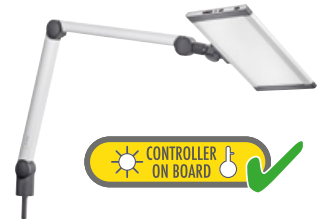




TSL - Trust Your Senses to a Proven Partner



PL151



LED Lighting System PL151

IMAGINE,
HAVING YOUR OWN LIGHT



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DESIGN MEETS FUNCTION

The workstation light series PL151 is the result of consistent research and development. It is an upgraded version of the PL150 system. The new LED workstation light PL151 is based on the multi-awarded design and lighting technology of the PL150 series. The program of the LED lighting system PL151 was extended with new variants for further industrial applications.

Depending on the application and the desired lighting features, there are different optic variants available.

The sleek aluminum design and high-quality synthetic parts bridge functional industrial standards and appealing office design. The PL151 offers extraordinary illumination though requires little space due to its perfect flat construction. The PL151 system also offers new mounting possibilities.



DESIGN MEETS FUNCTION

ABOUT PL151

FEATURES

Great Climate! LED technology reduces heat emission

The LED light allows working comfortably even in high ambient temperatures. Moreover, there is no risk of hand burns when touched. A sophisticated thermal management guarantees a lamp lifetime of up to 50,000 operating hours. Thus, maintenance costs are minimized.

Color Setting

Customizable light color! The PL151 is infinitely adjustable from warm white to cool white (approx. 3,000K- 6,500K).

· Physiology:

Cool light enhances concentration and prevents fatigue.
Warm light generates well-being.

· Applications for cool light:

Cool light clearly accentuates outlines and details.
For example in testing stations and quality control.

· Applications for warm light:

Warm light reduces reflections on glossy parts.
For example, welding work and surface inspection.

Glare-Free

A constant distribution of light (prism technology) reduces light density and produces glare free light. Reflections on glossy parts are reduced to a minimum.

No Noticeable Shadow Effect

By redirecting light rays from more than 100,000 micro lenses, uncomfortable brightness is avoided, achieving homogeneous light distribution. Shadows on working areas are basically nonexistent even when partial light obstruction occurs. Thus common multi shadows despised in LED lighting are prevented.

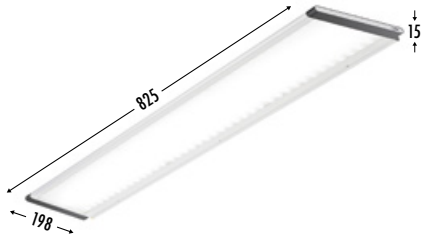
Easy cleaning

The prism area is easy to clean due to its smooth surface.

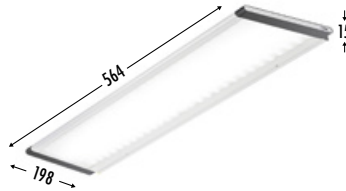


DIMENSION

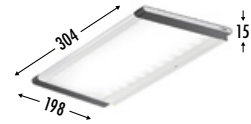
PL151X8



PL151X6



PL151X3



LIGHT CONTROL

The LED Lighting System PL151 is infinitely adjustable in brightness and color temperature from warm white to cool white.

The light functions can be controlled via a miniature wired handheld MTP or a 0 - 10 V dimmer (available in retail). Alternatively, it is possible to centrally control several workplace lamps via a DMX bus to create certain lighting scenarios (e.g. dimming the light during breaks or lunch time, adjusting brightness according to daylight changes, increasing cool white light to decrease fatigue, etc.)



DMX



Built-in light control

Functions:

- On/off switch
- Brightness adjustment
- Color temperature tuning
- Save/recall up to three light settings
- Memory display

Factory default settings as follows:

- Memory 1: Cool white (approx. 6.500K), maximum brightness
- Memory 2: Warm white (approx. 3.000K), maximum brightness
- Memory 3: Neutral white (approx. 4.500K), maximum brightness



LIGHTING DESIGN

ABOUT PL151

OPTICS

Due to lateral radiation technology of LEDs into the optics, the PL151 generates a pleasant homogeneous workplace illumination. Moreover, it has a remarkable high light efficiency.

