Sensors & Controls

sceneCOM

Manual Daylight linking



TRIDONIC

Legal information

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1 How to use these instructions

We are pleased that you have chosen this $Tridonic\ GmbH\ \&\ Co\ KG$ product. So that you can get the most from these instructions, this section provides the following information:

- Signs and icons in these instructions
- Further information
- Target audience of these instructions
- Software version

Signs and icons in these instructions

The following signs and icons are used in these instructions:

Sign/icon	Explanation		
1.	Individual steps in the instruc	Individual steps in the instructions are numbered.	
\triangleright	Single-step instructions are	indicated by the \triangleright icon at the beginning of the line.	
0	After a step has been described, a description of the expected results will follow. These results are indicated by the ⊃ icon at the beginning of the line.		
_	Requirements which need to	be checked before carrying out a step are indicated by —.	
i	Notes can be recognised by	Notes can be recognised by the ${f i}$ icon. In addition, notes are identified by the word Note .	
[Bold text]	Bold text indicates words that are shown on a device display or software user interface.		
\triangle	Danger and safety instructions are indicated by this icon. Safety and warning information is labelled and classified using the following words:		
	DANGER indicates an immediate danger. This could lead to death or severe injury if not avoided.		
	 WARNING indicates a potentially dangerous situation. This could lead to death or severe injury if not avoided. CAUTION indicates a potentially dangerous situation. This could lead to minor injury or damage to property if not avoided. 		
	Attention	indicates a situation involving potential damage. If it is not avoided, the product or something in the vicinity may be damaged.	

Table 1: Signs and icons in these instructions



1 How to use these instructions

Further information

Further information on the setup and function of your *sceneCOM* system can be found in our product and system documentation.

If you should have any further questions, please contact your sales partner.

General information on our products can be found on our website: www.tridonic.com

Target audience of these instructions

This manual is intended for electricians without any special product training who would like to commission and configure daylight linking with one or more light sensors.

Software version

These instructions are based on software version sceneCOM 3.1.0.



Note

This manual contains path information which can be used to access the configuration options. The path always starts from the app overview.

Example: "Path: app overview > **Basic settings** > **Date and time**" means that you should go to the app overview, tap on **Basic settings** and then tap the **Date and time** button.



2 Other available documents

All *sceneCOM* manuals can be downloaded from the website: https://www.tridonic.com

Manual	Description	
Commissioning and maintenance	This manual is aimed at electricians without any special product training and describes how the basic functions can be commissioned. It also describes general maintenance functions.	
Shows	This manual is aimed at electricians without any special product training and describes how shows can be commissioned and configured.	
Special luminaires	This manual is aimed at electricians without any special product training and describes how special luminaires (e.g. RGB luminaires TW luminaires) can be commissioned and configured.	
Self-contained emergency luminaires	This manual is aimed at electricians without specific product training and describes how emergency lighting functions for self-contained emergency luminaires can be commissioned, configured and monitored in a <i>sceneCOM</i> system that itself has already been commissioned.	
BACnet	This manual is aimed at electricians and system integrators without any special product training and describes how BACnet can be commissioned and configured.	
REST API & MQTT	This manual is aimed at system integrators without any special <i>Tridonic</i> product training and describes how REST API and MQTT can be commissioned and configured.	

Table 2: Other available documents – sceneCOM



3 Safety instructions



Attention

- The sceneCOM system may only be used for the application area specified.
- Relevant health and safety regulations must be observed.
- Assembly, installation and commissioning may only be carried out by qualified personnel.
- The *sceneCOM* system and connected devices can only be operated when in complete working order.
- The manufacturer is neither liable nor does it accept any guarantee for consequential damage that may occur if these instructions are not followed.



4 Navigation principles

There are different buttons in the web application for commissioning, configuring and operating the system. If a button is tapped, its colour changes briefly.

