

Doublepower TREE LED luminaires
Doublepower AIR LED luminaires
Doublepower SKY LED luminaires
Doublepower RAY LED luminaires



Doublepower TREE

Energy efficient industrial LED luminaire for ceiling mounting and local lighting.

With an exceptional thermal management ensures highly efficient heat dissipation.

Body manufactured from extruded anodized aluminium profile.

The body surface and heat sink fins are shaped to deliver the most efficient heat dissipation from the light source, and to minimize dust accumulation. The concept is tested not only in laboratory but also in real-life operations.

The difference between the ambient temperature and the temperature on the LED-chip reference point is not more than 18°C. In other words the temperature of the chip reaches only 78°C at an ambient temperature of 60°C.

These values are completely unique for LED luminaires. The luminaires has no stroboscopic effect with rotating machines.

The luminaire is easy to install due to the adjustable fixing points in the top of the luminaire. Quick and easy installation!

Optional available with a GESIS IP 68 connector for fast and reliable connection.

Lifetime:

Doublepower TREE luminaires can be applied in extreme conditions, even at very high temperatures.

Unlike other competing products, LED-chips in Doublepower TREE are powered well below their maximum power supply current and in accordance with the recommendations of the chip producer, who guarantees their lifetime on the basis of the tests. Usually Doublepower do not power the chip's to more than 60% of their maximum supply current. The tests (e.g. TM21 directive) confirm that this has a very positive effect on the chip's lifetime and slows the flux loss.

It is one of the reasons why the guarantee on this luminaires lifetime is a minimum of 100.000 hours.

Glare factor:

Many producers encounter difficulties with high levels of glare (UGR) with regards to their luminaires. In order to ensure low glare levels Doublepower embedded the LED modules deeper in the body of the TREE luminaire. The radiance is regulated by suitable optics and/or larger reflector's surface. In this way Doublepower achieve low levels of glare while maintaining very high efficiency of the luminous flux.

For special application (local lighting, spaces where quality control takes place etc.), Doublepower TREE luminaires can be equipped with a diffuser, which further lowers the UGR values.

Specifications 1-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	17,5W	636x100x60mm LxWxH weight 3,2 kg
Wattage (high output type):	25,65W	
Lumen output (high efficiency type):	2.225 lm	
Lumen output (high output type):	2.901 lm	
Chip system (high efficiency type):	123 lm/W / 114 lm/W (Tc +65°C)	
Chip system (high output type):	141 lm/W / 128 lm/W (Tc +65°C)	
Light source:	TRIDONIC LLE EXCITE LED band	
Lifespan of the light source:	100.000 hours / L70F50	
Lifespan of the electronics:	> 100.000 hours	
Front cover:	3mm tempered security glass AGC Clear Vision / PMMA for HACCP applications.	
Body:	High visible light transmittance, antistatic, no degradation in time. Pressed eloxed aluminium profile. Highly efficient heat dissipation for optimal heat management. At ambient temperature +50°C chip's temperature only +66,5°C At ambient temperature +60°C chip's temperature only +78°C	
Protection:	IP65	
Ambient temperature and electronics:	From -25°C to +60°C (TaMax not available in the 1-module version)	
Optical system and reflectors:	Linear lenses 90° / 60° / reflector made of ALMECO VEGA / combination Low glare values.	
Others:	Dimmable optional with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX	

Suitable for areas from 2 to 10 meter.

For areas with very high temperatures and extreme dustiness and aggressive environments.

Heavy industry, production facilities, warehouses with free storage, man ceiling lighting, engine rooms, local lighting.



