

NEW! WITH PLUG-AND-PLAY DETECTORS

FLAT IS ESY, BECAUSE IT REPRESENTS MAXIMUM PERFORMANCE WITH SLIM DESIGN

FLAT SERIES PRESENCE AND MOTION DETECTORS



PERFORMANCE FOR SIMPLICITY

ESYLUX GmbH | sales@esylux.com | www.esylux.com

OUTSTANDINGLY FLAT

6 MILLIMETRES: EFFICIENCY DOES NOT NEED MORE HEIGHT

With the presence and motion detectors from the FLAT series, there is finally something to shout about when it comes to room aesthetics: The housing and lenses are flattened to achieve a height of just 6 mm when surfacemounted on ceilings for a discreet look. The clear lines also fit seamlessly into even the most challenging room architecture. Your planning freedom therefore knows no limits.

If you are searching for a first-class range of designs, you will always find the perfect variety with the ultra-flat FLAT detectors, available in white or black in a choice of round or square contours. For even greater design freedom, a high-quality glass surface is available as an accessory, as well as variants with plug-and-play connection for exceptionally easy installation!













VZ

AUTOMATICALLY EFFICIENT

EFFICIENT AUTOMATION SAVES COSTS

The FLAT detectors not only save height, they also save costs: because they only use light where someone is actually present. This significantly reduces energy consumption. The one-part detectors also guarantee simple installation and the durable quality makes the automation solution maintenance-free.

MINIMUM INSTALLATION DEPTH AND MOUNTING HEIGHT

The presence and motion detectors of the FLAT series are ideal for use in indoor areas and even close to doors thanks to their minimal installation height of just 6 mm. The low overall height of the power box results in an installation depth of only 24 mm, leaving plenty of space for quick and simple wiring.

RADIATION-FREE PIR SENSORS WITHOUT ELECTROSMOG

ALSO HIGHLY VERSATILE INSTALLATION OPTIONS

The round FLAT detectors in white are also available as FLAT LARGE (104 mm Ø) for larger recessed boxes. The matching C IP20 surface-mounted box offers an additional assembly option, and the FLAT MOUNTING SET IP20 FM makes installation easier for all variants!



COMPACT MOUNTING BOX



PD-FLAT 360i/8 LARGE ROUND WHITE with COMPACT MOUNTING BOX IP20 SM WH

POWERFUL DETECTION

Despite its flat lens, the FLAT series also demonstrates high output in detection: The average range of the passive infrared sensor system is more than 8 m with a detection angle of 360° at an installation height of 2.5 to 3 m. This means that a large workspace with a variety of different movement processes can be covered by a single detector.

Several detectors can easily be connected in parallel for an even greater range thanks to push terminals with a through-wiring function, even in master-slave mode. The switch-off delay time is flexible and can easily be adjusted via the infrared remote control or using the ESY-Pen and ESY-App.



Detection angle





8 m Range

0 - 240 mir Switch-off

FLAT MOUNTING SET IP20 FM

PD-FLAT 360i/8 RW WAGO WINSTA CodeA



PD-FLAT 360i/8 RW WAGO WINSTA CodeA/S

THREE FIELDS OF DETECTION FOR OPTIMUM ROOM COVERAGE

Operating area up to 4 m Ø

- High-precision detection of small movements
- Ideal over workplaces

Head-on passage area up to 6 m Ø

- Field of detection of walking movements
- In all directions
- Ideal for the area between desks

Diagonal passage up to 8 m Ø

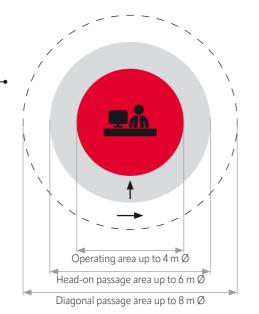
- Detection of walking movements across the detector
- Ideal for the edges of office space

CONNECT. SAVE. DONE.

Time-saving solutions are becoming increasingly important for electricians, especially in times of high demand and a lack of skilled workers. This is why the FLAT series also includes presence and motion detectors with WINSTA pluggable connections from WAGO – for greater energy efficiency via plug-and-play and installation that is both safe and trouble free.