Button	Description
< * * >	Set value (e.g. on the start page) You can enter a specific value in the click area so that all devices have the same control value. If, for example, different control values (80%, 60%) are set for the luminaires and you tap on 50%, all luminaires switch to the control value of 50%. If you tap on the left or right click area, the value you are setting decreases or increases
	respectively in the entire effective range by one unit. If different control values are saved for the luminaires (80%, 60%, 20%) and you tap on the 🔅 button, these control values are increased by one unit (81%, 61%, 21%). This function is not available for all setting options.
	Set value (e.g. fade time) Tap these buttons to increase or decrease the value being set. Tap the button to change the value by one unit. Tap and hold the button to change the value, and release when the desired value has been reached. The longer the button is held, the faster the value is changed.
— 12:00 +	Special feature: set the time If the time is tapped, the Set time view appears. The hours and minutes can be set separately here.
> ~	Expand – collapse The arrow indicates that additional information or selection options can be displayed (e.g. devices in a group). Tap the arrow pointing right to expand the information or selection options. The arrow changes so that it is pointing down. Tap the arrow pointing down to collapse the information or selection options. The arrow changes so that it is pointing right again.
✓	Save or confirm Tap this button to save the settings or confirm a message.
	Option not selected – option selected (single choice) This button marks multiple options that are available (e.g. different types of date groups), from which only one can be selected. As soon as an option for a switch is selected, all other switches change to the other option accordingly.
	Option not selected – option selected (multiple choice) This button marks multiple options that are available, from which multiple options can be selected. As soon as an option is selected, it is highlighted.
	Setting not selected – setting selected If an empty button is tapped, the button is marked with a purple background. One or more control elements (such as sliders) appear below.
	Switch between individual pages of the app overview The number of points corresponds to the number of the pages in the app overview. The point filled in with colour indicates the page currently being displayed. Tap an empty point to go to the corresponding page.
TRIDONIC	Tap the logo to access the Information view. This page contains manufacturer information, the reference number and version of the web application and information on the licences used.

Table 3: Navigation principles

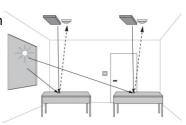


5 sceneCOM and daylight linking

Daylight linking is a way of controlling luminaires whilst taking into account the natural daylight available. Controlling the artificial light by adjusting it to the natural daylight achieves optimal lighting quality and saves additional energy.

The amount of available daylight is detected by one or more light sensors:

• Ambient light sensors: sensors for detecting the reflected artificial light and daylight in the room (e.g. basicDIM DGC sensor).



The light sensor does not have to be located in the room where daylight linking will be enabled.

Measurement points are used to control daylight linking for artificial light. The measurement point defines the maximum amount of light a luminaire can output. For each measurement point, the illuminance at the workspace is measured with a luxmeter, once with artificial light set to 100% and once at 0%. These two values and the sensor values currently being measured combine to form one measurement point.

Measured illuminance (100%)

→ Current sensor value when measuring illuminance

Measured illuminance (0%)

→ Current sensor value when measuring illuminance

= measurement point (MP)



Note

The value of the light sensor must not change too drastically between the two measurements, i.e. the available daylight in the room must remain the same. Otherwise both measurements must be repeated.

The measurement points are then used to calculate the amount of artificial light required to achieve the required illuminance. The number of measurement points created in a room depends on the following factors:

- Light sensors used: When ambient light sensors are used, only one measurement point can be created, which in turn can have secondary measurement points. At least two measurement points are required when daylight sensors are used.
- Local conditions
- Luminaires installed

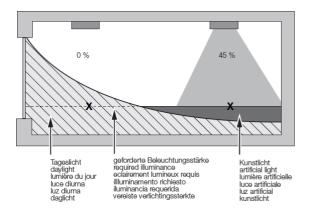
Secondary measurement points can be created for daylight linking with ambient light sensors. Secondary measurement points are located in the effective range of the primary measurement point and are used to regulate several areas with one ambient light sensor. For secondary measurement points, the illuminance at the workspace is measured with a luxmeter, once with artificial light set to 100% and once at 0%. If the daylight between the measurements of the primary and secondary measurement points has changed too dramatically, the illuminance at the primary measurement point may need to be measured again at 0% intensity. This value only affects the secondary measurement point selected.