The PL151 system is offered in three optic selections. Considering the requirements from various application areas, the optics were defined. High-brightness, focused light, or soft diffuse illumination at workstations is possible with one system.



Lateral radiation of LEDs into the optics

Prismatic - Angle of radiation approx. 60°

The PL151 lights with 60° prismatic are recommended for workstations with high brightness requirement and major distance (for example, assembly line stations, quality control desks, or monitoring of manufacturing process of large components). Due to the integrated 60° lenses, the light is focused on the workplace.

Microstructure - Angle of radiation approx. 100°

For tasks with higher reflection on the considering object (for example, coating or surface inspection). Due to a bigger angle of radiation, a larger work surface can be illuminated.

Diffused

For highly precise assignments where maximum light emission is required without uncomfortable glare (for example, watch industry). This is possible with an additional diffuser on the microstructure optic.

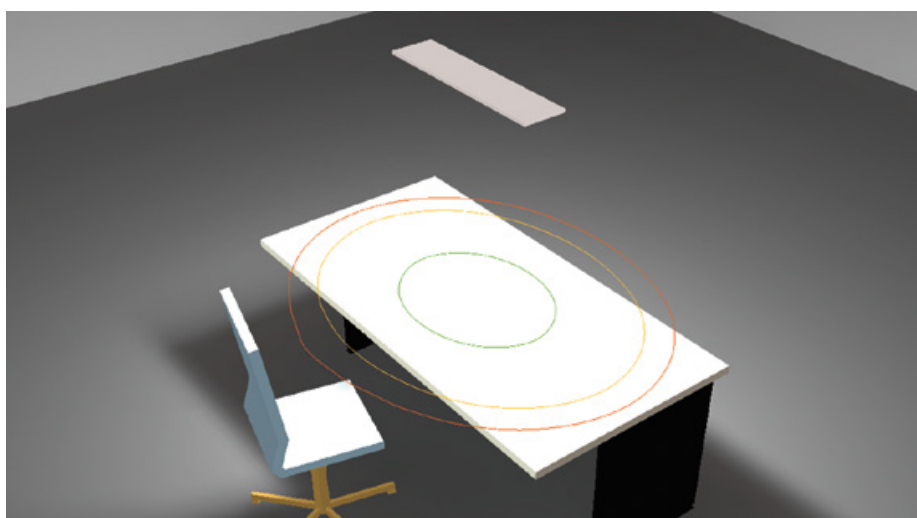
Small light - Great effect

The PL151 features an exceptional compact design. Considering the size of light-emitting surface, the PL151 illuminates large areas.

The graphic shows that the PL151x8 (with 60° prismatic) illuminates an area of example 1m x 2m very homogeneously and brightly.

The light is located at a distance of 1m to the table.

Illumination:	
Illumination:	
red line	>400lx
orange line	>500lx
green line	>1000lx



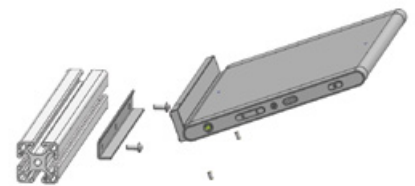
MOUNTING POSSIBILITIES

The PL151 system provides mounting options for different applications. Depending on the workstation design, there are different options available for an easy light installation.

Ceiling or wall mounting for workstations in production halls. The PL151 can be mounted on ceilings or walls. It illuminates workstations from a large distance. The mounting bracket, which is included in the factory delivery, can be mounted on the ceiling or wall. The light is simply suspended/hooked and with two screws fixed on the mounting bracket.



LED light PL151 for mounting on walls /ceilings



Mounting bracket on the ceiling with the light

Articulated arm for design desks and precision assembly stations. The base clamp can be directly fastened to the desk. Different options are available for desk mounting depending on the application (clamp, drilling, or screw mounting). The articulated arm allows the light to be moved freely in any direction.