YOUR ADVANTAGES AT A GLANCE

- Simple and safe plug-and-play installation
- Error-free thanks to colour and mechanical coding
- Can also be installed by untrained individuals
- · Very flexible conversion
- Tried-and-tested ESYLUX high-quality sensor technology



EASY WITH DALI

The DALI industry standard represents simple planning and installation and ensures optimal control and dimming, particularly for LED lighting. The FLAT series offers presence detectors with a simple broadcast mode without addressing, and with a field of detection that can be expanded at any time through master-slave combinations. As an addition, the DALI actuator from ESYLUX enables switching of conventional consumers, such as ventilation!

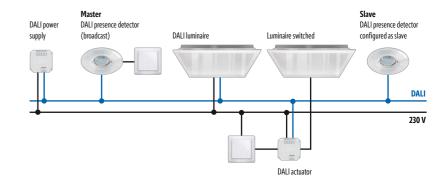
DALI-2 FOR INTEROPERABILITY OF DEVICES FROM DIFFERENT MANUFACTURERS

Its subsequent development into DALI-2 now also guarantees interoperability of devices from different manufacturers, meaning that project managers can put together a solution made up of best-in-class devices. This is why ESYLUX has developed the BMS presence detectors from the FLAT series for building management systems: With motion sensor, light sensor and push button input, the most important input devices are combined in a single housing!

YOUR ADVANTAGES AT A GLANCE

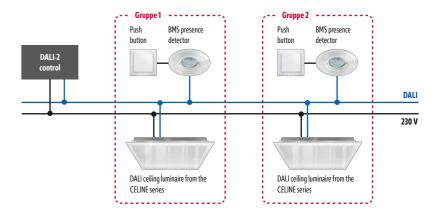
- Also available as a set including DALI bus power supply (e.g. PD-FLAT 360i/8 ROUND WHITE DALI SET)
- DALI broadcast for easy commissioning, independent configuration of the electronic ballast
- Field of detection can be extended using master-slave communication
- HVAC control with DALI actuator from ESYLUX
- Input for conventional switches
- BMS presence detector for DALI-2 for use in building management systems

BROADCAST LIGHT CONTROL WITH DALI PRESENCE DETECTOR AND DALI ACTUATOR



CONTROL INDIVIDUAL GROUPS WITH DALI-2 PRESENCE DETECTORS





IP20 Ø 94. H 30

IP20 Ø104, H30

Sensing range	Detection range	Installation type	Number of light channels	Function	Constant lighting control	Lighting push button input	In-rush current	Number of HVAC channels	HVAC switch input	Protection type Dimensions (mm)	
---------------	-----------------	-------------------	--------------------------	----------	---------------------------	-------------------------------	-----------------	-------------------------	-------------------	------------------------------------	--

Product group / product name	item no.	Š	۵	=	z	Œ	O	⊒.⊑	=	Z	Ŧ	Δ.	Δ	J	z
Presence detectors / ceiling mounting															
DALI															
PD-FLAT 360i/8 ROUND WHITE DALI (white, similar to RAL 9010)	EP10427541	360°	Ø8m	FM	1	Switching/ dimming	•	1		2*		IP20	Ø 94, H 30	•	
PD-FLAT 360i/8 SQUARE WHITE DALI (white, similar to RAL 9010)	EP10427558	360°	Ø8m	FM	1	Switching/ dimming	•	1		2*		IP20	L77, W77, H30	•	
PD-FLAT 360i/8 SQUARE BLACK DALI (black, similar to RAL 9004)	EP10427909	360°	Ø8m	FM	1	Switching/ dimming	•	1		2*		IP20	L77, W77, H30		
PD-FLAT 360i/8 ROUND BLACK DALI (black, similar to RAL 9004)	EP10427916	360°	Ø8m	FM	1	Switching/ dimming	•	1		2*		IP20	Ø 94, H 30	•	
PD-FLAT 360i/8 LARGE ROUND WHITE DALI SET (white, similar to RAL 9010)	EP10428661	360°	Ø8m	FM	1	Switching/ dimming	•	1		2*		IP20	Ø104, H30	•	
PD-FLAT 360i/8 ROUND WHITE DALI SET (white, similar to RAL 9010)	EP10428708	360°	Ø8m	FM	1	Switching/ dimming	•	1		2*		IP20	Ø 94, H 30	•	
PD-FLAT 360i/8 SQUARE WHITE DALI SET (white, similar to RAL 9010)	EP10428715	360°	Ø8m	FM	1	Switching/ dimming	•	1		2*		IP20	L77, W77, H30	•	
DALI-2															
PD-FLAT 360/8 SW BMS DALI-2 (white, similar to RAL 9010)	EP10423024**	360°	Ø8m	FM	1	Input device		1***				IP20	L77, W77, H30	•	*
PD-FLAT 360/8 RW BMS DALI-2	FD10.432021**	2/00	Ø 0	гм	1	laant danias		1***				חכתו	Q 04 1130		