5 sceneCOM and daylight linking

A unique measurement point must be assigned to every luminaire in order to achieve sufficient and also energy-saving lighting levels. When using daylight sensors, luminaires with the same amount of available daylight can be assigned to the same measurement point. This allows you to achieve even illumination of the room without having to create as many measurement points.

A daylight sensor is used in the following example. As a result, two measurement points are needed: one at the workspace below the left luminaire and one below the right luminaire. The measurement points are marked with an X.



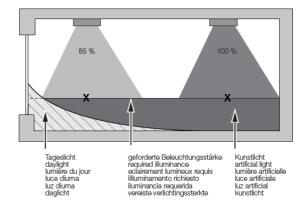


Figure 1: Example of daylight linking with a lot of daylight in the room

Figure 2: Example of daylight linking with little daylight in the room

Integrate daylight linking with ambient light sensors in a *sceneCOM* system.

For more information see Section Integrating daylight linking with ambient light sensors in a sceneCOM system of the sensors in a sceneCOM system.



5 sceneCOM and daylight linking

Integrating daylight linking with ambient light sensors (e.g. basicDIM DGC sensor) in a sceneCOM system

The following steps are required:

Step 1: Activate the **Daylight linking** app.
 Path: App overview > sceneCOM Store
 For more information see Section Licensing 1111

Step 2: Address an ambient light sensor.
 Path: App overview > Addressing > Input devices > Sensors
 For more information see Manual Commissioning and maintenance

Step 3: Select the effective range.
 Path: App overview > Daylight linking > Effective range
 For more information see Section Overview of the "Daylight linking" app 12

Step 4: Select an ambient light sensor.
 Path: App overview > Daylight linking > Light sensors
 For more information see Section Overview of the "Daylight linking" app 12

Step 5: Define the global settings.
 Path: App overview > Daylight linking > Global settings
 For more information see Section Global settings 18

• Step 6: Create and configure a measurement point.

Path: App overview > Daylight linking > Measurement points

For more information see Section Overview of the "Daylight linking" app 12

• Step 7: Create and configure a secondary measurement point, if necessary.

Path: App overview > Daylight linking > Measurement points > Secondary measurement points

For more information see Section Overview of the "Daylight linking" app 12

Step 8: Configure a scene for daylight linking and define the required illuminance.
 Path: App overview > Scenes
 For more information see Section Scenes and daylight linking



6 Licensing

Daylight linking can only be configured if a licence has been activated. You have to activate the licence before you can use the **Daylight linking** app.

Path: App overview > sceneCOM Store > Daylight linking

The following steps are required:

• Step 1: Request licence.

Path: App overview > sceneCOM Store > Licensing information

• Step 2: Activate licence.

Path: App overview > sceneCOM Store > Activate licence

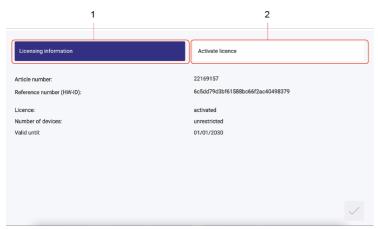


Figure 3: Overview of licensing

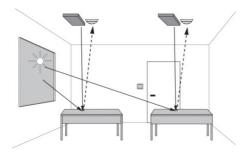
	Function	Brief description	
(1)	Licensing information	This page provides information about your licence (article number of the app and reference number). You need this information to request a licence from your sales partner. You can also see whether the licence has been activated or not. Note If several licences have been activated, the number of enabled devices will be added together. You can activate the licence with a licence number here. Note To access the ordered licence numbers, go to the website scenecom.tridonic.com and enter the reference number (HW-ID) for the sceneCOM. Multiple licences can be activated. The licence number, number of activated devices and the validity period are shown for each activated licence.	
(2)	Activate licence		

Table 4: Overview of licensing



This section explains how to configure daylight linking with ambient light sensors.