Specifications 2-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	35W	910x100x60mm LxWxH weight 3,7 kg
Wattage (high output type):	51W	1050x100x60mm LxWxH weight 4,2 kg
Lumen output (high efficiency type):	4.500 lm	
Lumen output (high output type):	5.800 lm	
Chip system (high efficiency type):	123 lm/W / 114 lm/W (Tc +65°C)	
Chip system (high output type):	141 lm/W / 128 lm/W (Tc +65°C)	
Light source:	TRIDONIC LLE EXCITE LED band	
Lifespan of the light source:	100.000 hours / L70F50	
Lifespan of the electronics:	> 100.000 hours	
Front cover:	3mm tempered security glass AGC Clear Vision / PMMA for HACCP applications.	
Body:	High visible light transmittance, antistatic, no degradation in time. Pressed eloxed aluminium profile. Highly efficient heat dissipation for optimal heat management. At ambient temperature +50°C chip's temperature only +66,5°C At ambient temperature +60°C chip's temperature only +78°C	
Protection:	IP65	
Ambient temperatures and electronics:	From -25°C to +60°C (-40°C to +65°C for the TaMax)	
Optical system and reflectors:	Linear lenses 90° / 60° / reflector made of ALMECO VEGA / combination Low glare values.	
Others:	Dimmable optional with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX	

Suitable for areas from 2 to 12 meter.

For areas with very high temperatures and extreme dustiness and aggressive environments.

Heavy industry, production facilities, warehouses with free storage, man ceiling lighting, engine rooms, local lighting.



Transparant en diffus glas leverbaar!!

doublepower!!
industrial lighting | intelligent | efficient

Specifications 3-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	53W	1184x100x60mm LxWxH weight 4,8 kg
Wattage (high output type):	77W	1329x100x60mm LxWxH weight 5,3 kg
Lumen output (high efficiency type):	6.750 lm	
Lumen output (high output type):	8.750 lm	
Chip system (high efficiency type):	123 lm/W / 114 lm/W (Tc +65°C)	
Chip system (high output type):	141 lm/W / 128 lm/W (Tc +65°C)	
Light source:	TRIDONIC LLE EXCITE LED band	
Lifespan of the light source:	100.000 hours / L70F50	
Lifespan of the electronics:	> 100.000 hours	
Front cover:	3mm tempered security glass AGC Clear Vision / PMMA for HACCP applications.	
Body:	High visible light transmittance, antistatic, no degradation in time. Pressed eloxed aluminium profile. Highly efficient heat dissipation for optimal heat management. At ambient temperature +50°C chip's temperature only +66,5°C At ambient temperature +60°C chip's temperature only +78°C	
Protection:	IP65	
Ambient temperatures and electronics:	From -25°C to +60°C (-40°C to +65°C for the TaMax)	
Optical system and reflectors:	Linear lenses 90° / 60° / reflector made of ALMECO VEGA / combination Low glare values.	
Others:	Dimmable optional with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX	

Suitable for areas from 2 to 18 meter.

For areas with very high temperatures and extreme dustiness and aggressive environments.

Heavy industry, production facilities, warehouses with free storage, man ceiling lighting, engine rooms, local lighting.

Specifications 4-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	70W	1470x100x60mm LxWxH weight 5,8 kg
Wattage (high output type):	102W	1616x100x60mm LxWxH weight 6,3 kg
Lumen output (high efficiency type):	9.000 lm	
Lumen output (high output type):	11.600 lm	
Chip system (high efficiency type):	123 lm/W / 114 lm/W (Tc +65°C)	
Chip system (high output type):	141 lm/W / 128 lm/W (Tc +65°C)	
Light source:	TRIDONIC LLE EXCITE LED band	
Lifespan of the light source:	100.000 hours / L70F50	
Lifespan of the electronics:	> 100.000 hours	
Front cover:	3mm tempered security glass AGC Clear Vision / PMMA for HACCP applications. High visible light transmittance, antistatic, no degradation in time.	
Body:	Pressed eloxed aluminium profile. Highly efficient heat dissipation for optimal heat management. At ambient temperature +50°C chip's temperature only +66,5°C At ambient temperature +60°C chip's temperature only +78°C	
Protection:	IP65	
Ambient temperatures and electronics:	From -25°C to +60°C (-40°C to +65°C for the TaMax)	
Optical system and reflectors:	Linear lenses 90° / 60° / reflector made of ALMECO VEGA / combination Low glare values.	
Others:	Dimmable with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX	

Suitable for areas from 5 to 18 meter.
For areas with very high temperatures and extreme dustiness and aggressive environments.
Heavy industry, production facilities, warehouses with free storage, man ceiling lighting, engine rooms, local lighting.



