



# PowerBalance gen2 – sustainable performance

## PowerBalance gen2

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 gen2 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. The gen2 architecture enables a range of highly versatile modular and semi-modular luminaires. These luminaires can be easily mounted in ceilings with exposed T-bar and concealed T-bar, as well as plaster ceiling types.

### 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

- Variety of mounting options
- Advanced LED technology
- Available in different shapes and sizes
- Office-norm-compliant
- Integrated 3 hour emergency options available
- Integrated sensor for (connected) lighting systems enabling additional energy saving and data collection

## Application

- Offices
- Other indoor applications

## Warnings and Safety

- The product is IP20 and as such is not protected against water ingress, so we strongly recommend that the environment in which the luminaire is to be installed is suitably checked
- If the above advice is not taken and the luminaires are subject to water ingress, Philips/Signify cannot guarantee safe use and the product warranty will become void

## Specifications

<b>Type</b>	RC461B (module size 600x600 mm versions) RC463B (module size 625x625 mm versions) RC468B (module size 675x675 mm versions)
<b>Ceiling type</b>	Exposed and symmetrical concealed T-bar ceiling and plaster (board) ceiling Asymmetrical concealed T-bar ceiling, square Bandraster ceiling
<b>Ceiling grid</b>	RC461B: module size in length: 600 mm RC463B: module size in length: 625 mm RC468B: module size in length: 675 mm
<b>Light source</b>	Philips LED module PP
<b>Power</b>	20.5 to 30 W (depending on type)
<b>Beam angle</b>	90°
<b>Luminous flux</b>	2,800, 3,400 or 4,000 lm (depending on configuration)
<b>Correlated Colour</b>	3,000 or 4,000 K/Tunable White
<b>Temperature</b>	
<b>Colour Rendering Index</b>	> 80
<b>Lumen maintenance at median useful life* 50,000 h</b>	L90
<b>Control gear failure rate at median useful life 50,000 h</b>	5%
<b>Performance Ambient Temperature Tq</b>	+25 °C
<b>Operating temperature range</b>	+10 to +40 °C
<b>Driver</b>	Built-in: Non-dimmable (PSU) DALI Dimmable (PSD) DALI Dimmable Touch and Dim (PSD-T)
<b>Mains voltage</b>	220-240 V/50 Hz
<b>Dimming</b>	Compatible with DALI controllers
<b>Control system input</b>	DALI
<b>Options</b>	Emergency lighting (integrated): 3 hours (EL3) Airhandling (only VPC, Bandraster) Controls: Actilume (ACL)
<b>Material</b>	Housing: coated steel and plastic Rim: powder-coated steel Optics: plastic
<b>Colour</b>	White (WH, comparable to RAL 9003)

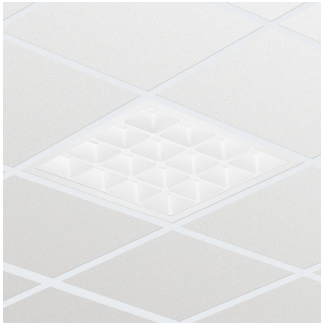
<b>Connection</b>	Wieland connector GST 18, 3 or 4 poles (W, W4) Push-in connector with pull relief (PIP)
<b>Maintenance</b>	Optical module sealed for life; no internal cleaning required
<b>Installation</b>	Visible profile ceiling version (VPC): in-lay, no brackets needed Concealed profile ceiling version (CPC): using separate mounting rim and brackets (included) (not in RC467B/RC468B) Plaster ceiling version (PCV): using separate mounting rim and brackets (included) (only RC460B/RC461B)
<b>Type</b>	RC415B (module size 600x600 mm version) RC416B (module size 625x625 mm version)
<b>Ceiling type</b>	Exposed T-bar ceiling Bandraster ceiling (RC416 W15LEXT)
<b>Ceiling grid</b>	RC415B: module size in length: 600 mm RC416B: module size in length: 625 mm
<b>Light source</b>	Philips LED module PP
<b>Power</b>	LED34S: 30 W (4,000 K) LED20S: 17 W (4,000 K)
<b>Beam angle</b>	90°
<b>Luminous flux</b>	2,000 or 3,400 lm (depending on configuration)
<b>Correlated Colour</b>	3,000 or 4,000 K
<b>Temperature</b>	
<b>Colour Rendering Index</b>	> 80
<b>Lumen maintenance at median useful life* 50,000 h</b>	L90
<b>Control gear failure rate at median useful life 50,000 h</b>	5%
<b>Performance Ambient Temperature Tq</b>	+25 °C
<b>Operating temperature range</b>	+10 to +40 °C
<b>Driver</b>	Built-in: Non-dimmable (PSU) DALI Dimmable (PSD) DALI Dimmable Touch and Dim (PSD-T)
<b>Mains voltage</b>	220-240 V/50 Hz
<b>Dimming</b>	Compatible with DALI controllers
<b>Control system input</b>	DALI