7.1 Ambient light sensors



The amount of available daylight is detected by an ambient light sensor. Ambient light sensors detect the reflected artificial light and natural daylight in the room (e.g. basicDIM DGC sensor).

7.1.1 Overview of the "Daylight linking" app

The following contains an overview of the functions in the **Daylight linking** app when using ambient light sensors.

Path: App overview > Daylight linking

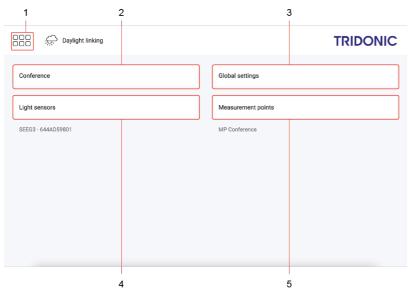


Figure 4: "Daylight linking" app view

	Function	Brief description	
(1)	Return to app overview	The app overview can be accessed via this button.	
(2)	Select effective range	 Whether a room or group is selected as the effective range depends on the project engineering: Select a room if the scene in a room is to be controlled via daylight linking using a single ambient light sensor, regardless of the number of groups. Select a group if the scene in a room should be controlled via daylight linking using a separate ambient light sensor to detect the available daylight in the room for each group. In both cases the ambient light sensor does not have to be located in the effective range. 	



	Function		Brief description	
(3)	Configure global settings		Some settings can be applied to all daylight linking, e.g. Interruption period after manual operation.	
	 Note For more information see Section Global settings 18 The Scenes app provides the option of defining whether the global settings are used. For more information see Section Scenes and daylight linking 19 			
(4)	Select an ambient light sensor		The available daylight is detected by light sensors. With ambient light sensors you can only select one. The ambient light sensor does not have to be located in the room where daylight linking will be enabled. You can select a different ambient light sensor at any time.	
			Note Measurement points are specially created for a certain sensor. Before you change the light sensor, you must delete existing measurement points. New measurement points must then be created for the newly selected light sensor.	
(5)	Create, co	py and edit measurement points	Daylight linking is implemented using measurement points. An overview of the functions of the Edit measurement points view can be found after this table.	

Table 5: Functions in the "Daylight linking" app



The following contains an overview of the functions in the **Edit measurement points** view.

Path: App overview > Daylight linking > Measurement points

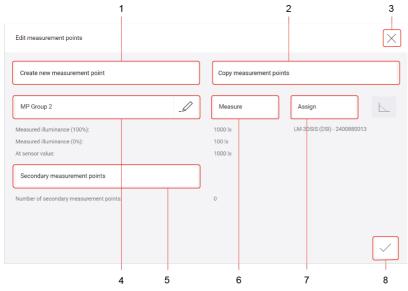


Figure 5: "Edit measurement points" view

	Function	Brief description	
(1)	Create new measurement point	Create a new measurement point. During this process, assign the measurement point to a room, individual groups or individual luminaires.	
		Note Secondary measurement points are located in the effective range of the primary measurement point. If you want to create secondary measurement points, the primary measurement point must not be assigned to all luminaires in the selected effective range.	
		A name is automatically suggested for the measurement point, which can be changed at any time. By default the name consists of the abbreviation MP (Measurement Point) and the assignment. Examples: • MP Luminaire 1: measurement point assigned to luminaire 1 • MP Group 3: measurement point assigned to group 3	
(2)	Copy measurement point	Measurement points can be copied from other effective ranges. This is recommended when scenes should be controlled via daylight linking in rooms with a similar setup. The name of the measurement point and measured illuminance are applied. The measurement point only has to be assigned.	
		 Note This function is only available if measurement points have already been created in other effective ranges. Secondary measurement points are copied alongside a primary measurement point. 	
(3)	Return to the Daylight linking view	If you tap the X, the Daylight linking view is called up.	



