu 1	Text Display Mode LCD	Auto
Rocker switch 1 - button 1/2	Display text hold time (s)	1
Rocker switch 2 - button 1/2	Number of numeric display levels	3
Rocker switch 3 - button 1/2	Time between numeric display levels (s)	5
Rocker switch 4 - button 1/2	Numeric display option 1	Clock
Menu 2	Numeric display option 2	Temperature
Rocker switch 1 - button 1/2	Numeric display option 3	Humidity
Rocker switch 2 - button 1/2		
Rocker switch 3 - button 1/2		
Rocker switch 4 - button 1/2		
External contact	Request date on bus reset	No

Figure 22: Display

The following settings are made in the "Display" menu:

LCD (MeTa Premium only):

The illumination of the LCD can be dimmed from 0 to 100%. With automatic brightness control, the actual brightness depends on the ambient brightness.

Optionally, the brightness can be adjusted with a group address via the bus.

Rockers:

The lighting of the rockers can be dimmed from 0 to 100%. With automatic brightness control, the actual brightness depends on the ambient brightness. A minimum ambient brightness can be set, below which the lighting is switched off.

Optionally, the brightness can be adjusted with a group address via the bus.

Display LCD (MeTa Premium only);

The text display can be configured to display only the date, only texts or point graphs of group addresses (mode "group address"), or both (mode "auto"). The hold time for display in the text display can be parameterized.

In addition, the time and measured values can be displayed in a numeric display. This consists of up to five levels, which switch after an adjustable time.

The date and time for the display LCD can be requested with bus voltage recovery via the bus with 1-bit group addresses.

Rockers

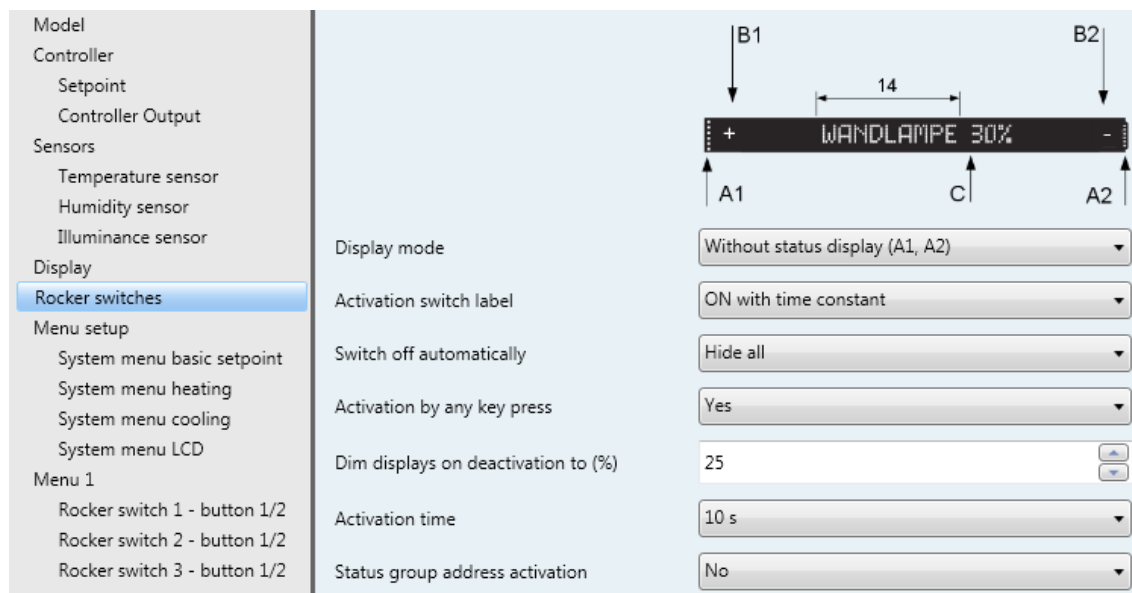


Figure 23: Rockers

The following properties can be parameterized in the "Rockers" menu:

- **Display Mode:** Up to eight (Meta Premium) or four (MeTa Starter / MeTa Standard) 1-bit objects can be displayed on the side edges of the rocking label.
- **Activation Rocker labeling:** The rockers can be set to inactive after non-actuation after a parameterizable time or by means of a group address. Activation can be carried out by key actuation or group address.
- **Automatic switch off:** In the inactive state, the rocking label or the entire display can be switched off.
- **Activate at any button press:** The inactive state can be exited by pressing any button or only when a menu button is pressed.
- **Display darker dimming when activating (%):** When the dimmer is inactive, the dimmer is dimmed to the value specified here.
- **Activation time:** Time after which, when not operated, the rockers become inactive
- **Status group address Activation:** The status of the flag labeling active / inactive can be sent to a group address.

Menu structure

Model	Menu levels	2
Controller	Fall-back to default menu	Yes
Setpoint	Alarm menu (via GA)	1
Controller Output	Default menu	1
Sensors	Show default menu after (s)	10
Temperature sensor	System menus	On long key press in menu
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		
Menu setup		
System menu basic setpoint		

Figure 24: Menu structure

Up to four menu levels are possible.

For more than one menu level, a default menu can be parameterized, which is displayed after an adjustable time period without actuation.

An alarm menu can be accessed when receiving a group address.

In addition to the menus, system menus can be entered, which can be used to change some controller parameters or the brightness control of the display. The system menus can be entered either by pressing the long button on one of the menu buttons or by scrolling through the menus after the last menu level.

The system menus can be released individually.

