



DOUBLEPOWER!! TREE

EXTREMELY DURABLE

INDUSTRIAL LUMINAIRE

DOUBLEPOWER TREE

- One of the most durable LED linear luminaires on the market
- Uncompromising design
- Various performance options and lighting characteristics
- True life-span of 100,000 hours (L80B10)
- 6 to 10 year full guarantee

Tested and proven on installations in numerous industrial operations.

doublepower!!
industrial lighting | intelligent | efficient



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Primary characteristics

- Highly compact luminaire with exceptionally effective heat management
- High modularity, many performance variations
- Variable use of reflectors, optics and combination of the two, variable lighting characteristics tailored to the needs of various operations
- LED light source and LED driver placed in separate parts of the heat sink
- Top-grade industrial components in a robust body
- Luminaire efficacy up to 127 lm/W for Ta +50 °C
- Operating temperature range -30 °C ~ +50 °C
- TaMAX version for truly demanding industrial conditions with temperatures up to +65 °C
- With an integrated emergency module, the luminaire can be used as emergency lighting
- Transparent diffuse protective glass
- IP65 enclosure rating
- Mounting height 2 – 10 meters
- L80B10 life-span of 100,000 hours
- 6 to 10 year guarantee

Modularity and variability

Doublepower!! TREE luminaires are unique in their unbeatable adaptability to various industrial applications. We optimize them either to maximum luminous flux efficiency (version HE; HighEfficiency) or to maximum luminous flux output (version HO; HighOutput). Each of the options offers various combinations of performance, lighting characteristics, protective glass, etc.

Heat management and luminaire construction

The doublepower!! TREE luminaire has a unique profile ensuring extremely effective heat management. The surface of its body and the shape of its heat sink are completely devoted to removing heat from the light source.

The shape and orientation of the cooling surfaces are fully prepared for dust buildup. Because dust cannot be completely avoided, we have designed these surfaces to effectively remove heat even in the most unfavorable, dusty conditions.

We have paid a great deal of attention to the selection and method of applying heat-conducting material, which transfers heat from the chip to the luminaire's cooling system. Unsealed areas or fluctuations in the thickness of the thermal-conductive material can significantly worsen the conduction of heat and lead to the degradation of the LED chips.

For doublepower!! TREE luminaires, we use special thermal-conductive materials and a proven method of application that completely rules out the risk of defects.

All the measures taken above result in only very small differences between the heats of the LED chips and drivers and the surrounding temperatures. The components operate in a comfortable environment, far below their maximum temperature limits.

LED chip drivers

Contrary to a large portion of the competition's luminaires, the LED chips in doublepower!! TREE luminaires are driven only at app. 60% of the maximum supply current. This is another important reason for the very slow luminous flux loss, ensuring that our doublepower!! TREE luminaires have an extremely long life-span.

LXXBXX – think about the long-term costs

The L80B10 life-span parameter for doublepower!! TREE luminaires is equal to 100,000 hours. An important parameter for the life-span of LXXBXX is the temperature of the luminaire's surroundings. L80B10 of the doublepower!! TREE luminaire in the value of 100,000 hours applies to Ta +50 °C and +65 °C for TaMAX versions.



The transparent labels list the electronics used in the luminaire.



The carefully calculated and designed openings in the profile of the luminaire heighten the efficiency of the cooling system.



Compact design and one of the best heat parameters on the market.





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The LXXBXX parameter is highly useful when it comes to 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.

Physical separation of LED chips and drivers

LED chips and drivers are two sources of heat that the luminaire produces. Their performance, life-span, and reliability are closely connected to the heat conditions they work in.

In order to keep chips and drivers from overheating, they are mounted into doublepower!! TREE luminaires separately and are kept cool by the highly effective cooling system described above.

Optical system

With doublepower!! TREE luminaires, we can combine various optics with reflectors and offer different lighting characteristics. The bottom section of the luminaire is protected by a special non-degrading glass with high light transmittance in both transparent and opaque (diffused) options. Glare protection is ensured by placing the LED strips deeper into the luminaire's body and using a larger lighting surface for the optical system.

