## **DOUBLEPOWER!! TREE LUMINAIRES LED AT SEA**

## **Extremely Durable Industrial Luminaires**

Manufacturer of high end LED luminaires with a unique design and thermal management.

### **DOUBLEPOWER!! TREE LED Luminaires**

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

With an exceptional thermal management ensures highly efficient heat dissipation.

Body manufactured from special extruded anodized sea water resistant 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 luminiares 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.

An extreme long true life-span of 100.000 hours (L80B10) and 6 to 10 year full guarantee.

### **Specifications are:**

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  $+50^{\circ}$ C chip's temperature only  $+66.5^{\circ}$ C At ambient temperature  $+60^{\circ}$ C chip's temperature only  $+78^{\circ}$ C

Protection: IP

Ambient temperature and electronics: From -25°C to +60°C (-40°C to +65°C for EXtreme Industry TaMax type)

(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 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. Very suitable for use on board of seagoing vessels inside and outside.

Front cover with diffused glass for extra low UGR





doublepower!!

industrial lighting | intelligent | effici

## **DOUBLEPOWER!! TREE LUMINAIRES LED AT SEA**

# **Extremely Durable Industrial Luminaires**

#### **Benefits are:**

All doublepower LED luminaires has an enormous long life-span. From 60.000 hours for the AIR luminiares to 100.000 hours for the TREE, the SKY and the RAY luminaires.

The doublepower LED luminaires comes with a full 6 to 10 years full guarantee (on the complete luminaire).

Doublepower LED luminaires are extremely energy efficient and equipped with the latest LED technology.

Doublepower LED luminaires can be controlled with a mobile phone (as option).

Doublepower LED luminaires are produced for the most demanding environments.

Doublepower fine-tune lighting systems for a variety of industrial applications.

Doublepower has more than 10 years experience in LED technique.

Doublepower systems reduces cost significantly.

Doublepower LED technique for long term solutions.

Doublepower works for well known industrial companies.

### Some references are:

Hyundia Auto Manufacturer Europe

EŚAB

Coca Cola

Ina

Gefco Silon

Pewag

Iveco

Kia MOL Logistics

Metro Makro

Parker

Schneider Electric

Yusen Logistics

Available from 1 up to 4 modules 2.225 up to 11.600 lumen (17,5W up to 102W). Lengths 636mm up to 1616mm

Contact us for more information.



Doublepower!! TREE LED luminiare with cable gland



Doublepower!! TREE LED luminiare with GESIS IP68 Connector





**Doublepower!! TREE LED thermal management** 

