

EU-TYPE EXAMINATION CERTIFICATE



[1]

[2]

**Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 2014/34/EU**

[3]

EU-Type Examination Certificate Number: **DEMKO 15 ATEX 1476X Rev. 1**

[4]

Product: **Intrinsically Safe Flashlight, Models DS-7, DS-7 Z1, DS-5, DS-5 Z1, DS-6, DS-6 Z1**

[5]

Manufacturer: **Day Sun Technology Ltd.**

[6]

Address: **No. 1, Alley 2, Lane 110, Sec. 4, Hsi-Men Road, North District, Tainan City, 704 Taiwan**

[7]

This product 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 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of the product 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. **4787171947**

[9]

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

**EN 60079-0:2012+A11:2013
EN 60079-26:2007**

**EN 60079-11:2012
EN 50303:2000**

[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 EU-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 the certificate.

[12]

The marking of the product shall include the following:

Models DS-5, DS-6, DS-7 -

I M 1 Ex ia I Ma

II 1 G Ex ia IIC T4 Ga

Models DS-5 Z1, DS-6 Z1, DS-7 Z1-

I M 2 Ex ib I Mb

II 2 G Ex ib IIC T4 Gb

Certification Manager
Jan-Erik Storgaard

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Notified Body

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Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 15 ATEX 1476X Rev. 1

Report: 4787171947

[15]

Description of Equipment or protective system

Models DS-5, DS-5 Z1, DS-6, DS-6 Z1, DS-7 and DS-7 Z1 are portable, hand-held flashlights powered by four size "AA" batteries, alkaline or rechargeable NiMH, connected in series. The batteries are only to be replaced in a non-hazardous location. These models are available in three different color enclosures: yellow, orange, black. The following batteries were considered acceptable for use in the flashlight:

- NiMH type Model NH15-2300 manufactured by Energizer
- Alkaline type Model E91 manufactured by Energizer
- Alkaline type Models 815 or AL-AA manufactured by Rayovac
- Alkaline type Models 5015548 or 1502-0002 manufactured by Ansmann
- Alkaline type Model MN1500 manufactured by Duracell
- Alkaline type 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 2014/34/EU is not covered in this certificate.

Routine tests:

None.

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EC-Type Examination Certificate.

[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 Energizer NH15-2300, Energizer E91, Rayovac 815, Rayovac AL-AA, Ansmann 5015548, Ansmann1502-0002, Duracell MN1500, or Varta 4906.
- To reduce the risk of explosion, do not mix new batteries with used batteries, or mix batteries from different manufacturers or from different types.
- Do not charge NiMH batteries in the flashlight. Charge the NiMH batteries according to the manufacturer's specification.
- The screw shall be secured tightly after opening and closing the enclosure.



[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9.

Additional information

The models DS-5, DS-5 Z1, DS-6, DS-6 Z1, DS-7 and DS-7 Z1 flashlights have in addition passed the tests for Ingress Protection to IP 67 in accordance with EN60529:1991+A1:2000+A2:2013.

The Registered Trademark,  **DAYSUN DAYSUN**, or  **DAYSUN TECHNOLOGY LTD.**, for Day Sun Technology Ltd. may be used as the company identifier on the marking.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.