LED light PL151 with articulated arm



Articulated arm pin and clamp

Swing-arm for vertical desks in testing or inspection stations. Thanks to the swing-arm the light can be mounted on a vertical desk with just two screws. It also features length adjustment to the desired position.



LED light PL151 with swing-arm

Pole and swing-arm

LIGHTING DESIGN

CONFIGURATOR

LED LIGHTING SYSTEM PL151

The LED Lighting System PL151 provides various combination possibilities. The following tables aim to help you configure your desired system. Your PL151 system is complete and ready to be implemented when a component from any given area has been selected.

■ Components for lights with 60° prismatic optics

Our LED lights with prismatic optics have an angle of radiation of 60°. They are recommended for workstations with high brightness requirement and major distance (for example, assembly line stations, quality control desks, or monitoring of manufacturing process of large components).

■ Components for lights with microstructure optics

The microstructure optics have a light emitting angle of 100°. It is recommended for tasks with higher reflection on the considering object (for example, coating or surface inspection).

■ Components for lights with diffused optics

The diffused optics are suitable for highly precise assignments where maximum light emission is required without uncomfortable glare (for example, watch industry).

PRISMATIC – WALL/CEILING ASSEMBLY WITHOUT LIGHT CONTROL

LED Light	PL151X3	PL151X6	PL151X8
Article Number	8705393	8705394	8705395
Assembly (Ceiling or wall assembly)	X	X	X
Accessories - Ready for connection system			
WALL PLUG POWER SUPPLY			
NT25 Wall plug power supply (Europlug) (8705401)	X		
NT60 Power supply (Power plug D) switchable (8705360)	X	X	
NT60 Power supply (Power plug D) (8705402)		X	
NT100 Power supply (Power plug D), switchable (8705410)			X
NT60 Power supply (Power plug CH) switchable (8705363)	X	X	
NT60 Power supply (Power plug CH) (8705412)		X	
NT100 Power supply (Power plug CH), switchable (8705411)			X
CONNECTION CABLE			
Connection cable, M8 - DC (8705413)	X	X	X

CHECKLIST

YOUR SYSTEM IS COMPLETE, IF YOU HAVE CHOSEN THE FOLLOWING COMPONENTS:

- LED LIGHT
- POWER SUPPLY
- CONNECTION CABLE



PRISMATIC - CEILING ASSEMBLY AND EXTERNAL LIGHT CONTROL

LED Light	PL151X3	PL151X6	PL151X8
Article Number	8705393	8705394	8705395
Assembly (Ceiling or wall assembly)	X	X	X
Accessories			
ADDITIONAL COMPONENTS FOR EXTERNAL LIGHT CONTROL			
100W Power supply for free wiring (8701525)	X	X	X
LCU (Light control) (8702672)	X	X	X
MTP (Manual control) (8702673)	X	X	X
CONNECTION CABLE			
Built-in M8 connector, stranded (8705770) first option	X	X	X
PL151 Connection cable M8 - Plug/Coupling 2m (8702801)	X	X	X

CHECKLIST

YOUR SYSTEM IS COMPLETE, IF YOU HAVE CHOSEN THE FOLLOWING COMPONENTS:

