



PowerBalance surface-mounted – sustainable performance

PowerBalance, surface mounted

When it comes to lighting an office space with LED luminaires, people are usually willing to invest in sustainability provided the investment pays back. At the same time, the system should comply with office lighting norms to ensure a comfortable working environment. PowerBalance is Philips' most energy-efficient office-norm-compliant LED luminaire. It more than halves energy costs compared to a T5 solution, and the light source has a longer lifetime. This results in significantly lower operational costs, ensuring a payback that meets the needs of the specification market. PowerBalance surface-mounted luminaires are easy to install on ceilings thanks to their intuitive mounting system. PowerBalance is also available in a recessed version.

Benefits

- Extremely efficient office-norm-compliant LED luminaire
- Good-quality lighting solution for direct replacement of T5 luminaires in most indoor applications
- Significantly reduces operational costs, resulting in an attractive payback time

Features

- Easy and intuitive mounting system
- Advanced LED technology
- Available in different shapes and sizes
- Office norm-compliant

Application

- Offices
- Other indoor applications

Specifications

PowerBalance, surface mounted

Type	SM461V
Light source	Philips LED module PP
Power	Square version (W57L57), 4000 K
	LED40S: 28.5 W
	LED34S: 24 W
	LED28S: 20.5 W
	Rectangular version (W17L169), 4000 K
	LED40S: 30 W
	LED34S: 26 W
	LED28S: 21 W
Beam angle	90°
Luminous flux	2800, 3400 or 4000 lm (depending on configuration)
Correlated Color	3000 or 4000 K
Temperature	
Color Rendering Index	> 80
Lumen maintenance at median useful life* 50000 h	L90
Control gear failure rate at median useful life 50000 h	5%
Performance Ambient Temperature Tq	+25 °C

Operating temperature range	+10 to +40 °C
Driver	Built-in
Mains voltage	220-240 V / 50 Hz
Dimming	DALI Dimmable (PSD)
	DALI Dimmable Touch and Dim (PSD-T)
Controls system input	DALI
Options	Emergency lighting (integrated): 1 hour (EL1) or 3 hours (EL3)
	Controls: Actilume (ACL)
Material	Housing: coated steel and plastic
	Rim: powder coated steel
	Optics: plastic
Color	White
Optic	Wide beam
Connection	Push-in connector with pull relief (PIP)
Maintenance	Optical module sealed for life; no internal cleaning required
Installation	Square version: individual; locking the luminaire into pre-mounted ceiling plate (delivered with the luminaire)
	Rectangular version: individual or in line; clicking the luminaire into pre-screwed ceiling brackets
	Through-wiring possible
Accessories	Dedicated suspension sets for square and rectangular versions

Versions



PowerBalance Surface-mounted
SM461V luminaire, rectangular
version



PowerBalance Surface-mounted
SM461V luminaire, square version



PowerBalance Surface-mounted
SM461V luminaire with ActiLume,
square version



PowerBalance Surface-mounted
SM461V luminaire with ActiLume,
rectangular version

PowerBalance, surface mounted

Product details



Closing mechanism



Electrical connector



PowerBalance luminaire, ceiling-mounted



PowerBalance luminaire, suspended mounting



Triangular suspension set for rectangular PowerBalance luminaire



In-line mounting using connection pieces



Connection pieces for in-line mounting



Closing mechanism

PowerBalance, surface mounted

Product details



Electrical connector



PowerBalance is easy to install thanks to the large opening in the top of the luminaire



Luminaire in mounting position on ceiling; suspension sets available for square and rectangular luminaires



PowerBalance, square shape, suspended



Suspension set for square shape has four wires that are connected to the four corners of the luminaire

Accessories



Suspension set for square version

Ordercode 27584800



Suspension set for rectangular version

Ordercode 27585500

PowerBalance, surface mounted

Application Conditions

Ambient temperature range	+10 to +40 °C
Maximum dim level	1%

Approval and Application

Mech. impact protection code	IK02
Ingress protection code	IP40

Controls and Dimming

Dimmable	Yes
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General Information

Beam angle of light source	- °
Cap-Base	-
CE mark	CE mark
Driver included	Yes
Emergency lighting	No
ENEC mark	ENEC plus mark
Flammability mark	F
Glow-wire test	850/5
Light source replaceable	No
Number of gear units	1 unit
Number of light sources	1
Optic type	No
Product Family Code	SM461V
UL mark	-

Initial Performance (IEC Compliant)

Initial chromaticy	(0.38, 0.38) SDCM <3
Init. Corr. Color Temperature	4000 K
Init. Color Rendering Index	≥80
Luminous flux tolerance	+/-10%

Mechanical and Housing

Color	White
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Application Conditions

Order Code	Full Product Name	Suitable for random switching
27602900	SM461V LED34S/840 PSD W17L169	No
27603600	SM461V LED40S/840 PSD W17L169	No
10321800	SM461V LED28S/840 PSD W17L169	No
27604300	SM461V LED40S/840 PSD W57L57	No
27605000	SM461V LED34S/840 PSD W57L57	No
10314000	SM461V LED28S/840 PSD W57L57	No
06489100	SM461V LED34S/840 POE W57L57	No
10315700	SM461V LED28S/840 PSD W57L57 ACL	Yes (relates to presence/ movement detection and daylight harvesting)
10317100	SM461V LED34S/840 PSD W57L57 ACL	Yes (relates to presence/ movement detection and daylight harvesting)
10319500	SM461V LED40S/840 PSD W57L57 ACL	Yes (relates to presence/ movement detection and daylight harvesting)
10322500	SM461V LED28S/840 PSD W17L169 ACL	Yes (relates to presence/ movement detection and daylight harvesting)
10324900	SM461V LED34S/840 PSD W17L169 ACL	Yes (relates to presence/ movement detection and daylight harvesting)
10326300	SM461V LED40S/840 PSD W17L169 ACL	Yes (relates to presence/ movement detection and daylight harvesting)