^{*} With additional DALI actuator ACTUATOR C3/C4 DALI as an accessory. ** Information on availability at www.esylux.com. *** Push-button input (light) also suitable for HVAC functions.

(white, similar to RAL 9010)

PD-FLAT-L 360/8 RW BMS DALI-2
(white, similar to RAL 9010)

DURABLE WITH 230 V

Around the world, LEDs are increasingly becoming the most popular illuminant, and presence and motion detectors make optimal use of their long service life through demand-based switching. To protect the relay from the high in-rush currents from the LEDs and thus ensure their own durability, all 230 V variants of the FLAT series use protective zero-cross switching.

PLUG-AND-PLAY INSTALLATION

The FLAT variants with WINSTA connection from WAGO offer particularly fast and safe installation: The ready-to-use connections provide a simple plug-and-play solution – saving time and money, and not just in times of high demand and a lack of skilled workers.

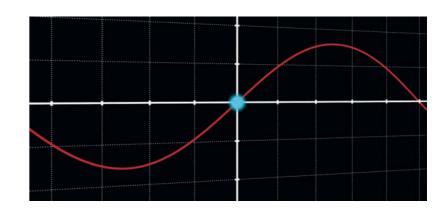


YOUR ADVANTAGES AT A GLANCE

- Zero-cross switching for switching behaviour that protects the relay
- Field of detection can be extended using parallel wiring
- Includes push button input
- Variants with WAGO-WINSTA® connection
- Variants with PD-FLAT mounting box and pre-assembled GST18i3 inlet and outlet available



