

# EC-TYPE EXAMINATION CERTIFICATE



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## Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

[3]

EC-Type Examination Certificate Number: **DEMKO 14 ATEX 1348X Rev. 0**

[4]

Equipment or Protective System: **Intrinsically Safe Flashlight**

[5]

Manufacturer: **Daysun Technology Ltd**

[6]

Address: **1st Fl No.1 Alley 2 Lane 110 Sec 4 Hsimen Rd North District Tainan 704, Taiwan**

[7]

This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. **4786426407**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2009**

**EN 60079-11:2012**

[10]

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11]

This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by the certificate.

[12]

The marking of the equipment or protective system shall include the following:

II 2 G Ex ib IIC T4

**Certification Manager**

Jan-Erik Storgaard

**Notified Body**

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**Date of issue:** 2014-09-01



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[13]

[14]

**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 14 ATEX 1348X Rev.0**  
**Report: 4786426407**

[15]

Description of Equipment or protective system

The Model Lite-Ex LED 60 is a portable, hand-held LED flashlight powered by four, size 'AA', 1.5V, alkaline batteries connected in series. The following batteries were considered acceptable for use in the flashlight:

- Model 1502-0002 (Ansmann Industrial AA/LR6), manufactured by Ansmann
- Model Ultra+ E91, manufactured by Energizer
- Model MN1500, manufactured by Duracell
- Model 5015548 (Ansmann RED AA/LR6), manufactured by Ansmann
- Model 4906, manufactured by Varta

Temperature range

The ambient temperature range is -20°C to +40°C.

Performance Testing

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 94/9/EC is not covered in this certificate.

Routine tests

None.

[16]

Report No.

Project Report No.: 4786426407 (Hazardous Location Testing)

Documents:

Description:	Drawing No.:	Rev. Level:	Date:
Model Lite-Ex LED 60: Marking	L03. Lite-Ex LED 60 Marking	1.0	2014-07-16
Model Lite-Ex LED 60: Manual (Ecom)	UM01. Lite-Ex LED 60 User Manual (Ecom)	1.0	2014-08-14
Model Lite-Ex LED 60: Manual (Ansmann)	UM02. Lite-Ex LED 60 User Manual (Ansmann)	1.0	2014-08-14
Model Lite-Ex LED 60: Exploded	EX01. Lite-Ex LED 60 Explosion	1.0	2014-04-23
Model Lite-Ex LED 60: Mechanical BOM	B01. Lite-Ex LED 60 ME-BOM	1.0	2014-04-23
Model Lite-Ex LED 60: Body	M01. Lite-Ex LED 60 Body	1.0	2014-04-23
Battery Separation	A01. DF1013 Battery Separation	2.0	2013-01-17
Infallible Wire Connection	M06. DF1013 Infallible Wire Connection	1.0	2014-07-01
Schematic	E01. DF1013 Schematics	2.0	2013-01-17
Electrical Bill of Material	B02. DF1013 BOM-EE	2.0	2013-01-16
LED PCB	E02. DF1013 LED PCB	2.0	2013-01-17
Circuit PCB	E03. DF1013 Circuit PCB	2.0	2013-01-17

[17]

Specific conditions of use:

- Read manual before use.
- Do not open the enclosure in a hazardous area.
- Replace batteries only in non-hazardous areas.
- Use only battery type Ansmann1502-0002 (Ansmann Industrial AA/LR6), Energizer Ultra+ E91, Duracell MN1500, Ansmann 5015548 (Ansmann RED AA/LR6) or Varta 4906.
- Do not mix batteries from different manufacturers.
- Do not mix used batteries with new batteries.
- The screw shall be secured tightly after opening and closing the enclosure.



[18]

Essential Health and Safety Requirements

Concerning ESRs this Schedule verifies compliance with the Annex III of ATEX directive only. By placing the product on the market, the manufacturer declares compliance with other relevant Directives, and all other safety related requirements including those of Annex II of this Directive.

[13]

[14]

**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 14 ATEX 1348X Rev.0**  
**Report: 4786426407**

Additional information

The Model Lite-Ex LED 60 has in addition passed the tests for Ingress Protection to IP 6X in accordance with EN60529: 1991/A1 2000.

The Registered Trademark  **DAYSUN**

 **DAYSUN** or

 **DAYSUN TECHNOLOGY LTD.**

for Day Sun Technology Limited

may be used as the company identifier on the marking label.

This certificate was issued as "Accredited by DANAK under registration number 7011 to certification of products".

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