	Function	Brief description	
(4)	Rename measurement point	Change the name of an existing measurement point.	
	Delete measurement point	If a measurement point is deleted, all assignments are also deleted.	
(5)	Create secondary measurement points	You can create up to 5 secondary measurement points. Secondary measurement points are located in the effective range of the primary measurement point and are used to regulate several areas with one ambient light sensor.	
(6)	Measure illuminance	Measure the illuminance at the workspace underneath the luminaire with a luxmeter, once at 100% and once at 0% intensity, and enter the measured illuminance values.	
		Under the Measure button, the At sensor value parameter shows the sensor value when illuminance is measured at 0% intensity.	
		The Measure illuminance view also shows the algorithm used for daylight linking.	
		The algorithm for ambient light sensors was developed to improve daylight linking. If ambient light sensors are already part of the system, the old algorithm (v.1) continues to apply to them. As soon as a new sensor is addressed in the system, the new algorithm (v.2) is automatically used. Algorithm v.1: the lighting is adapted purely using the value output by the ambient light sensor. Algorithm v.2: the difference between the actual value (output by the ambient light sensor) and the target value (control value stored in the scene) is calculated and the lighting is adapted accordingly. To switch from the old to the new algorithm, the corresponding sensor must be deleted and then addressed again.	
(7)	Assign measurement point	 A measurement point is assigned to either a room, individual groups or individual luminaires. When a new measurement point is created, the point is assigned. In this case the assignment is displayed under the Assign button. The assignment can be changed at any time. When a measurement point is copied, the assignment is not copied over with it. In this case the measurement point must be assigned in a separate step. Tap the Assign button to assign the measurement point. If another 	
(0)	Datum to the Day Harlet Barbary	measurement point has already been assigned, it is listed in the right-hand column. When saved, the existing assignment is overwritten.	
(8)	Return to the Daylight linking view	If you tap the tick mark, the changes are saved and the Daylight linking view is called up.	

Table 6: Functions in the "Edit measurement points" view



The following contains an overview of the functions in the **Secondary measurement points** view.

Path: App overview > Daylight linking > Measurement points > Secondary measurement points

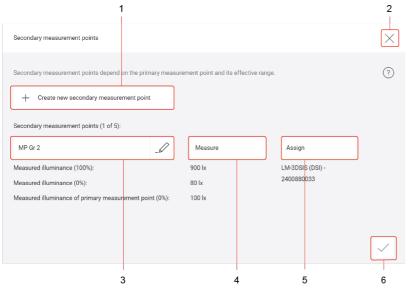


Figure 6: "Secondary measurement points" view

	Function	Brief description	
(1)	Create new secondary measurement point	Create a new secondary measurement point. During this process, assign the secondary measurement point to individual groups or individual luminaires.	
		 Note Secondary measurement points are located in the effective range of the primary measurement point. To create secondary measurement points, the primary measurement point must not be assigned to all luminaires in the selected effective range. As a general rule of thumb, the number of assigned luminaires (primary measurement point and secondary measurement points) times the number of scenes with daylight linking on the luminaires should equal no more than 30. Example: If primary and secondary measurement points are assigned to a total of 15 luminaires, no more than 2 scenes should be created that use daylight linking to control these luminaires. 	
		A name is automatically suggested for the measurement point, which can be changed at any time. By default the name consists of the abbreviation MP (Measurement Point) and the assignment. Examples: • MP Luminaire 1: measurement point assigned to luminaire 1 • MP Group 3: measurement point assigned to group 3	
(2)	Return to the Edit measurement points view	If you tap the X, the Edit measurement points view is called up.	