- LED LIGHT
- POWER SUPPLY
- LCU
- CONNECTION CABLE
- CONVENTIONAL 1-10V DIMMER OR MTP



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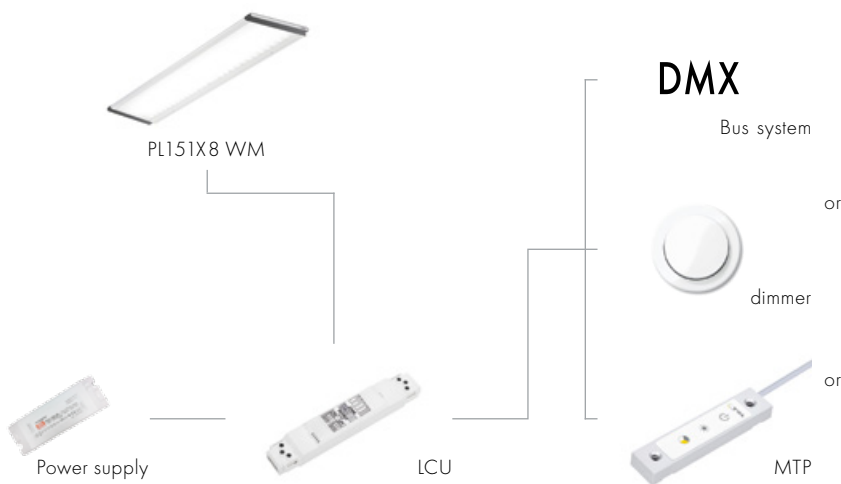
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Customize installation with single components



HINT Connection recommendation:

Use our build-in connector M8 for feed-through enclosures. Cable strands can be easily wired to the LCU (Light control). With an extension cable (8702801) you can connect the light fast and protect against polarity reversal. The MTP (handheld control) can be also connected with the M8 build-in connector.

PRISMATIC - CEILING ASSEMBLY AND INTEGRATED LIGHT CONTROL

LED Light	PL151X3	PL151X6	PL151X8
Article Number	8705396	8705397	8705398
Assembly (Ceiling or wall assembly)	X	X	X
Accessories - Ready for connection system			
WALL PLUG POWER SUPPLY			
NT25 Wall plug power supply (Europlug) (8705401)	X		
NT60 Power supply (Power plug D) switchable (8705360)	X	X	
NT60 Power supply (Power plug D) (8705402)		X	
NT100 Power supply (Power plug D), switchable (8705410)			X
NT60 Power supply (Power plug CH) switchable (8705363)	X	X	
NT60 Power supply (Power plug CH) (8705412)		X	
NT100 Power supply (Power plug CH), switchable (8705411)			X
CONNECTION CABLE			
Connection cable, M8 - DC (8705413)	X	X	X

CHECKLIST

YOUR SYSTEM IS COMPLETE, IF YOU HAVE CHOSEN THE FOLLOWING COMPONENTS:

- LED LIGHT
- POWER SUPPLY
- CONNECTION CABLE



MICROSTRUCTURE – SWING-ARM AND INTEGRATED LIGHT CONTROL

LED Light incl. connection cable	PL151X3	PL151X6
Article Number	8705399	8705400
Assembly (for vertical ceilings)	X	X
Accessories - Ready for connection system		
WALL PLUG POWER SUPPLY		
NT25 Wall plug power supply (Europlug) (8705401)	X	
NT60 Power supply (Power plug D) switchable (8705360)	X	
NT60 Power supply (Power plug D) (8705402)		X
NT60 Power supply (Power plug CH) switchable (8705363)		X
NT60 Power supply (Power plug CH) (8705412)		X
CONNECTION CABLE		
Connection cable, M8 - DC, 2 m (8705413)	X	X

Product no longer available!
Article numbers: 8705399 | 8705400 | 8705512

CHECKLIST

YOUR SYSTEM IS COMPLETE, IF YOU HAVE CHOSEN THE FOLLOWING COMPONENTS:

- LED LIGHT
- POWER SUPPLY



MICROSTRUCTURE – ARTICULATED ARM AND INTEGRATED LIGHT CONTROL

LED Light incl. connection cable	PL151X3	PL151X6
Article Number	8704819	8704825
Assembly (table installation)	X	X
Accessories - Ready for connection system		
WALL PLUG POWER SUPPLY		
NT25 Wall plug power supply (Europlug) (8705401)	X	
NT60 Power supply (Power plug D) switchable (8705360)	X	X
NT60 Power supply (Power plug D) (8705402)		X
NT60 Power supply (Power plug CH) switchable (8705363)	X	X
NT60 Power supply (Power plug CH) (8705412)		X
CLAMPS FOR TABLE INSTALLATION		
Universal clamp (8705705)	X	X
Drilling screw fitting (8705706)	X	X
Metal screw-on plate (8705707)	X	X
LifTEC table clamp (8704572)	X	X