Adjustabel mounting points with M6 sliding nut



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



Special heat sink fins over the complete length of the luminaire remove heat from the light source.
The TaMax version is equipped with a larger body to improve heat management at higher ambient temperatures.
Heat management dramatically influences the final appearance of the luminaires.

Number	Description	Lumen
02TR1020	1-module	2.225
02TR1021	1-module with IP67 connector	2.225
02TR1022	1-module DALI	2.225
Number	Description	Lumen
02TR1030	2-module 35W	4.500
02TR1031	2-module 35W DALI	4.500
02TR1032	2-module 35W Ta-Max	4.500
02TR1033	2-module 35W TaMax DALI	4.500
Number	Description	Lumen
02TR1034	2-module 51W	5.800
02TR1035	2-module 51W DALI	5.800
02TR1036	2-module 51W Ta-Max	5.800
02TR1037	2-module 51W TaMax DALI	5.800
Number	Description	Lumen
02TR1038	3-module 53W	6.750
02TR1039	3-module 53W DALI	6.750
02TR1040	3-module 53W Ta-Max	6.750
02TR1041	3-module 53W TaMax DALI	6.750
Number	Description	Lumen
02TR1042	3-module 77W	8.750
02TR1043	3-module 77W DALI	8.750
02TR1044	3-module 77W Ta-Max	8.750
02TR1045	3-module 77W TaMax DALI	8.750
Number	Description	Lumen
02TR1046	4-module 70W	9.000
02TR1047	4-module 70W DALI	9.000
02TR1048	4-module 70W Ta-Max	9.000
02TR1049	4-module 70W TaMax DALI	9.000
Number	Description	Lumen
02TR1050	4-module 102W	11.600
02TR1051	4-module 102W DALI	11.600
02TR1052	4-module 102W Ta-Max	11.600
02TR1053	4-module 102W TaMax DALI	11.600

Doublepower LED luminaires are equipped with a flexible mounting system with sliding nuts in a rail over the complete length of the luminaire. With this it is easy to use existing mounting points and rail systems and makes the installation of the luminaire fast and easy.



Doublepower AIR

Energy efficient industrial LED luminaire for ceiling mounting and local lighting.
With an exceptional thermal management ensures highly efficient heat dissipation.

Body manufactured from extruded anodized aluminium profile.

The body surface and heat sink fins are shaped to deliver the most efficient heat dissipation from the light source, which ensures a long lifetime of the luminaire. The luminaire is IP43 protected.

The most effective substitute for fluorescent luminaires in less demanding industrial environments, logistic operations and retail areas. Doublepower paid the utmost attention to the high-quality of its body.

The luminaire is available in HE (high efficiency) and HO (hoge output) version.

Fast and easy installation due to adjustable installation points with slide nuts in the rail over the length of the luminaire.

Optional available with a GESIS IP 68 connector for fast and reliable connection.

Lifespan:

Doublepower AIR luminaires are designed for inside use, even for applications with ambient temperatures up to +50°C.

The luminaires are equipped with the reliable Tridonic LLE G4 ADVANCE LED bands which are available in several colours.

The standard colour is 4000K but optional also in 3000K, 5000K en 6500K version.

Most of the time the Doublepower AIR LED-chips are powered well below their maximum power supply, which gives a positive effect on the light source and electronics and guarantees their long lifetime.

This luminaires has a life-span of at least 80.000 hours, with a 6 year warranty.


Glare factor.

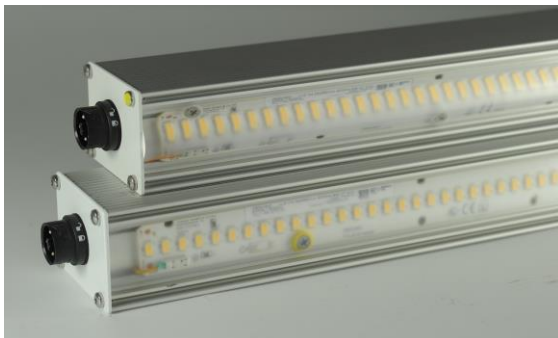
Many producers encounter difficulties with high levels of glare (UGR) with regards to their luminaires. In order to ensure low glare levels Doublepower embedded the LED modules deeper in the body of the AIR luminaire. The radiance is regulated by suitable optics and/or larger reflector's surface. In this way Doublepower achieve low levels of glare while maintaining very high efficiency of the luminous flux.