Menu structure - System menu basic setpoint

Model	Menu	Enable
Controller	Label basic setpoint	Basic setpoint
Setpoint		
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		
Menu setup		
System menu basic setpoint		

Figure 25: System menu basic setpoint

A labeling text of up to 14 characters can be specified for the system menus.

Menu structure - System menu heating

Model	Menu	Enable
Controller		
Setpoint		
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		
Menu setup		
System menu basic setpoint		
System menu heating		
	Label standby adjustment	Standby (H)
	Label economy adjustment	Economy (H)

Figure 26: System menu heating

Menu structure - System menu cooling

Model	Menu	Enable
Controller		
Setpoint		
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		
Menu setup		
System menu basic setpoint		
System menu heating		
System menu cooling		
	Label standby adjustment	Standby (C)
	Label economy adjustment	Economy (C)

Figure 27: System menu cooling

Menu structure - System menu LCD

Model	Menu	Enable
Controller		
Setpoint		
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		
Menu setup		
System menu basic setpoint		
System menu heating		
System menu cooling		
System menu LCD		
	Label LCD brightness	LCD
	Label automatic brightness	LCD auto
	Label switch brightness	Switch
	Label switch automatic brightness	Switch auto

Figure 28: System menu LCD

Menu

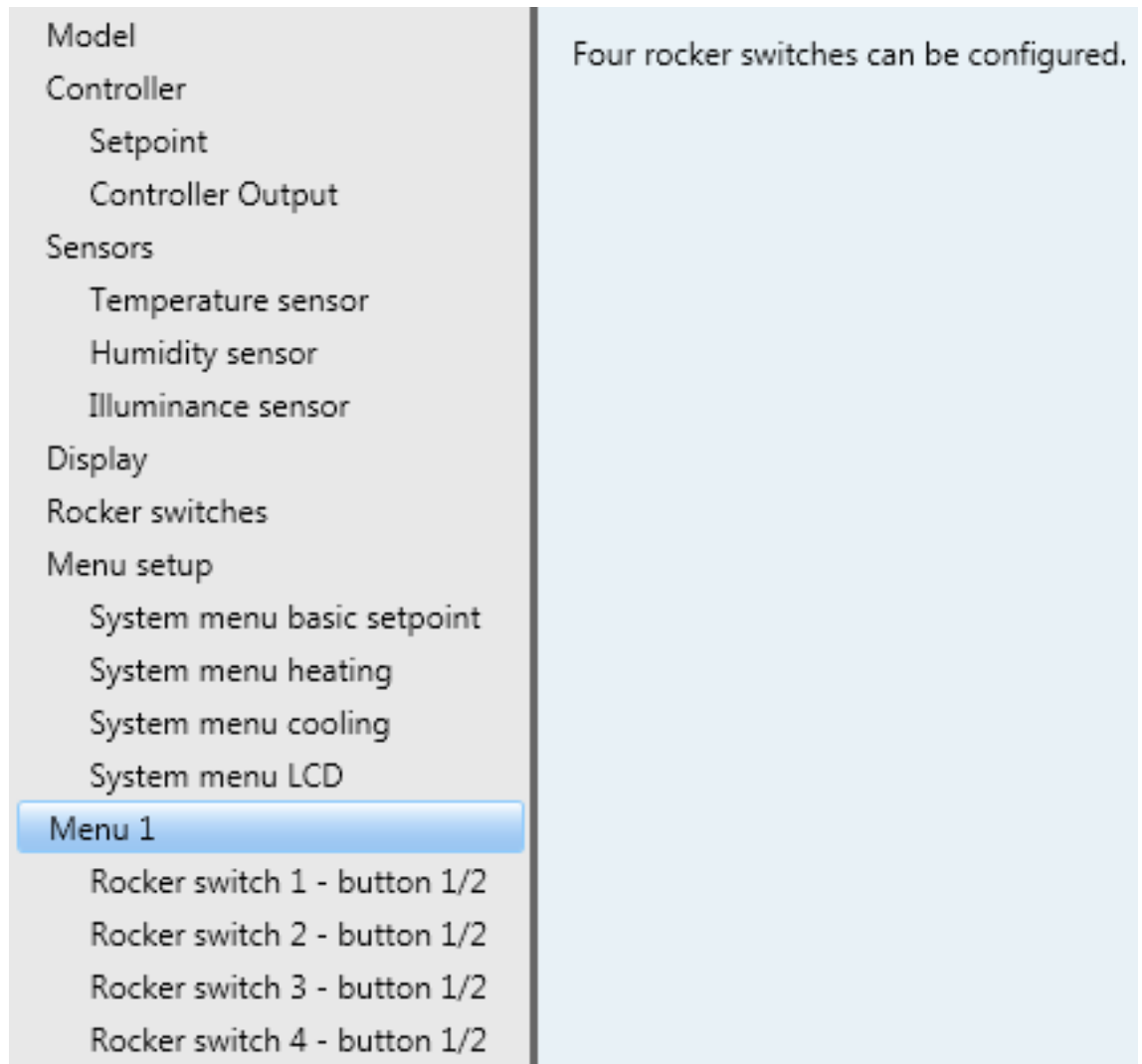


Figure 29: Menu

Depending on the version, there are four (MeTa Premium) or two (MeTa Starter / Standard) menus in one menu level.