	Function	Brief description	
(3)	Rename secondary measurement point	Change the name of an existing secondary measurement point.	
	Delete secondary measurement point	If a secondary measurement point is deleted, all assignments are also deleted.	
(4)	Measure illuminance	Measure the illuminance at the workspace underneath the luminaire with a luxmeter, once at 100% and once at 0% intensity, and enter the measured illuminance values. If the daylight between the measurements of the primary and secondary measurement points has changed too dramatically, the illuminance at the primary measurement point needs to be measured again at 0% intensity. This value only affects the secondary measurement point selected. The illuminance measured at the primary measurement point at 0% intensity is displayed below the Measure button for parameter Measured illuminance of primary measurement point (0%) .	
(5)	Assign secondary measurement point	A secondary measurement point is assigned either to individual groups or individual luminaires in the effective range of the primary measurement point. • When a new measurement point is created, the point is assigned. In this case the assignment is displayed under the Assign button. The assignment can be changed at any time. • When a measurement point is copied, the assignment is not copied over with it. In this case the primary and secondary measurement points must be assigned in a separate step. Tap the Assign button to assign the measurement point. When saved, the existing assignment is overwritten.	
(6)	Return to the Edit measurement points view	If you tap the tick mark, the changes are saved and the Edit measurement points view is called up.	

Table 7: Functions in the "Secondary measurement points" view



7.1.2 Global settings

Some settings can be applied to all daylight linking. These settings are enabled for all daylight-linked luminaires as standard. The **Scenes** app provides the option of separately defining whether the global settings are used, however.

Path: App overview > Daylight linking > Global settings

The following table provides a description of the individual configuration options:

i

Note

Whether parameters marked with an asterisk (*) can be configured depends on whether the parameter **Never dim off via daylight linking** is enabled. The following table provides an overview of which parameters can be configured.

	✓	
Lower dimming limit (daylight linking)	✓	×
Switch-off intensity	×	✓
Delay time	×	✓
Switch-on intensity	×	✓

Parameter	Description
Never dim off via daylight linking	Option that can be enabled so that the lighting is never dimmed off via daylight linking.
Lower dimming limit (daylight linking)*	Lower limit that further restricts the dimming range for daylight linking and prevents luminaires from being dimmed off completely. The dimming range is a range in which the intensity of the luminaires can be dimmed/brightened. It is restricted to the physical upper and lower limits.
Switch-off intensity*	Intensity level at which the luminaire or lighting is switched off if the intensity reaches this point or drops below it.
Delay time*	Time during which the switch-off intensity must be reached/not reached so that the luminaire/lighting is switched off.
Switch-on intensity*	Intensity level at which the luminaire or lighting is switched on if the intensity reaches this point or exceeds it.
Upper dimming limit (daylight linking)	Upper limit that further restricts the dimming range for daylight linking. The dimming range is a range in which the intensity of the luminaires can be dimmed/brightened. It is restricted to the physical upper and lower limits.
Interruption period after manual operation	Time during which daylight linking can be disabled temporarily by manual operation (e.g. pressing a key/switch). Once this time has expired daylight linking is automatically enabled again.
Daylight linking takes over when calculation matches manual operation	Option that can be enabled so that daylight linking takes over again as soon as the intensity calculated by daylight linking matches the intensity set by the user.
Dimming off threshold (for ambient light sensors only)	Percentage by which the required illuminance must be exceeded in order for the luminaire to be dimmed off via daylight linking. This setting prevents the illuminance from dropping below the target value when the luminaires are switched off, which would cause the luminaires to need to be switched on again immediately.

Table 8: Configuration options – Daylight linking; global settings



7.2 Scenes and daylight linking

Once the basic configuration has been defined for daylight linking in the **Daylight linking** app, configure the scene for daylight linking and define the required illuminance.