For special application (local lighting, spaces where quality control takes place etc.), Doublepower AIR luminaires can be equipped with a diffuser, which further lowers the UGR values.

Specifications 2-module luminaires:

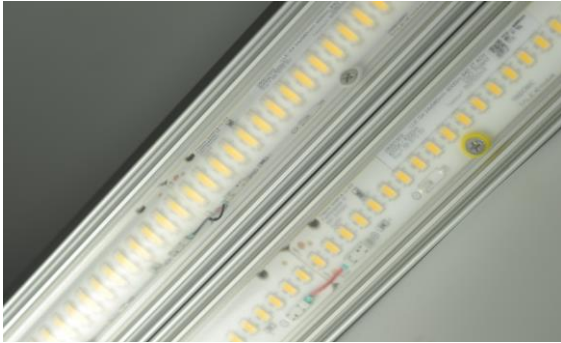
Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	18.48W	600x50x65mm LxWxH weight 1,55 kg
Wattage (high output type):	26.49W	600x50x65mm LxWxH weight 1,55 kg
Lumen output (high efficiency type):	3.403 lm	
Lumen output (high output type):	4.674 lm	
Chip system (high efficiency type):	189,56 lm/W / 184,12 lm/W for 4000K	
Chip system (high output type):	181,63 lm/W / 176,42 lm/W for 4000K	
Light source:	Samsung LM301B LED band	
Life-span light source:	80.000 hours / L80B10 for Ta -25°C to +50°C.	
Life-span electronics:	> 80.000 hours	
Front cover:	PMMA optics / diffused	
	High visible light transmittance, antistatic, no degradation in time.	
Body:	Pressed eloxed aluminium profile.	
	Highly efficient heat dissipation for optimal heat management.	
	Low temperatures of all components.	
Protection:	IP43	
Ambient temperature and electronics:	From -25°C to +50°C	
Optical system and reflector:	Linear lenses 40° / 60° / 90° / 110° / asymetric versions / diffused optics.	
Connection:	Optional equipped with a GESIS connector.	
Others:	Dimmable with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX	
	No stroboscopic effect with rotating machines.	
	Optional light colours 3000K, 5000K and 6500K.	





Specifications 3-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	27,72W	880x50x65mm LxWxH weight 2,3 kg
Wattage (high output type):	39,74W	880x50x65mm LxWxH weight 2,3 kg
Lumen output (high efficiency type):	5.104 lm	
Lumen output (high output type):	7.011 lm	
Chip system (high efficiency type):	189,56 lm/W / 184,12 lm/W for 4000K	
Chip system (high output type):	181,63 lm/W / 176,42 lm/W for 4000K	
Light source:	Samsung LM301B LED band	
Life-span light source:	80.000 hours / L80B10 for Ta -25°C to +50°C.	
Life-span electronics:	> 80.000 hours	
Front cover:	PMMA optics / diffused	
Body:	High visible light transmittance, antistatic, no degradation in time. Pressed eloxed aluminium profile. Highly efficient heat dissipation for optimal heat management. Low temperatures of all components.	
Protection:	IP43	
Ambient temperature and electronics:	From -25°C to +50°C	
Optical system and reflector:	Linear lenses 40° / 60° / 90° / 110° / asymetric versions / diffused optics.	
Connection:	Optional equipped with a GESIS connector.	
Others:	Dimmable with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX No stroboscopic effect with rotating machines. Optional light colours 3000K, 5000K and 6500K.	