Menu - rocker

Model	Button mode	Rocker switch
Controller		
Setpoint		
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches	Status display rocker switch (B1)	Label and status display
Menu setup	Label rocker switch (max. 14 characters)	Enertex
System menu basic setpoint	Group address for label	No
System menu heating	Rocker switch symbol (B1, B2)	Plus/Minus
System menu cooling	Direction	Normal
System menu LCD	Function	Switch
Menu 1	Feedback (C)	No
Rocker switch 1 - button 1/2	Value on pressing left rocker switch	ON
Rocker switch 2 - button 1/2	Value on releasing left rocker switch	No reaction
Rocker switch 3 - button 1/2	Value on pressing right rocker switch	OFF
Rocker switch 4 - button 1/2	Value on releasing right rocker switch	No reaction
Menu 2		
Rocker switch 1 - button 1/2		
Rocker switch 2 - button 1/2		
Rocker switch 3 - button 1/2		
Rocker switch 4 - button 1/2		
External contact		

Figure 30: Menu - rocker

In the "rocker" operating concept, the left and right buttons are assigned to the same function (e.g. switching).

The labeling of the rocker can be permanently overwritten with a group address.

Further details on the rocker functions: Rocker

Menu - Single buttons

Model		
Controller		
Setpoint		
Controller Output		
Sensors		
Temperature sensor		
Humidity sensor		
Illuminance sensor		
Display		
Rocker switches		
Menu setup		
System menu basic setpoint		
System menu heating		
System menu cooling		
System menu LCD		
Menu 1		
Rocker switch 1 - button 1/2		
Rocker switch 2 - button 1/2		
Rocker switch 3 - button 1/2		
Rocker switch 4 - button 1/2		
Menu 2		
Rocker switch 1 - button 1/2		
Rocker switch 2 - button 1/2		
Rocker switch 3 - button 1/2		
Rocker switch 4 - button 1/2		
External contact		

Button mode	Single buttons left and right
Left	
Display	No display
Function left button	Switch
Feedback (B1)	No
Value on pressing	ON
Value on releasing	No reaction
Right	
Display	No display
Function right button	Switch
Feedback (B2)	No
Value on pressing	OFF
Value on releasing	No reaction

Figure 31: Menu Single buttons

In the operating concept "single buttons left and right", the left and right buttons of a rocker can be parameterized independently of one another.

The labeling of the single button can be permanently overwritten with a group address.

Further details about the button functions: Single buttons

External contact

Model	Function	Switching (2 group addresses)
Controller		
Setpoint		
Controller Output		
Sensors	Group address 1	
Temperature sensor	Edge 0 => 1	1 / ON / DOWN
Humidity sensor	Edge 1 => 0	0 / OFF / UP
Illuminance sensor		
Display		
Rocker switches		
Menu setup	Group address 2	
System menu basic setpoint	Edge 0 => 1	1 / ON / DOWN
System menu heating	Edge 1 => 0	0 / OFF / UP
System menu cooling		
System menu LCD		
Menu 1		
Rocker switch 1 - button 1/2		
Rocker switch 2 - button 1/2		
Rocker switch 3 - button 1/2		
Rocker switch 4 - button 1/2		
Menu 2		
Rocker switch 1 - button 1/2		
Rocker switch 2 - button 1/2		
Rocker switch 3 - button 1/2		
Rocker switch 4 - button 1/2		
External contact		

Figure 32: External contact

The external contact (binary input) can take one of the following functions:

- Switch (1 group address): Write to a 1-bit group address
- Switch (2 group addresses): Write to two 1-bit group addresses
- Value 1 byte: Write to a 1 byte group address
- Scene: Call up a scene stored in an external scene actuator

Communication objects

Notes:

- Depending on the parameterization, some objects may not be available.

ID	Function	Name	Length	Type	Flags
0	Control	Basic setpoint temperature	16 Bit (f16)	DPT_Value_Temp	RWCT--

At the nominal temperatures for comfort, standby and night operation, it is important to ensure that all setpoints are in a fixed relationship to each other. All values are derived from the base temperature. This value can also be set in the ETS. With this 2 byte object, the base temperature and thus also all dependent target temperatures can be changed. In addition or alternatively, the basic setpoint can also be changed by means of an on-site operation in the second operating level. The basic setpoint sets the respective comfort temperature directly in the individual operating modes "Heating" or "Cooling". In the combined "heating and cooling" operating mode, the base set point adjusts the comfort temperature for heating either directly (asymmetrical dead zone) or indirectly (symmetrical dead zone) depending on the dead zone position configured in the ETS. The dead zone is the temperature zone in which neither heating nor cooling is performed. It is the difference between the comfort set temperatures for heating and cooling. The comfort setpoint temperature for cooling is then derived from the comfort setpoint temperature of the heating operation, taking into account the dead zone.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
1	Control	Current setpoint temperature	16 Bit (f16)	[9.1] DPT_Value_Temp	R-CT--

At the nominal temperatures for comfort, standby and night operation, it is important to ensure that all setpoints are in a fixed relationship with each other. The setpoint temperature is changed due to the setting of the operating mode. The calculated setpoint temperature of the controller can be queried with this object.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
2	Display	Character set	2 Byte	[234.001] DPT_LanguageCodeAlpha2_ASCII	-WC---

This object can be used to switch the character set of the rocker label. A 2 byte hex value must be transmitted. The following values are supported:

6465h / de : German ISO 8859-1

706ch / pl : Polish ISO 8859-2

7275h / ru : Cyrillic ISO 8859-5

6172h / ar : Arabic ISO 8859-6

656ch / el : Greek ISO 8859-7

6865h / he : Hebrew ISO 8859-8

7472h / tr : Turkish ISO 8859-9

6661h / fa : Farsi Windows-1256

Note: The object's read value is only defined if the object has been written at least once.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
3	Control	Heating actuator (analog)	8 Bit (u08)	[5.1] DPT_Scaling	R-CT--

This object outputs the control variable for the heating actuator with linear control.