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<b>Options</b>	Emergency lighting (integrated): 3 hours (EL3)
	Airhandling (bandraaster only)
	Controls: Actilume (ACL)
<b>Material</b>	Housing: coated steel and plastic
	Rim: powder-coated steel
	Optics: plastic

<b>Colour</b>	White (WH, comparable to RAL 9003)
<b>Connection</b>	Wieland connector GST 18, 3 or 4 poles (W, W4)
	Push-in connector with pull relief (PIP)
<b>Maintenance</b>	Optical module sealed for life; no internal cleaning required
<b>Installation</b>	Visible profile ceiling version (VPC): in-lay, no brackets needed
	Bandraaster

## Versions



PowerBalance gen2 RC460B/  
RC461B recessed LED luminaire,  
module size 600 (visible profile  
ceiling version)

## Product details



IPDP\_RC460Bi\_0153-Detail photo



IPDP\_RC460Bi\_0049-Detail  
photo



IPDP\_RC460Bi\_0055-Detail  
photo

# PowerBalance gen2

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Driver failure rate at 5,000 hours	0.01 %
<b>Application Conditions</b>	
Ambient temperature range	+10 to +40 °C
Maximum dimming level	1%
Suitable for random switching	No
<b>Approval and Application</b>	
Mech. impact protection code	IK02
Ingress protection code	IP20 (front IP40)
<b>Controls and Dimming</b>	
Dimmable	Yes
<b>Operating and Electrical</b>	
Input Voltage	220 to 240 V
<b>General Information</b>	
Beam angle of light source	120 °
CE mark	CE mark
Protection class IEC	Safety class I
Optical cover/lens type	PC
Driver included	Yes
ENEC mark	ENEC mark
Flammability mark	F
Gear	-
Glare-shielding accessories	No
Glow-wire test	Temperature 850 °C, duration 5 s
Light source replaceable	No
Number of gear units	1 unit
Number of light sources	1
Optic type	No
Product family code	RC461B
UL mark	No
<b>Initial Performance (IEC Compliant)</b>	
Initial chromaticity	(0.38, 0.38) SDCM <3
Init. Corr. Colour Temperature	4000 K
Init. Colour rendering index	≥90
Luminous flux tolerance	+/-10%
<b>Mechanical and Housing</b>	
Colour	White RAL 9003

## General Information

Order Code	Full Product Name	Lamp family code
96451100	RC461B LED34S/940 PSD W60L60 VPC PIP	LED34S
96456600	RC461B LED40S/940 PSD W60L60 VPC PIP	LED40S

## Initial Performance (IEC Compliant)

Order Code	Full Product Name	Initial LED luminaire efficacy	Initial luminous flux	Initial input power
96451100	RC461B LED34S/940 PSD W60L60 VPC PIP	139 lm/W	3400 lm	24.5 W
96456600	RC461B LED40S/940 PSD W60L60 VPC PIP	140 lm/W	4000 lm	28.5 W