Specifications 4-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	36,96W	1160x50x65mm LxWxH weight 3,05 kg
Wattage (high output type):	52,99W	1160x50x65mm LxWxH weight 3,05 kg
Lumen output (high efficiency type):	6.805 lm	
Lumen output (high output type):	9.349 lm	
Chip system (high efficiency type):	189,56 lm/W / 184,12 lm/W for 4000K	
Chip system (high output type):	181,63 lm/W / 176,42 lm/W for 4000K	
Light source:	Samsung LM301B LED band	
Life-span light source:	80.000 hours / L80B10 for Ta -25°C to +50°C.	
Life-span electronics:	> 80.000 hours	
Front cover:	PMMA optics / diffused	
Body:	High visible light transmittance, antistatic, no degradation in time. Pressed eloxed aluminium profile. Highly efficient heat dissipation for optimal heat management. Low temperatures of all components.	
Protection:	IP43	
Ambient temperature and electronics:	From -25°C to +50°C	
Optical system and reflector:	Linear lenses 40° / 60° / 90° / 110° / asymetric versions / diffused optics.	
Connection:	Optional equipped with a GESIS connector.	
Others:	Dimmable with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX No stroboscopic effect with rotating machines. Optional light colours 3000K, 5000K and 6500K.	



Specifications 5-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	46,20W	1440x50x65mm LxWxH weight 3,8 kg
Wattage (high output type):	66,23W	1440x50x65mm LxWxH weight 3,8 kg
Lumen output (high efficiency type):	8.506 lm	
Lumen output (high output type):	11.685 lm	
Chip system (high efficiency type):	189,56 lm/W / 184,12 lm/W for 4000K	
Chip system (high output type):	181,63 lm/W / 176,42 lm/W for 4000K	
Light source:	Samsung LM301B LED band	
Life-span light source:	80.000 hours / L80B10 for Ta -25°C to +50°C.	
Life-span electronics:	> 80.000 hours	
Front cover:	PMMA optics / diffused	
	High visible light transmittance, antistatic, no degradation in time.	
Body:	Pressed eloxed aluminium profile.	
	Highly efficient heat dissipation for optimal heat management.	
	Low temperatures of all components.	
Protection:	IP43	
Ambient temperature and electronics:	From -25°C to +50°C	
Optical system and reflector:	Linear lenses 40° / 60° / 90° / 110° / asymetric versions / diffused optics.	
Connection:	Optional equipped with a GESIS connector.	
Others:	Dimmable with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX No stroboscopic effect with rotating machines. Optional light colours 3000K, 5000K and 6500K.	



Specifications 6-module luminaires:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	55,44W	1720x50x65mm LxWxH weight 4,65 kg
Wattage (high output type):	79,48W	1720x50x65mm LxWxH weight 4,65 kg
Lumen output (high efficiency type):	10.208 lm	
Lumen output (high output type):	14.022 lm	
Chip system (high efficiency type):	189,56 lm/W / 184,12 lm/W for 4000K	
Chip system (high output type):	181,63 lm/W / 176,42 lm/W for 4000K	
Light source:	Samsung LM301B LED band	
Life-span light source:	80.000 hours / L80B10 for Ta -25°C to +50°C.	
Life-span electronics:	> 80.000 hours	
Front cover:	PMMA optics / diffused	
	High visible light transmittance, antistatic, no degradation in time.	
Body:	Pressed eloxed aluminium profile.	
	Highly efficient heat dissipation for optimal heat management.	
	Low temperatures of all components.	
Protection:	IP43	
Ambient temperature and electronics:	From -25°C to +50°C	
Optical system and reflector:	Linear lenses 40° / 60° / 90° / 110° / asymetric versions / diffused optics.	
Connection:	Optional equipped with a GESIS connector.	
Others:	Dimmable with DALI/DSI protocol, suitable for use in complex control system Doublepower DALI/KNX No stroboscopic effect with rotating machines. Optional light colours 3000K, 5000K and 6500K.	



