

- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

# **TÜV 21 ATEX 8751 X**

Issue: 00

(4) Equipment:

Portable rechargeable LED lamp / type PL-AT803A

(5) Manufacturer:

Powerline Industrial Ltd.

(6) Address:

Unit A,10/F,Lockhart Centre,301-307 Lockhart Road,Wanchai,Hong Kong

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26<sup>th</sup> February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC/Ex8751.00/21

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0:2018

EN 60079-11:2012

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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 specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



I M2 Ex ib I Mb
II 2 G Ex ib IIC T4 Gb
II 2 D Ex ib IIIC T135°C Db
(0°C ≤ Ta ≤ +40°C)

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-06-26

Dipl.-Ing. Kisuspeter Graff

This EU-Type Examination Certificate without signature and stamp shall not be valid.

This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln

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(13) Annex

# TÜV 21 ATEX 8751 X Issue: 00

## (15) <u>Description of equipment</u>

#### 15.1 Equipment and type:

Portable rechargeable LED lamp / type PL-AT803A

#### 15.2 Description / Details of Change

#### General product information

PL-AT803A is a self-contained lamp designed with LED technology for durable performance, power efficiency and structural robustness, and it is powered by wide thermal tolerant Lithium battery.

The enclosure of the lamp is made of industrial Polycarbonate Stat-tech PC SZ3223703 with excellent impact strength, and it is anti-static, high heat resistance and has good structural stability. The strength and dimensional stability of polycarbonate resin are further enhanced with rugged design for tough work environment.

Powerline lamp is ergonomically operated with one switch that turns on/off light and adjust brightness. The length of lighting time is increased when the power save mode is activated.

PL-AT803A is designed and constructed with type of protection "ib".

PL-AT803A is comprised of battery, electrical circuits, button and light source display. The electrical circuit is comprised of battery(including protection circuit) and main board circuit, charging board, LED board circuit and Keyboard circuit.

The equipment to be intended use in mining with EPL Mb, and Zone 1 with gas group IIC & Zone 21 with dust group IIIC.

### Technical Data

Electrical data
I.S Parameters:
Um= 250VACrms
Un= 12.6V(SELV delivered by AC/DC charger)
Ui= 4.35V(Uov of battery pack)

Environmental data Tamb: 0°C to +40°C IP Rating: IP20

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(16) <u>Test-Report No.</u>

GC/Ex8751.00/21

#### (17) Special Conditions for safe use

- 1. The equipment PL-AT803A must be protected from mechanical impacts. If damages occurred, the equipment must be removed from the hazardous area immediately.
- 2. The non-metallic parts of the enclosure shall not exposed to frequent temperature changes.
- 3. WARNING --DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
- 4. WARNING -DO NOT CHARGE THE BATTERY IN HAZARDOUS LOCATION
- 5. WARNING -USE ONLY MICA JBL-206-1S2P-18650 6700mAh 3.6V BATTERIES.
- 6. WARNING ONLY USE APPROVED ATEXBEAM CHARGER ADAPTOR AND CHARGING STATION FOR CHARGING POWERLINE LAMP.
- 7. The LED lamp needs to protected from impacts with high impact energy.
- 8. The LED Lamp are not permitted exposure to light for a long term directly, under the extreme situations, for example, the strong sunlight, the LED Lamp should be used with additional protection.
- 9. Under certain extreme circumstances, the plastic enclosure may store an ignition-capable level of electrostatic charge. Therefore, the user/assembler shall implement precautions to prevent the build-up of electrostatic charge, e.g. locate the equipment where a charge-generating mechanism is unlikely to present and clean with a damp cloth
- 10. Replacement procedure of battery as stated in the Ex instruction should be observed.

#### (18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-06-26

Dipl.-Ing. Klauspeter Graffi