ZERO-CROSS SWITCHING FOR HIGH IN-RUSH CURRENTS TO PROTECT THE RELAY



		Sensing range	Detection range	Installationtype	Number of light channels	Function	Constant lighting control Lighting push button input	In-rush current	Number of HVAC channels	Protection type	Dimensions (mm)	Core portfolio	
Product group / product name	Item no.	Sens	Det	Inst	N	Ā	Co ii.	<u> </u>	N S	Prof	E	Š	New
Motion detector / ceiling mounting													
ON/OFF													
MD-FLAT 360i/8 RW WAGO WINSTA CodeA/S (white, similar to RAL 9010)	EP10424687	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76,5	•	*
MD-FLAT 360i/8 RW WAGO WINSTA CodeA (white, similar to RAL 9010)	EP10424861	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76,5	•	*
MD-FLAT-E 360i/8 RW WIELAND GST18 (white, similar to RAL 9010)	EP10427862	360°	Ø8m	RM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76,5	•	
MD-FLAT 360i/8 ROUND WHITE (white, similar to RAL 9010)	EP10427886	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 30		
MD-FLAT 360i/8 SQUARE WHITE (white, similar to RAL 9010)	EP10427893	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	L77, W77, H30		
MD-FLAT 360i/8 ROUND BLACK (black, similar to RAL 9004)	EP10428074	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 30	•	
MD-FLAT 360i/8 SQUARE BLACK (black, similar to RAL 9004)	EP10428081	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	L77, W77, H30	•	
MD-FLAT-E 360i/8 ROUND WHITE (white, similar to RAL 9010)	EP10428548	360°	Ø8m	RM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76	•	
MD-FLAT 360i/8 LARGE ROUND WHITE (white, similar to RAL 9010)	EP10428609	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 104, H 30	•	
Presence detectors / ceiling mounting													
ON/OFF													
PD-FLAT 360i/8 RW WAGO WINSTA CodeA/S (white, similar to RAL 9010)	EP10424694	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76,5	•	*
PD-FLAT 360i/8 RW WAGO WINSTA CodeA (white, similar to RAL 9010)	EP10424878	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76,5	•	*
PD-FLAT-E 360i/8 RW WIELAND GST18 (white, similar to RAL 9010)	EP10427879	360°	Ø8m	RM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76,5	•	
PD-FLAT 360i/8 SQUARE WHITE (white, similar to RAL 9010)	EP10427923	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	L 77, W 77, H 30	•	
PD-FLAT 360i/8 ROUND WHITE (white, similar to RAL 9010)	EP10427930	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 30	•	
PD-FLAT 360i/8 SQUARE BLACK (black, similar to RAL 9004)	EP10427947	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	L77, W77, H30	•	
PD-FLAT 360i/8 ROUND BLACK (black, similar to RAL 9004)	EP10427954	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 30	•	
PD-FLAT-E 360i/8 ROUND WHITE (white, similar to RAL 9010)	EP10428555	360°	Ø8m	RM	1	Switching	1	78 A / 5 ms		IP20	Ø 94, H 76	•	
PD-FLAT 3601/8 LARGE ROUND WHITE (white, similar to RAL 9010)	EP10428623	360°	Ø8m	FM	1	Switching	1	78 A / 5 ms		IP20	Ø 104, H 30	•	

VARIABLE WITH KNX

KNX is known for offering a high level of control options, so it is no surprise that KNX designs in the FLAT series also offer extensive configuration options. No fewer than 47 communication objects are available for this, enabling features such as daylight-dependent constant lighting control even without a detected presence, as well as a night-light feature with a choice of seven different colours.

TWO LIGHT CHANNELS WITH EFFICIENT OFFSET

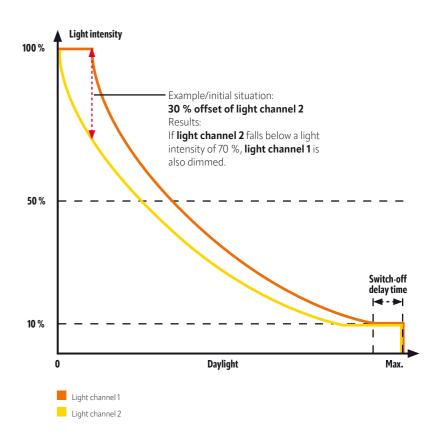
Particularly in rooms with only one bank of windows, users also benefit from lighting control with two broadcast channels: An offset between two channels enables the lights close to the window to dim even if 100 % illuminance is still required in the area of the room furthest from the window. This creates optimal lighting conditions while improving energy efficiency.

YOUR ADVANTAGES AT A GLANCE

- Extensive individual configuration options from 47 communication objects
- Constant lighting control can also be non-presence-dependent
- Detector can be configured as master or slave
- Two orientation levels
- Night-light feature with 7 selectable colours
- Separate presence detector in the KNX system