Note: This object is only available if the "Control→ Heating / Cooling" parameter is set to *Heating*, *Heating (2-stage)*, *Heating and Cooling* or *Heating and Cooling (2-stage)*.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
4	Control	Status of the heating actuator	1 Bit (b01)	[1.1] DPT_Switch	R-CT--

This object specifies whether to heat. Telegrams are sent automatically when the state changes.

The object value is 1 if object "heating actuator (analog)" > 0.

The object value is 0 if object "heating actuator (analog)" = 0.

Thus, the telegram may be used e.g. to control a pre-pump.

Note: This object is only available if the "Control→ Heating / Cooling" parameter is set to *Heating*, *Heating (2-stage)*, *Heating and Cooling* or *Heating and Cooling (2-stage)*.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
5	Control	Cooling actuator (analog)	8 Bit (u08)	[5.1] DPT_Scaling	R-CT--

This object outputs the control variable for the cooling actuator with linear control.
Note: This object is only available if the "Control→ Heating / Cooling" parameter is set to *Cooling*, *Cooling (2-stage)*, *Heating and Cooling* or *Heating and Cooling (2-stage)*.
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
6	Control	Status of the cooling actuator	1 Bit (b01)	[1.1] DPT_Switch	R-CT--

This object specifies whether to cool. Telegrams are sent automatically when the state changes.
The object value is 1 if object "Cooling actuator (analog)" > 0.
The object value is 0 if object "Cooling actuator (analog)" = 0.
Thus, the telegram may be used e.g. to control a pre-pump.
Note: This object is only available if the "Control→ Heating / Cooling" parameter is set to *Cooling*, *Cooling (2-stage)*, *Heating and Cooling* or *Heating and Cooling (2-stage)*.
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
7	Control	Add. Heating actuator (analog)	8 Bit (u08)	[5.1] DPT_Scaling	--CT--

This object outputs the control variable for the additional heating actuator for linear control.
Note: This object is only available if the "Control→Heating / Cooling" parameter is set to *Heating (2-stage)* or *Heating and Cooling (2-stage)*.
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
8	Control	Status of the additional heating actuator	1 Bit (b01)	[1.1] DPT_Switch	--CT--

This object specifies whether to heat. Telegrams are sent automatically when the state changes.
The object value is 1 if object "Add. Heating actuator (analog)" > 0.
The object value is 0 if object "Add. Heating actuator (analog)" = 0.
Thus, the telegram may be used e.g. to control a pre-pump.
Note: This object is only available if the "Control→Heating / Cooling" parameter is set to *Heating (2-stage)* or *Heating and Cooling (2-stage)*.
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
9	Control	Add. Cooling actuator (analog)	8 Bit (u08)	[5.1] DPT_Scaling	--CT--

This object outputs the control variable for the additional cooling actuator with linear control.
Note: This object is only available if the "Control→Heating / cooling controller" parameter is set to *Cooling (2-stage)* or *Heating and Cooling (2-stage)*.
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
10	Control	Status of the additional cooling actuator	1 Bit (b01)	[1.1] DPT_Switch	--CT--

This object specifies whether to cool. Telegrams are sent automatically when the state changes.
The object value is 1 if object "Add. Cooling actuator (analog)" > 0.
The object value is 0 if object "Add. Cooling actuator (analog)" = 0.
Thus, the telegram may be used e.g. to control a pre-pump.
Note: This object is only available if the "Control→Heating / cooling controller" parameter is set to *Cooling (2-stage)* or *Heating and Cooling (2-stage)*.
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
11	Control	Operating mode of the controller	8 Bit (u08)	[20.102] DPT_HVACMode	RWCT--

A common 1 byte switching object exists for the operating modes comfort, standby, night and building protection. This can be used to switch the operating mode after the reception of a single telegram at runtime. The operating mode is set according to the following values:

0 = Automatic

1 = Comfort

2 = Standby

3 = Night

4 = Building protection

Note: This object is only available if the parameter "Controller → Set operating mode via" is set to Byte object.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
12	Control	Comfort mode	1 Bit (b01)	[1.1] DPT_Switch	-WC---

This object can be switched to "Comfort" mode. This sets the current setpoint temperature to the basic setpoint temperature. The telegram may be released e.g. by a presence detector or a presence button.

Note: This object is only available if the parameter "Controller → Set operating mode via" is set to 1-bit objects.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
13	Control	Standby mode	1 Bit (b01)	[1.1] DPT_Switch	-WC---

This object can be switched to "Standby" mode. This lowers the current setpoint temperature in heating mode to the basic setpoint temperature minus the configurable standby lowering. In the cooling mode, the current setpoint temperature is raised to the basic setpoint temperature plus the standby increase. The telegram can be triggered e.g. by a timer.

Note: This object is only available if the parameter "Controller → Set operating mode via" is set to 1-bit objects.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
14	Control	Night mode	1 Bit (b01)	[1.1] DPT_Switch	-WC---

This object can be switched to "Night" mode. This lowers the current setpoint temperature in heating mode to the basic setpoint temperature minus the configurable night lowering. In cooling mode, the current setpoint temperature is raised to the basic setpoint temperature plus the night increase. The telegram can be triggered e.g. by a timer.

