



Hercules Ex

(PN: L3000)

COMPLIES WITH
ASTM E3022-2018
Standard

COMPLIES WITH
Rolls-Royce RRES 90061
Specification

COMPLIES WITH
Airbus AITM6-1001
Testing Method

COMPLIES WITH
USAF
Requirements

4 Year warranty

Designed upon request of the military, Hercules is probably the most durable and shock-proof UV light in the world today, suitable for any “heavy duty” environment. It comes with explosion proof approvals and is tested to comply with ASTM E3022-18 and all PRIMES requirements, including Rolls-Royce RRES 90061 and Airbus AITM6-1001. Accidentally dropped it, kicked it, baked it in an oven, run it over by a tank? – it will still work! – The battery is inside the light; you don’t need to worry it got smashed like ordinary lights. Zero LEDs out from day of launch, 6 years ago!



ON/OFF SWITCH
On/Off switch at the back prevents accidental activation.



FOUR UV LEDS WITH WHITE LIGHT BLOCK FILTERS
Four high quality UV LEDs with respective high quality white light block filters that do not suffer from solarization.



BATTERY POWERED
Hercules Ex is powered with two rechargeable batteries for ease of use in field inspections and tight work spaces.



CHARGE BATTERIES WITHOUT REMOVING FROM THE LAMP
A charger with an internal connector can be used to charge batteries without removing them from the lamp. Charger must not be used in explosive atmospheres.

Hercules Ex is an extremely durable product specifically developed for use in areas where the risk of an explosion is high. Use of explosion proof products is often required in Offshore Oil Rigs, Refineries, Aerospace, and Defense. It has successfully completed extremely tough tests, amongst them tests for thermal conditioning, Impact Tests, Drop Tests, IP tests that led to the ATEX certification (Certificate: ITS17ATEX402144X). This unique product is suitable for use in extreme weather conditions varying from 104° Fahrenheit (+ 40° Celsius) to minus 4° Fahrenheit (- 20° Celsius).

Furthermore, Hercules Ex has successfully completed all tests and audits leading to its certification for IECEx, NFPA 70 Article 500 for Class I (divisions II locations) and the United States military tests, Salt Fog Test and Explosive Atmosphere Test. It has an ingress protection marking of IP66.

This unique light is battery powered and has four UV LEDs that generate an intensity of 4 000 $\mu\text{W}/\text{cm}^2$. A charger is supplied with each lamp enabling users to charge the batteries without removing them from the lamp. Charging of batteries should only take place outside explosive atmospheres.

Hercules Ex has been tested to comply with ASTM E3022-18, Rolls-Royce RRES 90061 and Airbus AITM6-1001. A certificate of conformity is provided with every light as well as a 4-year warranty.

FACTS ABOUT HERCULES EX

Output Characteristics	Hercules Ex
Intensity	$\approx 4\,000\ \mu\text{W}/\text{cm}^2$
Visible light	$< 1.5\ \text{lux} / 0.1\ \text{fc}$
Beam $> 1\,000\ \mu\text{W}/\text{cm}^2$	$\varnothing 8\ \text{inches} / 20\ \text{cm}$

At a distance of 38 cm (15 inches)

TECHNICAL DATA

	Hercules Ex
UV LED:	4
Wavelength:	365 nm (peak) +/- 5 nm
Estimated LED life time:	30 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Battery
Weight:	888 grams (2.0 lbs)
Battery running time:	3 hours (+/- 5%)



EXPLOSIVE ATMOSPHERE CERTIFICATIONS

ATEX certified for Group II, Zone II (Certificate: ITS17ATEX402144X), IECEx, NFPA 70 Article 500 for Class I (divisions II locations), Explosive Atmosphere Test as per MIL-STD-810G.



OPERATE THE LAMP AS MAINS WHILE CHARGING BATTERIES

A separate PSU supplied can charge the batteries. This charger can only be used outside explosive atmospheres.



PACKAGE INCLUDES:

Lamp, Car Charger, Four Batteries, UV Block Goggles, External Charger for wall outlet, Carrying Case, Charging Power Supply.

TYPE-EXAMINATION CERTIFICATE

1. Type-examination Certificate (Module A)
2. Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)



3. Type examination certificate Nr **ITS17ATEX402144X**

4. Product: MB Hercules Ex

5. Manufacturer: Labino AB

Applicant: Labino AB

6. Address: Fågelsångsvägen 16,
186 42 Vallentuna,
Swede

Address: Fågelsångsvägen 16,
186 42 Vallentuna,
Sweden

7. This product and any acceptable variation thereto are specified in the schedule to this certificate and therein referred to.
8. INTERTEK ITALIA S.p.A., certifies that the equipment or protective system has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.

