

Industrial-100HBS Gen III®

100 Watt High Bay LED Luminaire

*Extremely Reliable
Extremely Heavy Duty
Extremely Efficient*

Product flyer, Version 1.0, Rev A, May 2018

Generation III Heavy Duty Industrial LED Luminaire.

Industrial-100HBS Gen III® is third generation of high performance, heavy duty and high temperature resistant series of LED products, proudly created and made by DITO Lighting, Slovenia, EU.

Industrial-100HBS Gen III® is industrial grade LED Luminaire, designed to be used in harshest industrial, high temperature environment. The Luminaire is simplified, yet more affordable version of his older brother, world's best nuclear grade Luminaire, the **HiRad-100HBS Gen III®**. The mechanical, photometric and electrical properties of both are the same. Industrial version has no nuclear qualification. Nevertheless the Luminaire can still survive gamma doses of up to 500 Gy.

The housing is made out of aluminium. Overall weight is 1.5 kg, without any sharp edges, therefore very easy to handle. Customized holders are available on request.

Overall system efficacy is more than 160 lm/W.

Available with two types of silicone optics - medium and wide. Different types of optics enable simple one-to-one replacement of mature lighting technologies in almost any lighting scenario.

Silicone optics is flexible, has operational temperature range of over 200 °C, is 100 % shatter proof and chemically stable.



Generation III has fully vented housing. Therefore insensitive to sudden ambient pressure changes. Soft mounting of the electronics means high seismic capacity, no sensitivity to vibrations and excellent protection against water, hot steam and other chemicals.

Proprietary electronics is based on full discrete design without integrated circuits, electrolytic capacitors and opto couplers. Predicted lifetime is more than 20 years. Mission profile 24/7 at 50 °C ambient temperature.

For latest, up to date information please visit:

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Industrial-100HBS Gen III[®]

100 Watt High Bay LED Luminaire



Specifications:

Nominal power:	100 W
Nominal voltage:	230 V AC or DC
Power factor:	> 0.95
Luminous flux:	> 16.000 lm
CCT:	5000 K
CRI:	> 80
Overall Luminaire efficacy:	> 160 lm/W
Electronics efficiency:	> 90.0 %
Housing:	Aluminium
Optics protection:	Silicone
Ingress protection:	IP 65
Impact protection:	IK 08
Ambient temperature:	-20 °C to +80 °C
Weight:	1.5 kg
Dimensions:	dia 330 × 124 mm

Warranty: 5 years

In compliance with (partial list):

MIL-STD-883, Method 1017 neutrons
MIL-STD-883, Method 1019 gamma
ESA ESCC No. 22900 gamma
IEEE 344 -2013
IEC 60980
EN 55015, EN 61547
IEC/EN 60598-1, IEC/EN 60598-2-1
IEC/EN 61347-1, IEC/EN 61347-2-13

Radiation tolerance:

Gamma:	5×10^2 Gy
Neutrons 1MeV (Si):	5×10^{10} n/cm ²

Seismic capacity:

Frequency range:	1 to 35 Hz, random
Base excitation:	> 10 g @ any axis

Reliability (environment: GB @ 50 °C):

Calculation method:	MIL-217F N2
MTBF:	3.758.857 h
Predicted lifetime:	> 22 years
Confidence level:	95 %

Notes:

Irradiation tests performed inside the core of the TRIGA MkII research reactor with the representative NPP spectrum.

The product is also available with US input voltage 120 V AC 60 Hz or 120 V DC.