

# THE NEW

# SURFACE DISC

# MODERN FLAT DESIGN, ROBUST PERFORMANCE

The SURFACE DISC wall and ceiling luminaire combines a sleek, flat design with durable housing — the perfect all-rounder for corridors, stairwells, entrance areas and other circulation zones in residential, commercial and public buildings. Easy to install with security lock fittings, it is available in different versions, offering flexible, energy-efficient solutions for every application.

With MULTI SELECT functionality, IP54 and IK10 protection, and a 75 000-hour lifetime, SURFACE DISC delivers durability, versatility and long-lasting performance — a reliable, cost-effective solution for a wide range of indoor areas.

# YOUR BENEFITS AT A GLANCE

- MODERN FLAT DESIGN elegant, robust and versatile, available in two sizes
- MULTI COLOUR & MULTI LUMEN selectable 3 000 K/4 000 K colour temperatures and lumen outputs



- SENSOR & CONTROL OPTIONS Microwave (300/220 mm), PIR, DALI-2 and TRIAC-DIM options (300 mm only)
- ALL-ROUNDER RANGE comprehensive portfolio for various spaces and functions; emergency versions available on 300 mm





# SURFACE DISC FAMILY OVERVIEW

# SURFACE DISC 300

# ON/OFF

Simple on/off control

## MICROWAVE SENSOR

With wired leaderfollower and corridor function

# PIR SENSOR

With wired leaderfollower and corridor function

# DALI-2

Digital dimming, integration with light management systems

# TRIAC (DIM)

Phase-cut dimming

### **EMERGENCY**

All types as emergency lighting version available





# CHOOSING THE RIGHT

# PIR SENSOR

PIR sensors efficiently detect changes in infrared radiation, making it easy to sense moving people



# **SENSOR TECHNOLOGY**

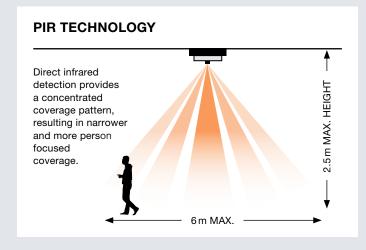
PIR: detects infrared radiation within a certain distance. The sensor registers when the IR signal moves from one of its facets to another, thereby sensing movement.

# YOUR ADVANTAGES

- Cost-effective and energy-efficient
- Easy to install and low-maintenance
- Reliable motion detection via body heat (infrared) and its movement
- No active transmission of signals (passive detection)

# **APPLICATION AREAS**

- Narrow staircases and corridors
- Side rooms and auxiliary areas
- Areas with moving objects (non IR) to avoid false sensing as well as active signal-sensitive areas



# Corridor lights automatically balance energy savings with safety. Lights remain at a low standby level and reach full brightness when motion is detected, then dim back after inactivity instead of switching off completely. Corridor lights automatically automatically balance energy savings with safety. Lights at full brightness Corridor lights automatically balance energy savings with safety. Lights at full brightness Corridor lights automatically balance energy savings with safety. Lights at full brightness Corridor lights automatically balance energy savings with safety. Lights at full brightness Corridor lights automatically balance energy savings with safety. Lights remain at a low standby level and reach full brightness Corridor lights automatically balance energy savings with safety. Lights remain at a low standby level and reach full brightness when motion is detected, then dim back after inactivity instead of switching off completely. Corridor lights automatically balance energy savings with safety. Lights at full brightness when motion is detected, then dim back after inactivity instead of switching off completely.

# SENSOR

# MICROWAVE SENSOR

Microwave sensors emit electromagnetic waves to detect movement precisely

# SENSOR TECHNOLOGY

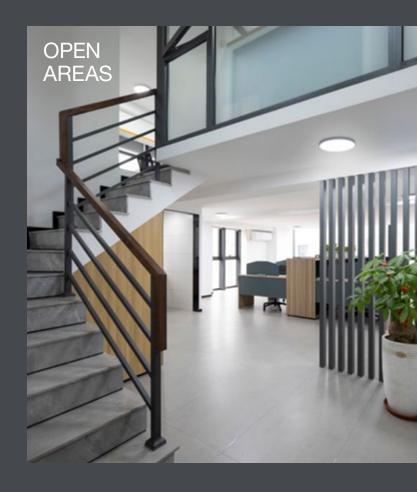
Microwave: emits continuous signals that are reflected by objects. The sensor detects movement based on changes in the reflection time pattern.

