# DOUBLEPOWER!! SKY - MORE THAN JUST A HIGH BAY

- High modularity, module arrangement side-by-side and front-to-back
- Many performance variations
- Possibility to combine optics and various lighting characteristics in one luminaire
- Realistic life-span of 100,000 hours (L80B10)
- 8 year full guarantee
- Unbeatable return on investment and total cost of ownership





#### Primary characteristics

- Extreme modularity and variability: many performance variations, variable arrangement of modules, combination of various lighting characteristics in one luminaire
- High-performance heat management of the entire luminaire
- LED light source and LED driver placed in separate heat sinks
- Luminaire efficacy 143,8 lm/W for Ta +50°C
- TaMax version for ambient temperatures up to +65 °C
- Available with an emergency module for use as emergency lighting
- IP65 enclosure rating
- Available version with front protective glass
- For installation heights from 4 to 30 meters
- Life-span of L80B10 => 100,000 hours
- 8 year guarantee

#### Exceptional modularity to truly and effectively illuminate your operations

Distribution of the emitted light to the illuminated area is just as important as the overall luminous flux efficacy.

We supply doublepower!! SKY luminaires in many performance variations. They are composed of modules with LED chips and one optical cover. Each module can be fitted with a different optical cover. Thus we can combine various light-distribution characteristics in one luminaire.

For example, the doublepower!! SKY 160W luminaire is composed of four modules, each one of which can have its own special light-distribution characteristics. Thanks to this, the luminaire can light up basically any operation in a highly effective manner. It can be perfectly adapted to the required illuminance level, mounting height, placement or installation limitations, the technological layout of your operation, etc.

#### Luminaire heat management

The doublepower!! SKY luminaire is built for reliable and long-lasting operation at ambient temperatures of -30 °C to +50 °C; TaMAX -40 °C to +65 °C.

The LED power sources and LED drivers in doublepower!! SKY luminaires are placed in separate boxes to prevent them from thermally affecting one another. The individual components of the luminaire also serve to cool the chips and drivers. Thus, all components in doublepower!! SKY luminaires can operate with a high degree of comfort even at extremely high temperatures of the surrounding environment.

### Several important facts

- We have designed the surfaces of the luminaire's body to remove heat properly even in heavily dusty environments.
- We've not only taken into consideration the effective surface area, but also sufficient thermal bridges to make sure heat dissipation is as quick and effective as possible
- Even the vertical ribbing located on the bottom side of the luminaire was designed and properly calculated to anticipate the collection of dust, moisture and other potential dirt.

### Thermal-conductive materials for LED source heat removal

Even the smallest unsealed areas between the chip and the cooling system can quickly damage the chip. Incorrect thicknesses or improper application can transform an effective thermal-conductive base into a heat barrier. Even a hundredth of a millimeter can make the difference.

For doublepower!! SKY luminaires, we use thermal-conductive materials specially designed for the specific LED light source. The technological procedure of the tape application guarantees 100% adhesion and therefore the quick and continuous removal of heat from the chips.

### LXXBXX - think about the long-term costs

The L80B10 life-span parameter for doublepower!! SKY luminaires is equal to 100,000 hours.



## DOUBLEPOWER!! SK

## **HIGHLY VARIABLE**

# INDUSTRIAL LUMINAIRES

## FOR ANY WORKING CONDITIONS



Openings in the profile of the luminaire further heighten the efficiency of the cooling system.



We integrate variations with higher performance into compact uni



Optics and lighting characteristics can be combined freely into one luminaire.





- Parameter L in the code shows the decrease of the luminaire's luminous flux after 100,000 hours in a percentage. L80 means that the doublepower!! SKY luminaire will have at least 80% of its original luminous flux after 100,000 hours of operation.
- Parameter B shows the percentage of luminaires that assumption L does not have to fulfill. With B10, the assumed luminous flux loss does not have to fulfill 10% of the installed luminaires. In other words – 10% of the installed luminaires may suffer greater luminous flux loss for the declared time (100 000 hours).

LXXBXX's lifespan may differ according to varying temperature conditions. L80B10 of the doublepower! SKY luminaire in the value of 100,000 hours applies to Ta +50 °C and +65 °C for TaMAX versions.

The LXXBXX parameter is very useful for economical project assessment. In assessing the total cost of ownership, installing cheaper luminaires with a worse LXXBXX parameter will paradoxically raise the price of your project, as they will need to be replaced sooner.

#### Optical system

In doublepower!! SKY luminaires, we use highly durable LED optics made by the foremost manufacturers which do not degrade over time. The transmittance of individual optics is between 92% and 96%.

In order to lower levels of glare, we use a larger number of LED chips and larger surfaces for our optics. At the same time, we sink the optical system deeper into the body of the luminaire.

Doublepower!! SKY luminaires can also be equipped with protective glass. We use special glass with a low iron content and the best level of transmittance on the market at 92%.