Number	Description	Lumen
02TR1070	2-module 19.1W	3.403
02TR1071	2-module 19.1W DALI	3.403
Number	Description	Lumen
02TR1074	2-module 28.4W	4.674
02TR1075	2-module 28.4W DALI	4.674
Number	Description	Lumen
02TR1078	3-module 28.65W	5.104
02TR1079	3-module 28.65W DALI	5.104
Number	Description	Lumen
02TR1082	3-module 42.6W	7.011
02TR1083	3-module 42.6W DALI	7.011
Number	Description	Lumen
02TR1086	4-module 38.2W	6.805
02TR1087	4-module 38.2W DALI	6.805
Number	Description	Lumen
02TR1090	4-module 56.8W	9.349
02TR1091	4-module 56.8W DALI	9.349
Number	Description	Lumen
02TR1094	5-module 47.8W	8.506
02TR1095	5-module 47.8W DALI	8.506
Number	Description	Lumen
02TR1098	5-module 71.0W	11.685
02TR1099	5-module 71.0W DALI	11.685
Number	Description	Lumen
02TR1102	6-module 57.3W	10.208
02TR1103	6-module 57.3W DALI	10.208
Number	Description	Lumen
02TR1106	6-module 85.2W	14.022
02TR1107	6-module 85.2W DALI	14.022

Doublepower LED luminaires are equipped with a flexible mounting system with sliding nuts in a rail over the complete length of the luminaire. With this it is easy to use existing mounting points and rail systems and makes the installation of the luminaire fast and easy.



Standard connector
Sliding nut for easy connection



Optional GESIS connector

Doublepower !! LED luminaires
Doublepower SKY LED luminaires



Doublepower SKY

Highly efficient and modular industrial LED luminaire for the most demanding installations.

With an exceptional thermal management ensures highly efficient heat dissipation.

Body manufactured from extruded anodized aluminium profile.

Due to the special construction this luminaire has a passive highly efficient cooling system.

For ambient temperatures between -40°C and +65°C (TaMAX version).

Temperature parameters are tested in laboratory and real-life operations. The difference between the ambient temperature and the temperature (Tc) on the LED-chip reference point is not more than 18°C at Ta = 50°C.

The light output luminous flux of the luminaire is very efficient and at least 138 lm/W.

Modular construction, with the possibility to arrange more modules in series or in parallel, the possibility to apply one or more drivers for the set.

Extreme high lifetime >100.000 hours for complete fixture including the LED sources and drivers.

Warranty up to 8 years. Protection IP65.

Doublepower SKY uses special 3M heat-conducting tapes, precisely calculated according to the LED sources used, and installed using a special technological procedure to ensure perfect and rapid heat dissipation.

The SKY luminaire is designed in a way to withstand the operating conditions where extreme dustiness and other environmental challenges occur. The heat dissipation function is ensured even in conditions when massive accumulation of dust or grease on the lighting fixture occurs (e.g. in the foundries), due to the following features:

For calculating the necessary lighting fixture surface for efficient heat dissipation, horizontal parts are not included.

The cooling profiles are adequately dimensioned to ensure efficient heat dissipation even when the profile is covered with dust in demanding industrial operations.

The cooling fins are positioned vertically on the bottom part of the lighting fixture, which prevents the accumulation of dust on the cooling fins. The luminaire's body is dimensioned not only with the respect to surface area, but also with respect to the thickness of the body at key areas, in a way to ensure the heat dissipation possible is as quick as possible.

The modular construction of the Doublepower SKY luminaire and the assembly system, which will adapt to any limitations within industrial operations, reduce the installation and maintenance cost.

Lifespan:

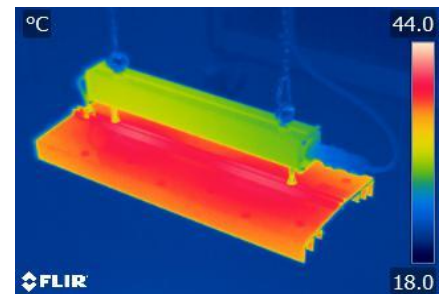
Doublepower SKY luminaires are applied in extreme conditions even at high ambient temperatures.

These SKY luminaires are guaranteed due to this facts at least at 100.000 hours.

Applications are: main ceiling lighting, local lighting, production facilities in heavy industry and light industry as well, warehouse premises with free storage (expedition), storage spaces with shelf aisles (high shelving), shopping centers, graphic and photographic studios (*TRUELIGHT variant), extremely dusty and aggressive environments and environments with very high temperatures. Can be used for very high mounting heights up to 30 meters.