The examination and tests results are recorded in confidential technical evaluation Intertek Report Nr. 104666450LHD-001, Revision 0, Dated 28 July 2021.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018 N IEC 60079-15:2019 except in respect of those requirements referred to at item 16 of the Schedule
10. If the sign X is placed after the certificate number, it indicates that the product is subject to Special Conditions for Safe Use specified in the schedule to this certifica
11. This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
12. The marking of the product shall include the following:



II 3G Ex ec nC IIC T4 Gc
-20°C ≤ Tamb ≤ +40°C

06-Sep-2021
Certificate issue date



Paul Moss
Certification Officer
Intertek Italia S.p.A.

This certificate has been issued by Intertek Italia S.p.A. on transfer from Intertek Testing & Certification Ltd. using the same issued original certificate number.



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

Intertek Italia S.p.A. Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Ital

LFT-EMEA-IT-ATEX-OP-23p (29 August 2019)

Page 1 of 3



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEX ITS 17.0056X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2018-06-11) Issue 0 (2017-10-12)
Date of Issue:	2021-09-06		
Applicant:	Labino AB Fågelsångsvägen 16 SE-186 42 Vallentuna Sweden		
Equipment:	MB Hercules Ex		
Optional accessory:			
Type of Protection:	Equipment protection by type of protection 'n'		
Marking:	Ex ec nC IIC T4 Gc -20°C ≤ Tamb ≤ +40°C		

Approved for issue on behalf of the IECEx
Certification Body:

Paul Moss

Position:

Certification Officer

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road
Leatherhead
Surrey, KT22 7SA
United Kingdom



Compliance with relevant ASTM and ISO Standards as well as Industry Engineering specifications

Labino AB LED UV Lights	Built in White Light LED	UV Intensity at 38 cm (15") (µW/cm ²)	COMPLIES WITH ASTM E3022-2018 Standard	COMPLIES WITH Rolls-Royce RR590061 Specification	COMPLIES WITH Airbus A1746-1001 Testing Method	COMPLIES WITH Pratt & Whitney Requirements	COMPLIES WITH The Boeing Co Requirements	COMPLIES WITH ISO 3039-12 Standard	COMPLIES WITH USAF Requirements
GX SERIES – OVERHEAD LIGHT									
GX Orion REMOTE	✓	1 500-7 000	✓	-	-	-	-	✓	-
GX Orion UV & WH	✓	≈ 7 000	✓	✓	✓	✓	-	✓	-
GX Orion UV	-	≈ 4 500	✓	✓	✓	✓	✓	✓	✓
BB 2.0 SERIES – HANDHELD LIGHT									
BB 2.0 Helios	-	≈ 9 000	✓	-	✓	✓	-	✓	✓
BB 2.0 Ikaros	-	≈ 4 000	✓	✓	✓	✓	✓	✓	✓
BB 2.0 Artemis	-	≈ 22 000	✓	-	-	-	-	✓	-
MB 3.0 SERIES – HANDHELD LIGHT									
Hercules Ex	-	≈ 4 000	✓	✓	✓	✓	✓	✓	✓
MB 3.0 Zeus	✓	≈ 4 500	✓	✓	✓	✓	✓	✓	-
MB 3.0 Zeus with Athena	✓	≈ 4 500	✓	✓	✓	✓	✓	✓	-
MB 3.0 Hermes	-	≈ 4 500	✓	✓	✓	✓	✓	✓	✓
MB 3.0 Hermes with Athena	-	≈ 4 500	✓	✓	✓	✓	✓	✓	✓
MB 3.0 Selene	✓	≈ 9 000	✓	-	✓	✓	-	✓	-
MB 3.0 Selene with Athena	✓	≈ 9 000	✓	-	✓	✓	-	✓	-
MB 3.0 Atlas	-	≈ 9 000	✓	-	✓	✓	-	✓	✓
MB 3.0 Atlas with Athena	-	≈ 9 000	✓	-	✓	✓	-	✓	✓
MB 2.0 SERIES – FLASHLIGHT / HEADLIGHT									
UVG3 2.0 Spotlight	-	≈ 80 000	✓	-	-	-	-	✓	-
UVG3 2.0 Midlight	-	≈ 9 000	✓	-	✓	✓	-	✓	✓
UVG3 2.0 Floodlight	-	≈ 4 000	✓	✓	✓	✓	✓	✓	✓
UVG5 2.0 Spotlight	Optional	≈ 80 000	✓	-	-	-	-	✓	-
UVG5 2.0 Midlight	Optional	≈ 9 000	✓	-	✓	✓	-	✓	✓
UVG5 2.0 Floodlight	-	≈ 4 000	✓	✓	✓	✓	✓	✓	✓

PLEASE NOTE: The above models are in compliance with the above ASTM and ISO standards as well as industry specifications as indicated on the table above irrespective of the power source (Battery or Mains).