TWO-CHANNEL LIGHT CONTROL WITH OFFSET





Product group / product name Presence detectors / ceiling mounting	Item no.	Sensingrange	Detection range	Installation type	Number of light channels	Function	Constant lighting control	Lighting push button input	In-rush current	Number of HVAC channels	HVAC switch input	Protection type	Dimensions (mm)	Core portfolio	New
KNX															
PD-FLAT 360i/8 LARGE ROUND WHITE KNX (white, similar to RAL 9010)	EP10428685	360°	Ø8m	FM	2	Switching/ dimming	•	2		1	•	IP20	Ø104, H30	•	
PD-FLAT 360i/8 ROUND WHITE KNX (white, similar to RAL 9010)	EP10451706	360°	Ø8m	FM	2	Switching/ dimming	•	2		1	•	IP20	Ø 94, H 30	•	
PD-FLAT 360i/8 SQUARE WHITE KNX (white, similar to RAL 9010)	EP10451713	360°	Ø8m	FM	2	Switching/ dimming	•	2		1	•	IP20	L77, W77, H30	•	
PD-FLAT 360i/8 ROUND BLACK KNX (black, similar to RAL 9004)	EP10451768	360°	Ø8m	FM	2	Switching/ dimming	•	2		1	•	IP20	Ø 94, H 30	•	
PD-FLAT 360i/8 SQUARE BLACK KNX (black, similar to RAL 9004)	EP10451775	360°	Ø8m	FM	2	Switching/ dimming	•	2		1	•	IP20	L77, W77, H30	•	_

POWER IN PERFECT HARMONY

With stunning aesthetics and intelligent control, the FLAT detectors not only show the room in the right light, they also combine harmoniously with different light designs – such as the ceiling lights from the STELLA series or the downlights from the ELSA-2 series.





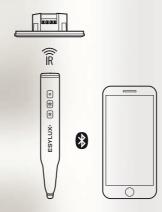
PD-FLAT 360i/8 SQUARED WHITE with STELLA PNL 300 DDP OP 1700 840 IP20





PD-FLAT 360i/8 ROUND WHITE with ELSA-2 DL 165 OP 110° 900 840 WH

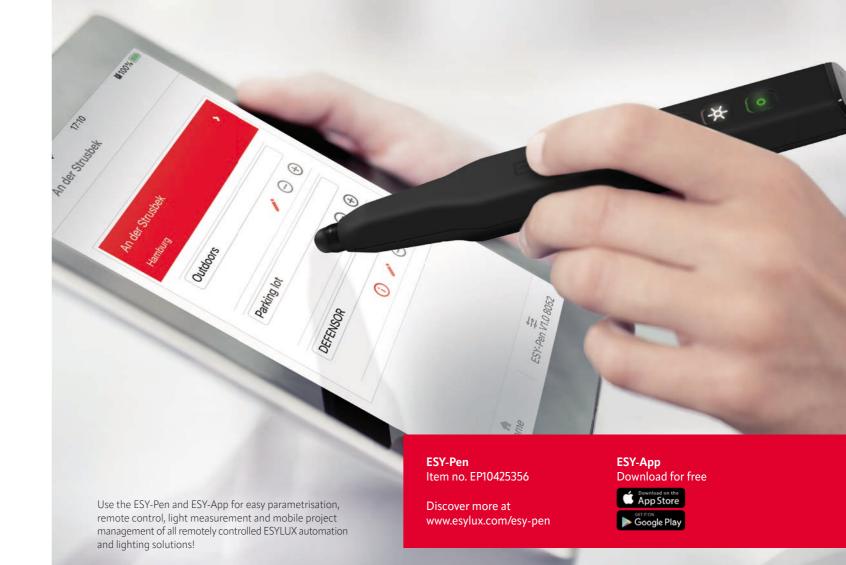
ALWAYS READY WITH THE RIGHT TOOL



Configuring the FLAT series Simple configuration using the ESY-App. The ESY-Pen creates a bridge for transfer.

The 230 V and DALI designs in the FLAT series can be used immediately without making any changes to the factory settings. However, anyone wishing to adjust the parameters or customise the intelligent device functions for their own use can do so with ease using the ESY-Pen and ESY-App. The ESY-App is available free of charge and the ESY-Pen acts as a bridge, transmitting the commands from the mobile end devices to the infrared sensor technology. And with the KNX variants, the user can easily override the system during operation!

From presence detectors to exterior lights with motion detector or light systems with ESYLUX Light Control, the ESY-Pen and the ESY-App ensure you always have the right tools for all remotely controlled ESYLUX solutions.