Specifications SKY luminaires:

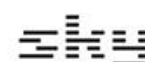
Voltage:	220/240Vac 50/60Hz
Wattage and lumen output:	80W >10.600 lm 120W >15.900 lm 160W >21.200 lm 200W >26.500 lm 240W >31.800 lm 280W >37.100 lm 320W >42.400 lm 360W >47.700 lm 400W >53.000 lm
Chip Efficiency:	155 lm/W
System Efficiency:	>138 lm/W (Ta = +50°C)
Light source:	CREE XP-L
Colour temperatures:	4.000 - 6.500K
Expected lifetime:	>100.000 hours / L80F10
Lifespan of the electronics:	>100.000 hours / L80F10
Front cover:	PMMA, optional 3 mm hardened borosilicate glass cover. High visible light transmittance, antistatic effect, no degradation in time.
Body:	Unique pressed aluminium profile, eloxed. Highly efficient heat dissipation for optimal thermal management of the luminaire. Low operating temperatures = prolonged lifetime of all the components.
Protection:	IP65
Ambient temperatures:	From -30°C to +50°C (-40°C to +65°C for the TaMAX version).
Optical system and reflectors:	System of PMMA optical elements with various light distribution characteristics based on the luminaire's application. Low glare levels.
Others:	No stroboscopic effect in case of rotating machines. optional continuous regulation using DALI/DSI protocol, optional connection to complex intelligent control system of Doublepower DALI/KNX Easy to install and service due to flexible connection points and GESIS connectors.



SKY Thermisch management.



Number	Description	Lumen
02TR1120	SKY 80W	10.600
02TR1121	SKY 80W DALI	10.600
Number	Description	Lumen
02TR1122	SKY 120W	15.900
02TR1123	SKY 120W DALI	15.900
Number	Description	Lumen
02TR1124	SKY 160W	21.200
02TR1125	SKY 160W DALI	21.200
Number	Description	Lumen
02TR1126	SKY 200W	26.500
02TR1127	SKY 200W DALI	26.500
Number	Description	Lumen
02TR1128	SKY 240W	31.800
02TR1129	SKY 240W DALI	31.800
Number	Description	Lumen
02TR1130	SKY 280W	37.100
02TR1131	SKY 280W DALI	37.100
Number	Description	Lumen
02TR1132	SKY 320W	42.400
02TR1133	SKY 320W DALI	42.400
Number	Description	Lumen
02TR1134	SKY 360W	47.700
02TR1135	SKY 360W DALI	47.700
Number	Description	Lumen
02TR1136	SKY 400W	53.000
02TR1137	SKY 400W DALI	53.000



Doublepower SKY project factory of Hyundai Czech Republic.

The complete factory production and warehouses are equipped by Doublepower LED luminaires with the DALI control system.

In total there are 2416 luminaires supplied and installed.



Doublepower !! LED luminaires
Doublepower RAY luminaires



Doublepower RAY

Highly efficient and modular LED luminaire especially for high warehouses.

With an exceptional thermal management ensures highly efficient heat dissipation.

Body manufactured from extruded anodized aluminium profile.

Due to the special construction this luminaire has a passive highly efficient cooling system.

For ambient temperatures between -40°C and +65°C (TaMAX version).

Special optic system for consistent and highly efficient illumination of both the shelf aisles and the goods in shelves.

Variable combination of various optics and lighting characteristics in one luminaire.

Long-term high efficiency, very slow decrease of luminous flux over time.

Modular design - optical part and part with electronics are separated.

Highly variable mounting system for most of the common mounting and hanging systems. Protection IP54.

Warranty up to 10 years, luminaire's lifetime including electronics min. 100.000 hours.

Lifespan:

Doublepower RAY luminaires can be used in extreme conditions even at high temperatures.

Due to this the luminaires are guaranteed at least at 100.000 hours.

Unique way of illuminating high rack aisles.

With the Doublepower RAY luminaire are unique incomparable lighting parameters achieved. Ideal for installation in shelf aisles and especially in high mounting heights. There are two types of optics installed in the luminaire.