Operating and Electrical

Order Code	Full Product Name	Input Voltage	Order Code	Full Product Name	Input Voltage
27602900	SM461V LED34S/840 PSD W17L169	220-240 V	10315700	SM461V LED28S/840 PSD W57L57 ACL	220-240 V
27603600	SM461V LED40S/840 PSD W17L169	220-240 V	10317100	SM461V LED34S/840 PSD W57L57 ACL	220-240 V
10321800	SM461V LED28S/840 PSD W17L169	220-240 V	10319500	SM461V LED40S/840 PSD W57L57 ACL	220-240 V
27604300	SM461V LED40S/840 PSD W57L57	220-240 V	10322500	SM461V LED28S/840 PSD W17L169 ACL	220-240 V
27605000	SM461V LED34S/840 PSD W57L57	220-240 V	10324900	SM461V LED34S/840 PSD W17L169 ACL	220-240 V
10314000	SM461V LED28S/840 PSD W57L57	220-240 V	10326300	SM461V LED40S/840 PSD W17L169 ACL	220-240 V
06489100	SM461V LED34S/840 POE W57L57	51 to 54 V			

General Information

PowerBalance, surface mounted

Order Code	Full Product Name	Protection class IEC	Lamp family	Embedded
			code	control
27602900	SM461V LED34S/840 PSD W17L169	Safety class I (I)	LED34S	No
27603600	SM461V LED40S/840 PSD W17L169	Safety class I (I)	LED40S	No
10321800	SM461V LED28S/840 PSD W17L169	Safety class I (I)	LED28S	No
27604300	SM461V LED40S/840 PSD W57L57	Safety class I (I)	LED40S	No
27605000	SM461V LED34S/840 PSD W57L57	Safety class I (I)	LED34S	No
10314000	SM461V LED28S/840 PSD W57L57	Safety class I (I)	LED28S	No
06489100	SM461V LED34S/840 POE W57L57	Safety class III (III)	LED34S	No

Order Code	Full Product Name	Protection class IEC	Lamp family	Embedded
			code	control
10315700	SM461V LED28S/840 PSD W57L57 ACL	Safety class I (I)	LED28S	ACL
10317100	SM461V LED34S/840 PSD W57L57 ACL	Safety class I (I)	LED34S	ACL
10319500	SM461V LED40S/840 PSD W57L57 ACL	Safety class I (I)	LED40S	ACL
10322500	SM461V LED28S/840 PSD W17L169 ACL	Safety class I (I)	LED28S	ACL
10324900	SM461V LED34S/840 PSD W17L169 ACL	Safety class I (I)	LED34S	ACL
10326300	SM461V LED40S/840 PSD W17L169 ACL	Safety class I (I)	LED40S	ACL

Initial Performance (IEC Compliant)

Order Code	Full Product Name	Initial LED	Initial luminous	Initial input
		luminaire efficacy	flux	power
27602900	SM461V LED34S/840 PSD W17L169	131 lm/W	3400 lm	26 W
27603600	SM461V LED40S/840 PSD W17L169	133 lm/W	4000 lm	30 W
10321800	SM461V LED28S/840 PSD W17L169	133 lm/W	2800 lm	21 W
27604300	SM461V LED40S/840 PSD W57L57	140 lm/W	4000 lm	28.5 W
27605000	SM461V LED34S/840 PSD W57L57	142 lm/W	3400 lm	24 W
10314000	SM461V LED28S/840 PSD W57L57	137 lm/W	2800 lm	20.5 W
06489100	SM461V LED34S/840 POE W57L57	145 lm/W	3400 lm	23.5 W

Order Code	Full Product Name	Initial LED	Initial luminous	Initial input
		luminaire efficacy	flux	power
10315700	SM461V LED28S/840 PSD W57L57 ACL	130 lm/W	2800 lm	21.5 W
10317100	SM461V LED34S/840 PSD W57L57 ACL	136 lm/W	3400 lm	25 W
10319500	SM461V LED40S/840 PSD W57L57 ACL	136 lm/W	4000 lm	29.5 W
10322500	SM461V LED28S/840 PSD W17L169 ACL	127 lm/W	2800 lm	22 W
10324900	SM461V LED34S/840 PSD W17L169 ACL	126 lm/W	3400 lm	27 W
10326300	SM461V LED40S/840 PSD W17L169 ACL	129 lm/W	4000 lm	31 W

Mechanical and Housing

Order Code	Full Product Name	Geometry
27602900	SM461V LED34S/840 PSD W17L169	W17L169
27603600	SM461V LED40S/840 PSD W17L169	W17L169
10321800	SM461V LED28S/840 PSD W17L169	W17L169
27604300	SM461V LED40S/840 PSD W57L57	W57L57
27605000	SM461V LED34S/840 PSD W57L57	W57L57
10314000	SM461V LED28S/840 PSD W57L57	W57L57
06489100	SM461V LED34S/840 POE W57L57	W57L57

Order Code	Full Product Name	Geometry
10315700	SM461V LED28S/840 PSD W57L57 ACL	W57L57
10317100	SM461V LED34S/840 PSD W57L57 ACL	W57L57
10319500	SM461V LED40S/840 PSD W57L57 ACL	W57L57
10322500	SM461V LED28S/840 PSD W17L169 ACL	W17L169
10324900	SM461V LED34S/840 PSD W17L169 ACL	W17L169
10326300	SM461V LED40S/840 PSD W17L169 ACL	W17L169