12

ONE MANUFACTURER

ALL APPLICATIONS

Recommended detector*

Recommended detector*								
			230 V (ON/OF	F)	DALI		KNX	
Room		Installation type	Product name	Item no.	Product name	Item no.	Product name	Item no.
CORRIDORS								
		Recessed ceiling mounting	PD-C 360i/32 Corridor or MD-C 360i/32 Corridor	EP10428180 EP10428128			PD-C 360i/32 KNX	EP10427794
			PD-C 360i/32 Corridor	EP10428180			PD-C 360i/32 KNX	EP10427794
H		Surface mounting	or MD-C 360i/32 Corridor with COMPACT MOUNTING BOX IP20 SM WH	EP10428128 EP10425370			with COMPACT MOUNTING BOX IP20 SM WH	EP10425370
		Wall mounting	MD 180i/16 Basic	EB10430459			PD-C 180i KNX	EP10426445
STAIRCASES								
2		Recessed ceiling mounting	MD-C 360i/8	EP10055393				
	6	Surface mounting	MD-C 360i/8 with COMPACT MOUNTING BOX IP54 SM WH	EP10055393 EP10425905				
		Wall mounting	MD 180i/16 Basic	EB10430459			PD-C 180i KNX	EP10426445
SIDE ROOMS								
		Surface mounting	MD 360i/8 Basic or	EB10430428				
		on ceilings	MD 360i/24 Basic	EB10430862				
		Surface mounting	MD 360i/8 Basic SMB or	EB10430466				
			MD 360i/24 Basic SMB	EB10430909				
		Wall mounting	MD 180i/16 Basic	EB10430459				
SANITARY FACILITIES						_		
		Recessed ceiling mounting	PD-C 360i/8 MIC	EP10425882			PD-C 360i/8 KNX UP	EP10427404
3.1		Surface mounting	PD-C 360i/8 MIC with COMPACT MOUNTING BOX IP54 SM WH	EP10425882 EP10425905			PD-C 360i/8 KNX UP with COMPACT MOUNTING BOX IP54 SM WH	EP10427404 EP10425905
	3 24 3	Wall mounting	MD 180i/16 Basic or	EB10430459			PD-C 180i KNX	EP10426445
			MD 180i/R	EM10055010				
CANTEENS								
		Recessed ceiling mounting			PD-C 360i/24 DUO DALI	EP10427459	PD-C 360i/24 KNX UP	EP10427428
		Surface mounting			PD-C 360i/24 DUO DALI with COMPACT MOUNTING BOX IP20 SM WH	EP10427459 EP10425370	PD-C 360i/24 KNX UP with COMPACT MOUNTING BOX IP20 SM WH	EP10427428 EP10425370
OUTDOOR RANGE OF MAX. Ø	40 m					_		
	1/-	Wall or ceiling mounting with pivot joint base	RC 230i white	EM10015311			RC 230 KNX white	EM10015472
I I		Wall or ceiling mounting with pivot joint base	DEFENSOR MD 230° 40 IR 1C IP55 WH	EM10025372				
BUILDING ENTRANCE RANGE	OF MAX. Ø 20	0 m						
		Wall mounting	DEFENSOR MD 200° 24 IR 1C IP55 WH	EM10025358				
	T	Wall mounting (with corner bracket	MD 200 white with	EM10025310				
		for building corners)	MD EDGE MOUNTING WH	EM10025518				

MD-W 200i white

Recommended detector*

		230 V (ON/OI	FF)	DALI		KNX	
Room	Installation type	Product name	Item no.	Product name	Item no.	Product name	Item no.

STANDARD INDIVIDUAL OFFICE



Recessed ceiling mounting	PD-C 360i/8 DUO DALI	EP10427442	PD-C 360i/8 KNX UP	EP10427404
Surface mounting	PD-C 360i/8 DUO DALI with COMPACT MOUNTING BOX IP20 SM WH	EP10427442 EP10425370	PD-C 360i/8 KNX UP with COMPACT MOUNTING BOX IP20 SM WH	EP10427404 EP10425370