Configuring a scene for daylight linking and defining the required illuminance

Path: App overview > Scenes

Requirement:

— The level (room or group) selected in the **Scenes** app has been assigned a measurement point.

i

Note

Example: if you want the intensity of a room to be controlled via daylight linking, a measurement point must be assigned to this room.

Path: App overview > Daylight linking > Measurement points > Assign

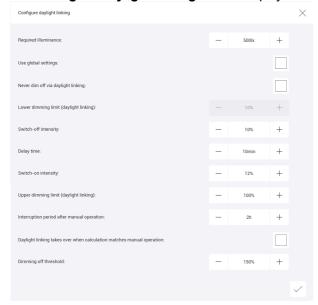
- 1. Navigate to the correct page as indicated in the path.
- 2. Select the effective range (room), scene and level (room, group or luminaire) for which daylight linking is to be configured.
 - The Configure scene view is displayed.



3. Enable the **Daylight linking** option.



- 4. Tap the **Configure** button.
 - The Configure daylight linking view is displayed.



- 5. Define the required illuminance.
- 6. Enable the **Use global settings** option or set the configuration options separately.



Note

You can modify the global settings.

Path: App overview > Daylight linking > Global settings



This section contains the following information:

- Factory settings 21
- Icons 22
- Glossary 24

8.1 Factory settings

Standard scenes

As soon as you create a room in your *sceneCOM* system, five standard scenes are enabled in the room. The following table contains the defaults for these scenes.

Scene	Absence	Working	Writing	Meeting	Workshop
Icon	Ф	다	य्व	٦	A
Intensity	0%	100%	40%	16%	7%
Tunable White	3000 K				
Colour	White	White	White	White	White
Light balance (direct/indirect)	50:50	50:50	50:50	50:50	50:50

Table 9: Standard scenes and their defaults



8.2 Icons

This section contains an overview of all icons shown on the web application.

"Scenes" app

Icon	Description
☆	Intensity
*	Colour
TW	Tunable White
崇	Light balance
	Different settings are stored for this setting at room, group and device level
DL	Setting is controlled via daylight linking
C	A show is stored for this setting; the settings can only be changed in the Shows app
null	Configuration unknown
②	Locate device
	Zone

Table 10: Icons in the "Scenes" app

"System image" app

Icon	Description
☆	Luminaire
*	RGB luminaire
™	TW luminaire
黨	Balance luminaire
学	Free-standing luminaire
	Momentary-action switch/standard switch
© an	Presence detector (generic and MSensorG3)
⊕ 🕲	Light sensor
	CO2 sensor
%	Humidity sensor
(1)) (1)) (1)) 	Noise sensor (average, maximum and minimum)
ÆĄ:	Temperature sensor
	Detection of power consumption



Icon	Description
M _{POO}	VOC sensor
\$	Emergency luminaire/safety sign luminaire
74	Emergency luminaire/safety sign luminaire (lighting management)
DALI 2 A	DALI-2 master (generic and MSensorG3)

Table 11: Icons in the "System image" app



8.3 Glossary

Term	Explanation
Absence scene	Scene in an area where absence is detected. Any scene can be defined as an absence scene.
Action timeframe	Time during which a function is enabled (e.g. presence linking). The action timeframe can be defined using timeframes and a dead time.
Balance luminaire	Luminaire consisting of at least two lamps, one for direct lighting and one for indirect lighting. For Balance luminaires, the light balance can be changed in addition to the intensity.
Contrast sensor	Sensor that presents the environment as a contrast image
DALI load	Typical power consumption of a subscriber on the DALI control line.
DALI-2	Expansion of the existing interface log for digital communication between control gears for the lighting system – DALI (<i>Digital Addressing Lighting Interface</i>). Expansion for control devices as per <i>IEC 62386</i> and addition of new commands and functions. More detailed information can be found on the website of the <i>Digital Illumination Interface Alliance (DiiA)</i> .
Delay time	Time during which a specific threshold must be breached in order to trigger a response. The response or the event that follows is only permitted after this time has expired.
Detail control	A way of controlling devices either individually or in groups
Dimming range	A range in which the intensity of the luminaires can be smoothly adjusted. It is restricted to the physical upper and lower limits. Setting a lower and upper dimming limit can limit the dimming range further.
eD device	Sensors, control points, input devices and control units that are used in DALI systems. Each of these devices has its own address (0 to 63) which can be used to operate it individually.
ExD	Self-contained emergency luminaire with a nominal duration of x hours (e.g. <i>E1D</i> = nominal duration of 1 hour), individual monitoring via DALI, central test and adjustable intensity in emergency operation.