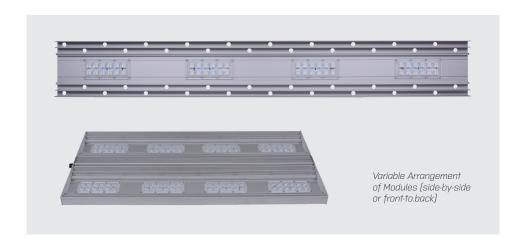
#### TaMAX version

We also offer a specially-designed version of the doublepower!! SKY luminaire for long-term ambient temperatures of up to app. +65 °C. The enlarged body of the luminaire and the enlarged cooling surfaces ensure that the LED chips and drivers stay below their maximum heat values. The industrial LED chips and drivers used in the TaMax version fulfill all requirements for use in such demanding operating conditions.

## Easy installation and maintenance

Installation via a connector and the possibility of choosing how to space installation points makes mounting quicker and reduces costs of installation and maintenance. The luminaire is made to adapt to various mounting and hanging limitations.

NEED ADDITIONAL INFORMATION? JUST CONTACT US. WE'LL BE HAPPY TO GIVE YOU MORE. CALL +420 222 312 917 OR EMAIL US AT NA INFO@DOUBLEPOWER.CZ.





Phone +420 222 312 917 www.doublepower.cz

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**HIGHLY VARIABLE** 

INDUSTRIAL LUMINAIRES

## FOR ANY WORKING CONDITIONS

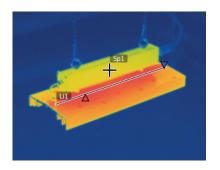


Flexibility in luminaire installation: IP68 connector and adjustable spacing of installation points.





Versions with or without Front Glass Cover



We test heat management in real operation.



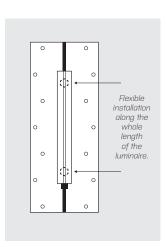


### Specification

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Versions	74,60 W / 111,90 W / 149,20 W / 186,50 W / 223,80 W / 298,40 W / 373,00 W							
Luminous Flux of the Luminaire	10 727 lm (74,60W) / 16 091 lm (111,90W) / 21 455 lm (149,20W) / 26 818 lm (186,50W) / 32 182 lm (223,80W) / 42 909 lm (298,40W) / 53 636 lm (33							
Luminous Flux Efficacy	LED light source: 151 lm/W, Luminaire: 143,8 lm/W							
LED Light Source	CREE XP-L2							
Color Temperature	4000K - 6500K							
Life-time of the Luminaire	L80B10 > 100 000 hours at Ta +50°C (+65°C for TaMAX version)							
Front cover	PMMA with possibility of 3mm hardened glass cover							
	Highl level of permeability, withnout degradation							
Body	Robust Body from Anodized Alluminium, separate body for LED driver							
	Highly Efficient Thermal Management							
	Low Operating Temperatures of all Components							
Protection rating	IP65							
Operating Temperatures and Electronics	-30°C ~ +50°C (-40°C ~ +65°C pro verzi TaMAX)							
	Tridonic LED Driver with Life-time more than 100 000 hours							
Optical System	System of PMMA Optics with various lighting characteristics							
	Low Glare Factor							
Other	No stroboscopic effect							
	DALI/DSI smooth control, possibility to include into a complex DALI/KNX control system							
	Fast and Easy Mounting thanks to IP68 connector and adjustable hanging points							
Manufacturer	doublepower!! s.r.o. Czech Republic							

## Dimmensions / cm (suspended luminaire)

	SKY 74,6W	SKY 74,6W TAMAX	SKY 111,9W	SKY 111,9W TAMAX	SKY 149,2W	SKY 149,2W TAMAX	SKY 186,5W	SKY 186,5W TAMAX	SKY 223,8W	SKY 223,8W TAMAX	SKY 298,4W	SKY 298,4W TAMAX	SKY 373W	SKY 373W TAMAX
Lenght (without connector)	50	74,8	75	112,2	100	149,6	125	187	150	112,2	100	149,6	150	187
- with unpluged connector	50	74,8	75	112,2	100	149,6	125	187	150	115,2	103,5	152,6	153	190
- with plugged connector	50	74,8	75	112,2	100	149,6	125	187	150	125,5	110,5	162,9	163	200
- with cable out	50	74,8	75	112,2	100	149,6	125	187	150	119,2	107	156,6	157	194
Width	20,1	20,1	20,1	20,1	20,1	20,1	20,1	20,1	20,1	48,5	48,5	48,5	55,5	55,5
Height	16,5	16,5	16,5	16,5	16,5	16,5	16,5	16,5	16,5	6,5	6,5	6,5	6,5	6,5
- including hanging rings	20,5	20,5	20,5	20,5	20,5	20,5	20,5	20,5	20,5	10,5	10,5	10,5	10,5	10,5
- including hanging rings and snap-hook	24,8	24,8	24,8	24,8	24,8	24,8	24,8	24,8	24,8	15	15	15	15	15
Weight (with unpluged connector, without hanging rings)	3,6	4,6	5,6	6,7	6,8	8,5	8,9	11,2	9,2	14,7	13,2	16,8	20,9	24,5



## **Lighting Characteristics**