# YOUR ADVANTAGES

- Detects any kind of motion
- Detection distance can be limited to avoid sensing through obstacles (e.g. glass, thin walls) and interfering with other devices
- Stable performance during temperature fluctuations
- Sensor is placed inside the housing which means the original luminaire design can be retained

# **APPLICATION AREAS**

- Staircases, corridors, and open spaces
- Areas requiring reliable motion detection regardless of the temperature
- Wide areas with people and moving objects (e.g. cars)



# NCTION



0 %
Extended inactivity:
Lights off

# LEADER-FOLLOWER FUNCTION

A SURFACE DISC sensor (PIR or Microwave) luminaire acts either as a leader or follower which can send or receive commands to act simultaneously. Leader overwrites the settings of follower in this case. Sensor function of followers are turned off.

This leader-follower function requires a wired connection.

# Electromagnetic sensing allows extensive coverage and enhanced detection flexibility, creating a wider and more versatile coverage area, even through obstacles.



Example of a wired corridor lighting plan with SURFACE DISC DALI, control unit and sensors.

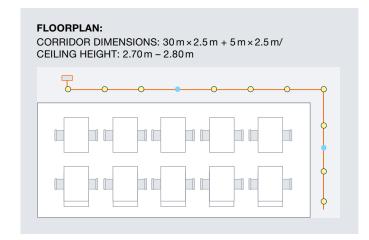
# **CHALLENGE**

- Ensure lighting is available where and when needed in the corridor
- Use existing or new wiring efficiently
- Provide full coverage with no dark zones
- Enable automatic movement detection for comfort and maximum energy efficiency

# **SOLUTION**

- Use LEDVANCE DALI control units with the DALI-2 LS-PD sensor
- Provide a proven wired corridor lighting solution
- Automatically adjust lights to presence and ambient
- Partition lighting zones to save energy and CO<sub>2</sub>
- Integrate seamlessly with VIVARES light management for added functionalities and a 7-year system guarantee without registration

# **REALISATION**



LIST OF MATERIALS								
Product picture	Image on floorplan	Designation	EAN	QTY				
	0	SURFACE DISC DALI: SF DISC DA 300 V 21W 83040	4099854 <b>640520</b>	10				
-		SENSOR: DALI-2 LS-PD-40X5 IR CI	4058075 <b>843868</b>	2				
D Form		POSSIBLE CONTROL UNITS: FLEX CU DALI-2 TW OR FLEX CU DALI-2 FM TW	4058075 <b>843844</b> / 4058075 <b>841901</b>	1				

# COMPONENTS

### SENSOR

- Wide detection area optimised for corridors (up to 40 m)
- DALI-2 certified input device
- Occupancy detection via passive IR element
- Light sensing up to 2000 lx
- Adapter for ceiling mounting IP54

### CONTROL

- Automatic control to adapt the light to everyone's needs
- Commissioning viaBT app
- Up to 32 devices, such as luminaires
   + sensors can be controlled

# SURFACE DISC RANGE





Are you interested in our services for your projects? You can reach us at contact@ledvance.com or by phone on +49 89 780673-600
All the information on successful projects can be found here: ledvance.com/projects