Term	Explanation
Fade time	The time it takes to change from one value (scene, presence value) to another. Example with a scene as a value: If the fade time is, for example, 0 seconds, the change from one scene to the next is immediate. If the fade time is 20 seconds, the outputs will smoothly adjust to gradually switch to the control values for the next scene within those 20 seconds. All outputs reach the desired value simultaneously (once the fade time has expired).
Instance	Sub-category of an input device. Each input device can have up to 32 instance types (e.g. light sensor, presence detector, remote control, momentary-action switch, and many more).
Light balance	Ratio of direct to indirect lighting
Light source	System for generating light in a luminaire (e.g. lamp, LED module)
Location	Process for determining where a network or bus subscriber is located or what its address it. How subscribers are located differs from device to device. There are three methods of locating devices: visual, acoustic and tactile.
Momentary-action switch (MAS)	Control point that upon being operated either closes and/or opens a circuit, depending on its wiring, but without "clicking" into place like a standard switch, i.e. once it is released the affected circuit returns to its original state.
Presence linking	A way of controlling luminaires whilst taking into account the presence of people. Presence is usually detected by presence detectors.
Presence scene	Scene in an area where the presence of at least one person is detected. Any scene can be defined as a presence scene.
Required illuminance	Illuminance required at minimum at a specific location (e.g. workspace) so that a person can complete visual tasks effectively and accurately.
RGA address	Address used in <i>sceneCOM</i> systems for communication purposes. The RGA address is based on the following address scheme: room address/group address/individual address.
RGB luminaire	Luminaire consisting of three individual lamps (red, green, blue). Coloured light is generated through additive colour mixing.
Run-on time	Time that starts after a certain event (e.g. the last person leaves the room) and after which an action is triggered (e.g. fade time starts, absence scene is recalled). If an event occurs during the run-on time (e.g. someone re-enters the room), the run-on time starts again. A typical application for run-on time is the stairwell function.



Term	Explanation
Special luminaire	Luminaire with multiple light sources (such as lamps, LED modules). The sceneCOM web application can be used to combine the light sources into one luminaire so that they can be controlled together.
Standard switch	Control point that upon being operated either closes or opens a circuit and "clicks" into place as it does so (as opposed to a momentary-action switch).
System extension	Process during which new network or bus subscribers are addressed, which are used in an existing and addressed system. Addressing for previously addressed network or bus subscribers will remain unchanged.
Timeframe	Limited time period between two or more events which already have set times. Example: two timeframes are defined for presence linking (07:00–12:00 and 14:00–18:00). Presence linking is enabled during these timeframes.
Tunable White	Option of dynamically changing the light of the LED in the white light range. Colour temperatures from 2700 K to 6500 K, for example, can be variably set using a control. The LED luminaires achieve high colour rendering of at least Ra 80 to Ra 90.
TW luminaire	Luminaire that supports Tunable White pursuant to IEC 62386-209. There are two types of TW luminaire: • Luminaires that consist of at least two individual lamps, one for warm-white and one for cool-white. • Luminaires that have one individual lamp that supports Tunable White.
Visual location	Type of location in which the address of a network or bus subscriber is used to visually locate this subscriber in the field. A visually located luminaire, for example, responds by switching to the maximum level.

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