Due to their different light distribution characteristics, the luminaire is able to efficiently and evenly illuminate not only the aisle pathway, but also the vertical wall shelving.

Thermal management, protecting rating:

As well as in case of Doublepower TREE, unique design features are applied in case of Doublepower RAY. One of them is special aluminium body design with exceptional heat management, or the LED-chip supply current solution.

Usually there are not so harsh conditions and high ambient temperatures in logistic halls as they can be in production facilities. The minimal difference between ambient temperature and the temperature inside the luminaire is still extremely important in logistics - the operating conditions of LED chips and electronics are very comfortable.

Thus exceptional life-time and long-term sustainability of lighting conditions are ensured. From many experiences from logistical installations we know that even in a common logistic operations luminaires without sufficient cover protection are subject to dust and impurities. This reduce the efficiency and increase the likelihood of defects. Therefore, we provide Doublepower RAY luminaires with IP54 protection.

Glare factor:

In order to ensure low glare level (UGR), in Doublepower RAY luminaires LED modules are embedded into the body of the luminaire's. There are a number of low-wattage LED-chips installed in Doublepower RAY and each LED chip is covered by it's own optic. More than that there is sufficient space between optics and LED chip's. **The light is not radiated from a very small space in a too big density, which further contributes to low glare factor.**

Specifications RAY luminaire:

Voltage:	220/240Vac 50/60Hz	
Wattage (high efficiency type):	39.6W	420x110x150mm LxWxH weight 2,49 kg
Lumen output (of the LED chips):	5.553 lm	
Lumen output (of the luminaire):	4.748 lm	
Efficiency of the LED chip:	140,22 lm/W voor 4000K	
Efficiency of the luminaire:	119,89 lm/W voor 4000K	
Light source	CREE XP-L 4.000K, Ra80	
Life-span light source:	100.000 uren / L80B10	
Life-span luminaire:	> 100.000 uren	
Front cover:	Prismatic lenses	
	High level of permeability, without degradation	
Body:	Extruded eloxed aluminium profile.	
	Highly efficient thermal management.	
	Low operating temperature of the luminaire and all components.	
Protection:	IP54	
Ambient temperature and electronics:	From -30 °C to +50 °C (-40°C to +65°C for the TaMAX version).	
Optical system:	Prismatic lenses LEDI 47° + 14° with 92% efficiency (several optics on request). Even illumination of both the corridors and the racks.	
	Low glare factor - number of low wattage LED chips embedded in the luminaires body.	
Connection:	Equipped with a GESIS connector.	
Others:	Optional dimmable by DALI/DSI protocol, possibility to include into a complex control system DALI/KNX.	
	No stroboscopic effect with rotation machines.	
	Easy to install and service due to flexible connection points at the top rail of the luminaire.	

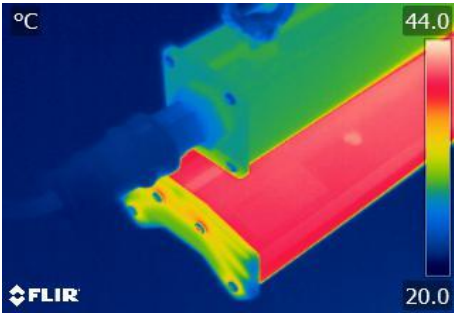
Applications Doublepower RAY:

Storage space with shelf aisles (high shelving), shopping centers.
For areas of 5-12 meter extra high areas of 12-18 meter.
For the TaMax version as addition to the normal one for use in extreme dusty and aggressive environments and environments with very high temperatures.



Number	Description	Lumen
02TR1140	RAY 40W	5.553 lm
02TR1141	RAY 40W DALI	5.553 lm

Number	Description	Lumen
02TR1145	RAY 40W TaMax	5.553 lm
02TR1146	RAY 40W DALI TaMax	5.553 lm



Doublepower RAY thermal management



Doublepower RAY special optical design



Doublepower RAY separated electronic module and LED module



Doublepower RAY combination of 2 optics

For information and quotations Doublepower: RMN phone +31 (0)85 27 32 216 or info@rmn.eu
Wij can make calculation design for your building.