CHECKLIST

YOUR SYSTEM IS COMPLETE, IF YOU HAVE CHOSEN THE FOLLOWING COMPONENTS:

- LED LIGHT
- POWER SUPPLY
- CLAMP



DIFFUSED - ARTICULATED ARM AND INTEGRATED LIGHT CONTROL

LED Light incl. connection cable	PL151X3	PL151X6
Article Number	8705234	8705235
Assembly (table installation)	X	X
Accessories - Ready for connection system		
WALL PLUG POWER SUPPLY		
NT25 Wall plug power supply (Europlug) (8705401)	X	
NT60 Power supply (Power plug D) switchable (8705360)	X	X
NT60 Power supply (Power plug D) (8705402)		X
NT60 Power supply (Power plug CH) switchable (8705363)	X	X
NT60 Power supply (Power plug CH) (8705412)		X
CLAMPS FOR TABLE INSTALLATION		
Universal clamp (8705705)	X	X
Drilling screw fitting (8705706)	X	X
Metal screw-on plate (8705707)	X	X
LiftTEC table clamp (8704572)	X	X

CHECKLIST

YOUR SYSTEM IS COMPLETE, IF YOU HAVE CHOSEN THE FOLLOWING COMPONENTS:

- LED LIGHT
- POWER SUPPLY
- CLAMP



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TECHNICAL DATA

CEILING ASSEMBLY

Type	Without light control			With light control		
	PL151X8	PL151X6	PL151X3	PL151X8	PL151X6	PL151X3
Article Number	8705395	8705394	8705393	8705398	8705397	8705396
Integrated light control	No	No	No	Yes	Yes	Yes
Description	Light with mounting panel to adapt on ceiling systems or wall assembly			Light with mounting panel to adapt on ceiling systems or wall assembly		
Product						
ELECTRICAL DATA						
Operating voltage	48V _{DC}	48V _{DC}	48V _{DC}	48V _{DC}	48V _{DC}	48V _{DC}
Power consumption	72W	48W	24W	72W	48W	24W
Current consumption typical (approx.)	1.5A	1A	0.5A	1.5A	1A	0.5A
MECHANICAL DATA						
Protection level	IP20	IP20	IP20	IP20	IP20	IP20
Connection	M8 male socket	M8 male socket	M8 male socket	M8 male socket	M8 male socket	M8 male socket
Housing material	aluminum	aluminum	aluminum	aluminum	aluminum	aluminum
Optic	prismatic	prismatic	prismatic	prismatic	prismatic	prismatic
Optic material	PMMA	PMMA	PMMA	PMMA	PMMA	PMMA
Environment temperature (Celsius)	-10° to +40°	-10° to +40°	-10° to +40°	-10° to +40°	-10° to +40°	-10° to +40°
Dimensions (in mm)	825 x 198 x 31	564 x 198 x 31	304 x 198 x 31	825 x 198 x 31	564 x 198 x 31	304 x 198 x 31
PHOTOMETRIC DATA						
Light color	neutral white	neutral white	neutral white	white, adjustable	white, adjustable	white, adjustable
Angle of radiation (approx.)	60°	60°	60°	60°	60°	60°
Illumination 0.5 m (in Lux)	6,300	4,650	2,510	6,300	4,650	2,510
Illumination 1.0 m (in Lux)	2,000	1,322	664	2,000	1,322	664
Illumination 1.5 m (in Lux)	1,000	617	320	1,000	617	320