Product name	EAN (GTIN)	Replacement for	W	lm	lm/w	K	L80 1			L×W×H[ Ø×H[		<b>№</b>
SURFACE DISC								SELECT	FLICKER VALUE <5%	CRI 1P54	IK10	5 YEARS GUARANTEE
SF DISC 220 V 14W ML 83040	4099854 <b>640421</b>	1×18W CFLp	14/9/7	1680/1080/720	120	3000/4000	75000	130		220	× 52	1
SF DISC 300 V 21W ML 83040	4099854 <b>640445</b>	1×26W CFLp	21/15/9	2520/1800/1080	120	3000/4000	75000	125		300	× 56	2
SURFACE DISC SENSOR MICROWAVE						4		<b>E</b>	FLICKER VALUE <5%	CRI P54	IK10	5 YEARS SURPANTEE
SF DISC SNM 220 V 14W ML 83040	4099854 <b>640469</b>	1×18W CFLp	14/9/7	1680/1080/720	120	3000/4000	75000	130		220	× 52	1
SF DISC SNM 300 V 21W ML 83040	4099854 <b>640483</b>	1×26W CFLp	21/15/9	2520/1800/1080	120	3000/4000	75000	125	_	300	× 56	2
SURFACE DISC SENSOR PIR						43		SENSOR PIR	FLICKER VALUE <5%	CRI >80 IP54	IK10	5 YEARS
SF DISC SNP 300 V 21W ML 83040	4099854 <b>640506</b>	1×26W CFLp	21/15/9	2520/1800/1080	120	3000/4000	75000	125		300	× 56	3
SURFACE DISC DALI					•		MAS DALI-2		FUCKER VALUE <5%	CRI 1P54	IK10	5 YEARS SUMMANTEE
SF DISC DA 300 V 21W 83040	4099854 <b>640520</b>	1×26W CFLp	21	2520	120	3000/4000	75000	125	DALI2	300	× 56	2
SURFACE DISC DIM							3	SELECT	Flicker value <5%	CRI >80 IP54	IK10	5 YEARS GUARANTEE
SF DISC DIM 300 V 21W 83040	4099854 <b>640544</b>	1×26W CFLp	21	2520	120	3000/4000	75000	125	PHASE CUT	300	× 56	2
SURFACE DISC EMERGENCY									FLICKER YALUE <5%	CRI >80 IP54	IK10	5 YEARS
SF DISC EL 300 V 21W ML 83040	4099854 <b>640568</b>	1×26W CFLp	21/15/9	2520/1800/1080	120	3000/4000	75000	125		300	× 56	2
SURFACE DISC EMERGENCY SENSOR MIC	ROWAVE					<b>(3</b>		<u>\$</u>	FUCKER VALUE <5%	CRI 1P54	IK10	5 YEARS
SF DISC EL SNM 300 V 21W ML 83040	4099854 <b>640582</b>	1×26W CFLp	21/15/9	2520/1800/1080	120	3000/4000	75000	125		300	× 56	2
SURFACE DISC EMERGENCY SENSOR PIR						<b>(3</b>		SENSOR PIR	FLICKER VALUE <5%	CRI 1P54	IK10	5 YEARS
SF DISC EL SNP 300 V 21W ML 83040	4099854 <b>640605</b>	1×26W CFLp	21/15/9	2520/1800/1080	120	3000/4000	75000	125		300	× 56	3
SURFACE DISC EMERGENCY DALI					•		MAÎ DALI-2		FUCKER VALUE <5%	CRI   P 54	IK10	5 value
SF DISC EL DA 300 V 21W 83040	4099854 <b>640629</b>	1×26W CFLp	21	2520	120	3000/4000	75000	125	DALI2	300	× 56	2
		· ·					<b>/31</b> 1/		PUCKES			- HOWYON
SURFACE DISC EMERGENCY DIM							30	(allian)	<5%	CRI >80 IP54	IK10	5 YEARS SUMPANTEE
SF DISC EL DIM 300 V 21W 83040	4099854 <b>640643</b>	1×26W CFLp	21	2520	120	3000/4000	75000	125	PHASE CUT	300	× 56	2

### SENSOR PROPERTIES

Product name	Sensor technology	Detection threshold of daylight sensor	Detection range of motion sensor	Sensor detection angle	Sensor controlled switching time
SF DISC SNM 220 V 14W ML 83040	Microwave	5170 lx	26 m	120°	5 s20 s
SF DISC SNM 300 V 21W ML 83040	Microwave	5170 lx	26 m	120 °	5 s20 s
SF DISC SNP 300 V 21W ML 83040	Passive infrared (PIR)	5170 lx	1.53 m	360 °	5 s60 s
SF DISC EL SNM 300 V 21W ML 83040	Microwave	5170 lx	26 m	120 °	5 s20 s
SF DISC EL SNP 300 V 21W ML 83040	Passive infrared (PIR)	5170 lx	1.53 m	360°	5 s60 s

### **EMERGENCY LIGHTING PROPERTIES**

Product name	Battery life in emergency operation mode	Type of emergency operation test	Type of emergency light operation	Luminous flux in emergency operation mode	Type of Battery
SF DISC EL 300 V 21W ML 83040	3 h	Automatic	Non-maintained, Maintained	180 lm	LiFeP04
SF DISC EL SNM 300 V 21W ML 83040	3 h	Automatic	Non-maintained, Maintained	180 lm	LiFePO4
SF DISC EL SNP 300 V 21W ML 83040	3 h	Automatic	Non-maintained, Maintained	180 lm	LiFePO4
SF DISC EL DA 300 V 21W 83040	3 h	Automatic	Non-maintained, Maintained	180 lm	LiFePO4
SF DISC EL DIM 300 V 21W 83040	3 h	Automatic	Non-maintained, Maintained	180 lm	LiFePO4



**IoT = Internet of Things.** Supports data transfer via gateway to cloudbased monitoring platforms, such as LEDVANCE VIVARES Cloud.

 $<sup>^1</sup>$  t[h]: L70/B50 @ 25 °C (Ta)/t[h]: L80/B10 @ 25 °C (Ta)  $^2$  Refer to www.ledvance.com/guarantee for precise conditions

### **ABOUT LEDVANCE**

With business activities in over 140 countries, LEDVANCE is one of the world's leading general lighting companies. Emerging from OSRAM's general lighting division, LEDVANCE's portfolio includes LED lamps and luminaires, intelligent lighting products, traditional lamps and renewable energy solutions.

#POWERTHROUGHLIGHT



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