Note: This object is only available if the parameter "Controller → Set operating mode via" is set to 1-bit objects.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
15	Control	Building protection mode	1 Bit (b01)	[1.1] DPT_Switch	-WC---

This object can be switched to the "Building protection" mode. This means that the temperature in heating mode should not fall below the parameterizable setpoint Frost protection or, in cooling mode, the configurable setpoint value should not exceed heat protection.

If the parameter "General → Use door or window contact" is set to Yes, the building protection mode can be activated automatically when a monitored door or window is opened. This leads to the immediate closing of the heating or cooling valve. On the one hand, the waste of heat or cooling energy is avoided, on the other hand, it is ensured that the temperature controller remains active and the space can not freeze or heat up as desired.

Note: This object is only available if the parameter "Controller → Set operating mode via" is set to 1-bit objects.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
16	Control	Dew point mode	1 Bit (b01)	[1.1] DPT_Switch	-WC---

This object can be switched to the operating mode "Dew point". This means that the heating or cooling is switched off unconditionally.

Note: This object is only available if the parameter "Controller → Set operating mode via" is set to 1-bit objects.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
17	Control	Controller status	8 Bit (u08)	[non-standard]	R-CT--

This object contains the current controller status, which is sent automatically in case of status changes. The controller status is summed up from the following values:

1 = Comfort
 2 = Standby
 4 = Night
 8 = Building protection
 16 = Dew point
 32 = Heating
 64 = Dead zone (Controller inactive)
 128 = Frost alarm

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
18	Control	Door or window status	1 Bit (b01)	[1.019] DPT_Window_Door	-WC---

Object for monitoring a door or window contact in order to switch to the "Building protection" mode.

Note: This object is only available if the parameter "Controller → Use door or window contact" is set to Yes.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
19	Control	Presence detectors	1 Bit (b01)	[1.1] DPT_Switch	-WC---

Via this object, the presence of persons can be reported to the room controller in order to extend the comfort mode.

Note: This object is only available if the parameter "Controller → Use presence detector" is set to Yes.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
20	Control	Switch between heating and cooling	1 Bit (b01)	[1.100] DPT_Heat/Cool	-WC---

With this object you can switch manually between heating and cooling mode:

0 = Cooling
 1 = Heating

After the application has been loaded, a mode must be specified as both heating and cooling are deactivated as standard.

Note: This object is only available if the "Heating / Cooling" parameter is set to *Cooling*, *Cooling (2-stage)*, *Heating and Cooling* or *Heating and Cooling (2-stage)*. In addition, the parameter "General → Switchover between heating and cooling" must then be set to *object*.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
21	Status	Controller status RHCC	16 Bit (u16)	[22.101] DPT_StatusRHCC	R-CT--

This object represents parts of the controller status, but for most users, the more common object 17 is interesting for the controller status. The controller status is added from the following values:

128 = Heating off
 256 = Heating/Cooling
 2048 = Cooling off
 4096 = Dew point mode
 8192 = Frost alarm

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
22	Rockers	Labeling	1 Bit (b01)	[1.1] DPT_Switch	-WC---

The rocker labeling can be activated via this object.

1 = activate
 0 = deactivate

Note: This object is only available when the "Rocker → Activation rocking label" parameter is set to *ON with time constant* or *ON / OFF*. If *ON with time constant*, only the activation is possible; in the case of *ON / OFF*, deactivation is also possible.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
23	Rocker	Status Labeling	1 Bit (b01)	[1.1] DPT_Switch	--CT--

This object displays the activation state of the rocker label.

1 = activated

0 = deactivated

Note: This object is only available when the "Rocker → Activation rocking label" parameter is set to *ON with time constant* or *ON / OFF*.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
24	Lighting	Brightness Rockers	8 Bit (u08)	[5.1] DPT_Scaling	-WC---

This object can be used to adjust the brightness of the rocker lighting. Values from 0% (minimum brightness) to 100% (maximum brightness) are possible. The value from the ETS is permanently overwritten.

Note: The object's read value is only defined if the object has been written at least once.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
25	Date	Date	3 Bytes (d24)	[11.1] DPT_Date	-WCTU-

The date of the room controller can be set via this object.

Versions: Premium

ID	Function	Name	Length	Type	Flags
26	Time	Time	3 Bytes (t24)	[10.1] DPT_TimeOfDay	-WCTU-

The time of the room controller can be set via this object.

Versions: Premium

ID	Function	Name	Length	Type	Flags
27	Lighting	Power saving mode	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With this object, the room controller can be set into the energy saving mode. The display and the lighting are deactivated.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
28	Lighting	Brightness LCD	8 Bit (u08)	[5.1] DPT_Scaling	-WC---

This object can be used to adjust the brightness of the LCD lighting. Values from 0% (minimum brightness) to 100% (maximum brightness) are possible. The value from the ETS is permanently overwritten.

Note: The object's read value is only defined if the object has been written at least once.

Version: Premium

ID	Function	Name	Length	Type	Flags
29	Menu	Alarm	1 Bit (b01)	[1.5] DPT_Alarm	-WC---

With the help of this object the alarm menu can be called up.

Note: The object is only available if there is more than one menu level.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
30	Sensor	Internally measured temperature	16 Bit (f16)	[9.1] DPT_Value_Temp	R-CT--

This object contains the temperature currently measured by the room controller, which can be sent cyclically and / or on change.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
31	Sensor	Internally measured humidity	16 Bit (f16)	[9.007] DPT_Value_Humidity	R-CT--

This object contains the air humidity currently measured by the room controller, which can be sent cyclically and / or on change.