SWING-ARM AND ARTICULATED ARM

Type	PL151X6	PL151X3	PL151X6	PL151X3	PL151X6	PL151X3
	Article Number	8705400	8705399	8704825	8704819	8705235
Integrated light control	Yes	Yes	Yes	Yes	Yes	Yes
Description	Light with adjustable arm and connection cable		Light with adjustable arm and integrated connection cable		Light with adjustable arm and integrated connection cable	
Product						
ELECTRICAL DATA						
Operating voltage	48V _{DC}	48V _{DC}	48V _{DC}	48V _{DC}	48V _{DC}	48V _{DC}
Power consumption	72W	48W	48W	24W	48W	24W
Current consumption typical (approx.)	1.5A	1A	1A	0.5A	1A	0.5A
MECHANICAL DATA						
Protection level	IP20	IP20	IP20	IP20	IP20	IP20
Connection	M8 male socket	M8 male socket	DC-Power supply plug	DC-Power supply plug	DC-Power supply plug	DC-Power supply plug
Housing material	aluminum	aluminum	aluminum	aluminum	aluminum	aluminum
Optic	microstruktur	microstruktur	microstruktur	microstruktur	diffusor	diffusor
Optic material	PMMA	PMMA	PMMA	PMMA	PMMA	PMMA
Environment temperature (Celsius)	-10° to +40°	-10° to +40°	-10° to +40°	-10° to +40°	-10° to +40°	-10° to +40°
Dimensions (in mm)	564 x 198 x 31	304 x 198 x 31	564 x 198 x 31	304 x 198 x 31	564 x 198 x 31	304 x 198 x 31
PHOTOMETRIC DATA						
Light color	white, adjustable	white, adjustable	white, adjustable	white, adjustable	white, adjustable	white, adjustable
Angle of radiation (approx.)	100°	100°	100°	100°	diffused	diffused
Illumination 0.5 m (in Lux)	3,900	2,070	3,900	2,070	3,510	1,860
Illumination 1.0 m (in Lux)	1,100	529	1,100	529	990	470
Illumination 1.5 m (in Lux)	550	240	550	240	495	210





Product no longer available!
 Article numbers:
 8705399 | 8705400 | 8705312

Illumination data refers to a light in a completely dark space. The area, daylight, or other light sources might change the actual measured illumination.






POWER SUPPLY

Type	NT25 Wall plug power supply (Europlug)	NT60 Power supply (Power plug D) switchable	NT60 Power supply (Power plug D)	NT100 Power supply (Power plug D), switchable	NT60 Power supply (Power plug CH)	NT60 Power supply (Power plug CH)	NT100 Power supply (Power plug CH), switchable	100W Power supply for free wiring
Article Number	8705401	8705360	8705402	8705410	8705363	8705412	8705411	8701525
Explanation	25W Wall plug power supply fully wired for the PL151 (Europlug)	60W switchable power supply fully wired for the PL151 with power plug D	60W Table power supply fully wired for the PL151 with power plug D	100W Power supply fully wired for the PL151 with power plug D	60W switchable power supply fully wired for the PL151 with power plug CH	60W Table power supply fully wired for the PL151 with power plug CH	100W Power supply fully wired for the PL151 with power plug CH	NT100 Power supply for free wiring 100W
Product								

MOUNTING DEVICE

Type	Universal clamp	Drilling screw fitting	Metal screw-on plate	LiftTEC table clamp
Article Number	8705705	8705706	8705707	8704572
Explanation	Clamp for fitting of PL151 systems for table fitting (Clamp length 18-74mm)	Drilling screw for fitting of PL151 systems for table fitting (Drilling diameter 14mm)	Robust metal screw-on plate for fitting of PL151 systems for table fitting (Fitting area: 51mm) Delivery incl. metal screw sleeve	Clamp for fitting of PL151 systems for table fitting (Clamp length 83mm)
Product				

OTHER

Type	PL151 Connection cable	PL151 Connection cable	LCU	MTP	Built-in connector
Article Number	8705413	8702801	8702672	8702673	8705770
Explanation	PL151 Connection cable M8 - DC, 2m	PL151 Connection cable M8 - Plug / Coupling 2m	Light control	Handheld control	Flange coupling M8 with cable
Product					



Please find further information and brochures on our web page!

MY WORKSPACE MY LIGHT

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