EXCLUSIVE INDIVIDUAL OFFICE



Recessed ceiling mounting	PD-FLAT 360i/8 RD WH DALI** EP10427	41 PD-FLAT 360i/8 RD WH KNX EP10451706
Recessed ceiling mounting	PD-FLAT 360i/8 RD BK DALI** EP104279	16 PD-FLAT 360i/8 RD BK KNX EP10451768

OPEN-PLAN OFFICE



0	Recessed ceiling mounting	PD-C 360i/24	EP10428067	PD-C 360i/24 DUO DALI	EP10427459	PD-C 360i/24 KNX UP	EP10427428
	Surface mounting	PD-C 360i/24 with COMPACT MOUNTING BOX IP20 SM WH	EP10428067 EP10425370	PD-C 360i/24 DUO DALI with COMPACT MOUNTING BOX IP20 SM WH	EP10427459 EP10425370	PD-C 360i/24 KNX UP with COMPACT MOUNTING BOX IP20 SM WH	EP10427428 EP10425370



	Recessed ceiling mounting with multi-sensor		PD-ATMO 360i/8 O KNX	EP10427220
0	Recessed ceiling mounting	PD-FLAT 360i/8 RD WH DALI** EP10427541	PD-FLAT 360i/8 RD WH KNX	EP10451706

CLASSROOM

PATIENT ROOMS



Recessed ceiling mounting PD-C 3601/24 DUO DALI EP10427459 PD-C 3601/24 KNX UP EP10427428 PD-C 3601/24 DUO DALI With COMPACT MOUNTING BOX IP20 SM WH EP10425370 BOX IP20 SM WH EP10425370 BOX IP20 SM WH EP10425370	6	Recessed ceiling mounting with multi-sensor			PD-ATMO 360i/8 O KNX	EP10427220
Surface mounting with COMPACT MOUNTING with COMPACT MOUNTING		Recessed ceiling mounting	PD-C 360i/24 DUO DALI	EP10427459	PD-C 360i/24 KNX UP	EP10427428
		Surface mounting	with COMPACT MOUNTING		with COMPACT MOUNTING	

6	Recessed ceiling mounting	PD-C 360i/8	EP10425059	PD-C 360i/8 DUO DALI	EP10427442	PD-C 360i/8 KNX UP	EP10427404
5	Surface mounting	PD-C 360i/8 with COMPACT MOUNTING BOX IP54 SM WH	EP10425059 EP10425905	PD-C 360i/8 DUO DALI with COMPACT MOUNTING BOX IP54 SM WH		with COMPACT MOUNTING	EP10427404 EP10425905
10	Flush-mounted ceiling installation	PD-CE 360i/8	EP10510700				

ENTRANCE AREAS



	Recessed ceiling mounting	PD-FLAT 360i/8 RD WH	EP10427930	PD-FLAT 360i/8 RD WH DALI**	EP10427541	PD-FLAT 360i/8 RD WH KNX	EP10451706
0	Flush-mounted ceiling installation,	PD-C 360i/8 mini	EP10426025	PD-FLAT 360i/8 mini DALI**	EP10427510	PD-C 360i/8 mini KNX	EP10426155
	miniaturised			PD-FLAT 360i/6 mini DALI**	EP10427503		

The applicable standards and regulations must be observed as a minimum requirement when selecting a product.
 With POWER SUPPLY 200mA DALI (EC10430008) as an accessory (available separately).

WH = white BK = black RD = round

www.esylux.com

Photo credits:
Fotolia: 28963452,77477773,71267036 | iStock: 0.00023437591, 108195326, 636344050, 495482808, 588391268, 475923646, 488715632 |
ThinkstockPhotos: 862725544 | shutterstock: 147183467, 361226012 | GettyImages: 472098295, 498111465, 482148863, 531241912, 637249110, 669105200, 518345403, 98844724, 153362937, 473513974, 475980520, 495604235, 505271706

 $The \ Blue tooth ^*word \ mark \ and \ logos \ are \ registered \ trademarks \ owned \ by \ Blue tooth \ SIG, \ Inc.$

For delivery times and further information on our products, please refer to our website.

© Copyright 2023