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
32	Sensor	Lighting intensity	16 Bit (u16)	[9.4] DPT_Value_Lux	R-CT--

This object contains the lighting intensity currently measured by the room controller, which can be transmitted cyclically and / or on change.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
33	Sensor	Lighting intensity(red)	16 Bit (u16)	[9.4] DPT_Value_Lux	R-CT--

This object contains the lighting intensity (red) currently measured by the room controller, which can be transmitted cyclically and / or on change.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
34	Sensor	Lighting intensity(green)	16 Bit (u16)	[9.4] DPT_Value_Lux	R-CT--

This object contains the lighting intensity (green) currently measured by the room controller, which can be transmitted cyclically and / or on change.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
35	Sensor	Lighting intensity(blue)	16 Bit (u16)	[9.4] DPT_Value_Lux	R-CT--

This object contains the lighting intensity (blue) currently measured by the room controller, which can be transmitted cyclically and / or on change.

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
36	Sensor	Temperature for display	16 Bit (f16)	[9.1] DPT_Value_Temp	-WCTU-

This object can be used to send the current temperature to the room controller from an external sensor in order to display it on the display. See the "External sensor" parameter under "Display".

Version: Premium

ID	Function	Name	Length	Type	Flags
37	Sensor	External temperature sensor	16 Bit (f16)	[9.1] DPT_Value_Temp	-WCTU-

If the object is written, the room controller controls with the externally transmitted temperature. See parameter "Temperature sensor → Reference temperature".

Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
38	Display	Symbols	8 Bit (u08)	[non-standard]	-WC---

With this object, different symbols can be displayed on the display of the room controller. The value for the displayed symbols is summed up from the following list:

1 = Sun

2 = Rain

4 = 1/2 Sun

8 = Cloud

16 = Frost

32 = @

64 = Lamp

A 0 disables all icons. Also note the following: To display a rain cloud, both rain and cloud must be activated (2+8=10).

Version: Premium

ID	Function	Name	Length	Type	Flags
39	Display	Display-Text 21	14 Bytes (c14)	[16.1] DPT_String_8859_1	-WC---

Using this and the next object, a 28 character long text can be sent to the room controller to output it in the dot matrix area of the display. Scrolling is activated for text lengths that do not fit into the display line. The display is made as soon as object 40 is received.

Version: Premium

ID	Function	Name	Length	Type	Flags
40	Display	Display-Text 22	14 Bytes (c14)	[16.1] DPT_String_8859_1	-WC---

See object 39.

Version: Premium

ID	Function	Name	Length	Type	Flags
41	Display	Dot matrix 1	14 Bytes	[non-standard]	-WC---

In the object (and the following two objects), one bit is reserved for each pixel of the dot matrix display. An external program can be used to create a bit pattern, which can then be displayed in the room controller. Objects 42 and 43 must also be written.

Version: Premium

ID	Function	Name	Length	Type	Flags
42	Display	Dot matrix 2	14 Bytes	[non-standard]	-WC---

Continued on object 41.

Version: Premium

ID	Function	Name	Length	Type	Flags
43	Display	Dot matrix 3	14 Bytes	[non-standard]	-WC---

Continued on object 41 and 42.

Version: Premium

ID	Function	Name	Length	Type	Flags
44	Display	Display-Text	14 Bytes (c14)	[16.1] DPT_String_8859_1	-WC---

Using this object, a 14-character text can be sent to the room controller to output it in the dot matrix area of the display. Scrolling is activated for text lengths that do not fit into the display line. If there are spaces at the end of the string, these are ignored, i.e. no scrolling.

Version: Premium

ID	Function	Name	Length	Type	Flags
45	Sensor	Humidity alarm	1 Bit	[1.1] DPT_Switch	--CT--

Alarm object that is sent with the value 1 or 0 if the threshold value is exceeded or fallen below.
Note: This object is only available when the parameter "Humidity sensor" - "1 Bit alarm" is set to "Yes".
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
46	Sensor	Threshold humidity	16 Bit (f16)	[9.007] DPT_Value_Humidity	--WC---

Threshold for humidity alarm. The value from the ETS is permanently overwritten.
Note: This object is only available when the parameter "Humidity sensor" - "1 Bit alarm" is set to "Yes".
Note: The object's read value is only defined if the object has been written at least once.
Versions: Standard, Premium

ID	Function	Name	Length	Type	Flags
47	Sensor	Brightness alarm	1 Bit	[1.1] DPT_Switch	--CT--

Alarm object that is sent with the value 1 or 0 if the threshold light intensity is exceeded or fallen below.
Note: This object is only available if the parameter "Light sensor" - "1 Bit alarm" is set to "Yes".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
48	Sensor	Threshold light intensity	16 Bit (u16)	[9.4] DPT_Value_Lux	--WC---

Threshold for brightness alarm. The value from the ETS is permanently overwritten.
Note: This object is only available when the parameter "Humidity sensor" - "1 Bit alarm" is set to "Yes".
Note: The object's read value is only defined if the object has been written at least once.
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
49	External contact	Switch 1	1 Bit	[1.1] DPT_Switch	--CT--

Object that is sent when the external contact (binary input) is opened or closed with the parameterized value.
Note: This object is only available if the parameter "External contact" - "Function" is set to "Switch (1 group address)" or "Switch (2 group addresses)".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
50	External contact	Switch 2	1 Bit	[1.1] DPT_Switch	--CT--