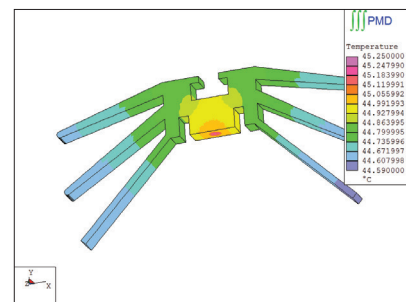
TaMAX version

We also offer a specially-designed version of the doublepower!! TREE luminaire for long-term ambient temperatures of up to +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.

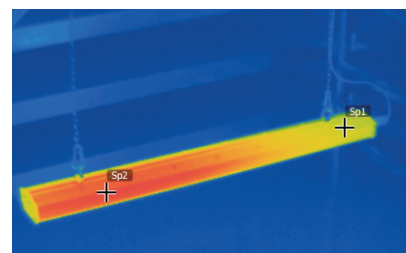
The luminaire has to adapt to its environment

It only takes two seconds to set up the spacing of doublepower!! TREE luminaire installation points and the luminaire adapts to various installation limits. Connection with the help of IP68 connectors helps speed up installation and further reduce installation costs.

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.



Heat management dramatically influences the final appearance of the luminaires.



Prerequisites are tested and proven in practice.



The IP68 connector and M6 nut preinstalled in the notch allow for speedy and variable installation.



Specification

Version	2 modules	3 modules	4 modules
Output (HIGH EFFICIENCY TYPE)	35,00 W	52,50 W	70,00 W
Output (HIGH OUTPUT TYPE)	51,30 W	77,00 W	102,60 W
Luminous Flux of the Luminaire (HIGH EFFICIENCY TYPE)	4 451 lm	6 677 lm	8 902 lm
Luminous Flux of the Luminaire (HIGH OUTPUT TYPE)	5 802 lm	8 703 lm	11 604 lm
Efficacy of the LED chip / luminaire (HIGH EFFICIENCY TYP)	145 lm/W / 127 lm/W		
Efficacy of the LED chip / luminaire (HIGH OUTPUT TYP)	130 lm/W / 113 lm/W		
LED light source	TRIDONIC LLE EXCITE LED, 4000 – 6000K		
Life-time of the Luminaire	L80B10 = 100 000 hours at Ta +50°C (TaMAX +65°C)		
Front Cover	3 mm hardened glass AGC ClearVision / PMMA for HACCP applications		
	High level of permeability, without degradation		
Body	Robust Body from Anodized Aluminium		
	Highly Efficient Thermal Management		
	Low Operating Temperatures of all Components		
Protection rating	IP65		
Operating Temperatures	-25°C ~ +50°C [-40°C ~ +65°C for TaMAX version]		
Optical System	Linear lens 90°/ 60° / Reflector from ALMECO VEGA reflective material / combination of both		
Other	No stroboscopic effect		
	DALI/DSI smooth control, possibility to include into a complex DALI/KNX control system		
Manufacturer	doublepower!! s.r.o. Czech Republic		

Dimensions / cm (suspended luminaire)

Varianta	TREE 2 modules	TaMAX TREE 2 modules	TREE 3 modules	TaMAX TREE 3 modules	TREE 4 modules	TaMAX TREE 4 modules
Lenght (without connector)	91	105	118,4	132,9	147	161,6
- with unplugged connector	92,5	106,5	119,9	134,4	148,5	163,1
- with plugged connector	114	119	131,4	145,9	160	174,6
Width	10	10	10	10	10	10
Height	6	6	6	6	6	6
- including hanging rings	10	10	10	10	10	10
- including hanging rings and snap-hook	14,8	14,8	14,8	14,8	14,8	14,8
Weight (with unplugged connector, without hanging rings)	3,7	4,2	4,8	5,3	5,8	6,3

Lighting Characteristics