Object that is sent when the external contact (binary input) is opened or closed with the parameterized value.
Note: This object is only available if the parameter "External contact" - "Function" is set to "Switch (2 group addresses)".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
51	External contact	Value 1 Byte	1 Byte	[5.1] DPT_Scaling	--CT--

Object that is sent when the external contact (binary input) is opened or closed with the parameterized value.
Note: This object is only available if the parameter "External contact" - "Function" is set to "Value 1 byte".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
51	External contact	Scene	1 Byte	[18.1] DPT_SceneControl	--CT--

Object that calls the parameterized scene of an external scene block when opening or closing the external contact.
Note: This object is only available if the parameter "External contact" - "Function" is set to "Value 1 byte".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
52	Menu	Status left rocker 1	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the left status display of the rocker 1 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
53	Menu	Status right rocker 1	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the right status display of the rocker 1 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
54	Menu	Status left rocker 2	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the left status display of the rocker 2 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
55	Menu	Status right rocker 2	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the right status display of the rocker 2 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
56	Menu	Status left rocker 3	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the left status display of the rocker 3 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Version: Premium

ID	Function	Name	Length	Type	Flags
57	Menu	Status right rocker 3	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the right status display of the rocker 3 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Version: Premium

ID	Function	Name	Length	Type	Flags
58	Menu	Status left rocker 4	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the left status display of the rocker 4 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Version: Premium

ID	Function	Name	Length	Type	Flags
59	Menu	Status right rocker 4	1 Bit (b01)	[1.1] DPT_Switch	-WC---

With the aid of this object the right status display of the rocker 4 can be shown (value = 1) or removed (value = 0).
Note: The object is only available when the "Rocker" - "Display mode" parameter is set to "With status display (A1, A2)".

Version: Premium

ID	Function	Name	Length	Type	Flags
60	Menu 1 rocker 1	Labeling center	14 Bytes (c14)	[16.1] DPT_String_8859_1	-WC---
With this object, the labeling of the rocker 1 parameterized in the ETS can be permanently overwritten. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Group address for label" is set to "Yes". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
60	Menu 1 rocker 1	Labeling left	14 Bytes (c14)	[16.1] DPT_String_8859_1	-WC---
With this object, the labeling of the left button of the rocker 1 parameterized in the ETS can be permanently overwritten. Note: The object is only available when the "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" parameter is set to "Left and right single buttons" and the "Menu 1" - "Rocker 1 / Button 1" parameter / 2 "-" group address for label button on the left "is set to" Yes ". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
61	Menu 1 rocker 1	Switching	1 Bit	[1.1] DPT_Switch	-WCTU-
Switch object, which is sent with the parameterized values when the buttons of rocker 1 are pressed. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function" is set to "Switch", "Dimming" or "2 Channel operation". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
61	Menu 1 rocker 1	Switch left	1 Bit	[1.1] DPT_Switch	-WCTU-
Switch object, which is sent by pressing the left button of the rocker 1 with the parameterized values. Note: The object is only available when the "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" parameter is set to "Left and right single buttons" and the "Menu 1" - "Rocker 1 / Button 1" parameter / 2 "-" Function button on the left "is set to" Switch "," Dimming "or" 2 Channel operation ". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
61	Menu1 rocker 1	Short-time operation	1 Bit	[1.7] DPT_Step	-WCTU-
Switch object for blind short-time operation, which is sent with the parameterized values when the buttons of rocker 1 are pressed. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function" is set to "Blind". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
61	Menu 1 rocker 1	Short-time operation left	1 Bit	[1.7] DPT_Step	-WCTU-
Switch object for blind short-time operation, which is sent by pressing the left button of the rocker 1 with the parameterized values. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function button left" is set to "blind". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
62	Menu 1 rocker 1	Dimming	4 Bits	[3.7] DPT_Control_Dimming	-CT---
Dimming object, which is sent with the parameterized values when the buttons of rocker 1 are pressed. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function" is set to "Dimming". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
62	Menu 1 rocker 1	Dimming left	4 Bits	[3.7] DPT_Control_Dimming	-CT---

Dimming object, which is sent with the parameterized values when the left button of rocker 1 is pressed.
Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function button on the left" is set to "Dimming".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
63	Menu 1 rocker 1	Long-term operation	1 Bit	[1.8] DPT_UpDown	-CT---

Switch object for long-time blind operation, which is sent with the parameterized values when the buttons of rocker 1 are pressed.
Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function" is set to "Blind".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
63	Menu 1 rocker 1	Long-term operation left	1 Bit	[1.8] DPT_UpDown	-CT---

Switch object for blind long-term operation, which is sent by pressing the left button of the rocker 1 with the parameterized values.
Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function button left" is set to "blind".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
64	Menu 1 rocker 1	Encoder / Dimmer 1 Byte	1 Byte	[5.1] DPT_Scaling	-CT---

Encoder object 1 byte or object for absolute dimming, which is sent when pressing the buttons of the rocker 1 with the set values.
Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function" is set to "Value 1 byte" or "2 channel operation".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
64	Menu 1 rocker 1	Encoder / Dimmer 1 Byte left	1 Byte	[5.1] DPT_Scaling	-CT---

Encoder object 1 byte or object for absolute dimming that is sent when you press the left button of the rocker 1 with the set values.
Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function key left" is set to "value 1 byte" or "2 channel operation".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
64	Menu 1 rocker 1	Scene	1 Byte	[1.8] DPT_SceneControl	-CT---

Object which, when pressing the buttons of rocker 1, calls or saves the parameterized scene of an external scene block.
Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function" is set to "Scene".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
64	Menu 1 rocker 1	Scene left	1 Byte	[1.8] DPT_SceneControl	-CT---

Object which, when pressing the left button of rocker 1, calls or saves the parameterized scene of an external scene block.
Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function button left" is set to "Scene".
Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
65	Menu 1 rocker 1	Encoder 2 Byte	2 Bytes	[9.1] DPT_Value_Temp	-CT---

Encoder object 2 byte, which is sent with the parameterized values when the buttons of the rocker 1 are pressed.

Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function" is set to "Encoder 2 byte".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
65	Menu 1 rocker 1	Encoder 2 Byte left	2 Bytes	[9.1] DPT_Value_Temp	-CT---

Encoder object 2 byte, which is sent with the parameterized values when the left button of the rocker 1 is pressed.

Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function button left" is set to "value 2 byte".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
66	Menu 1 rocker 1	Labeling right	14 Bytes (c14)	[16.1] DPT_String_8859_1	-WC---

With this object, the labeling of the right button of the rocker 1 which has been parameterized in the ETS can be permanently overwritten.

Note: The object is only available when the "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" parameter is set to "Left and right single buttons" and the "Menu 1" - "Rocker 1 / Button 1" parameter / 2 "-" group address for label button right "is set to" yes".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
67	Menu 1 rocker 1	Switch right	1 Bit	[1.1] DPT_Switch	-WCTU-

Switch object, which is sent with the parameterized values when the right button of the rocker 1 is pressed.

Note: The object is only available when the "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" parameter is set to "Left and right single buttons" and the "Menu 1" - "Rocker 1 / Button 1" parameter / 2 "-" function button right "is set to" switch "," dimming "or" 2 channel operation".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
67	Menu 1 rocker 1	Short-time operation right	1 Bit	[1.7] DPT_Step	-WCTU-

Switch object for blind short-time operation, which is sent with the parameterized values when the right button of the rocker 1 is pressed.

Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function button right" is set to "blind".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
68	Menu1 rocker 1	Dimming right	4 Bits	[3.7] DPT_Control_Dimming	-CT---

Dimming object, which is sent with the parameterized values when the right button of the rocker 1 is pressed.

Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function button on the right" is set to "Dimming".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
69	Menu 1 rocker 1	Long-term operation right	1 Bit	[1.8] DPT_UpDown	-CT---

Switch object for long-time blind operation, which is sent with the parameterized values when the right-hand button of the rocker 1 is pressed.

Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function button right" is set to "blind".

Versions: Starter, Standard, Premium

ID	Function	Name	Length	Type	Flags
70	Menu 1 rocker 1	Encoder / Dimmer 1 Byte right	1 Byte	[5.1] DPT_Scaling	-CT---
Encoder object 1 byte or object for absolute dimming, which is sent with the parameterized values when the right-hand button of the rocker 1 is pressed. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function button right" is set to "value 1 byte" or "2 channel operation". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
70	Menu 1 rocker 1	Scene right	1 Byte	[1.8] DPT_SceneControl	-CT---
Object which, when pressing the right button of rocker 1, calls or saves the parameterized scene of an external scene block. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Function button right" is set to "Scene". Versions: Starter, Standard, Premium					

ID	Function	Name	Length	Type	Flags
71	Menu 1 rocker 1	Encoder 2 Byte right	2 Bytes	[9.1] DPT_Value_Temp	-CT---
Encoder object 2 byte, which is sent with the parameterized values when the right-hand button of the rocker 1 is pressed. Note: The object is only available if the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "Operating concept" is set to "Rocker" and the parameter "Menu 1" - "Rocker 1 / Button 1/2" - "function button right" is set to "value 2 byte". Versions: Starter, Standard, Premium					

The remaining button or menu levels result in the objects corresponding to the objects ID 60 - 71.

Note: Further menu levels are to be set with the parameter "Menu structure" - "Menu levels".

Versions: Starter (rockers 1 and 2), Standard (rockers 1 and 2), Premium (rockers 1, 2, 3 and 4))

ID	Name	Object function	Length	Type	Flags
252	Date	Request date	1 Bit	[1.1] DPT_Switch	-CT---
Request of the current date from a clock on the KNX bus					

ID	Name	Object function	Length	Type	Flags
253	Time	Request time	1 Bit	[[1.1] DPT_Switch	-CT---
Request of the current time from a clock on the KNX bus					

Technical specifications

Enertex® MeTa Starter

Enertex® MeTa Standard

Symbols	 May not be disposed of via household waste.
KNX	DC 21 ... 32 V SELV Power consumption with default settings typical 7. ... 16 mA at 30 V (depending on ambient brightness) connector type 5.1
External contact (binary input)	Supply by MeTa with DC $\leq 21,5$ V
Ambient temperature	-5 ... +45° C
Installation	Only for use in dry indoor areas. Protection IP20 Protection class III
Dimensions	90 mm x 90 mm x 14,6 mm

Enertex® MeTa Premium

Symbols	 — May not be disposed of via household waste.
KNX	DC 21 ... 32 V SELV Power consumption with default settings typical 10. ... 33 mA at 30 V (depending on ambient brightness) connector type 5.1
External contact (binary input)	Supply by MeTa with DC $\leq 21,5$ V
Ambient temperature	-5 ... +45° C
Installation	Only for use in dry indoor areas. Protection IP20 Protection class III
Dimensions	90 mm x 161 mm x 14,6 mm