

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:	IECEx TPS 21.0025X	Page 1 of 4	<u>Certificate history</u>
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Status: Current Issue No: 0

Date of Issue: 2022-01-13

Applicant: Dongguan Pan American Electronics Co., Ltd.

No.175 BeiWang Road Zhongtang Town

DongGuan City, GuangDong Province 523227

China

Equipment: LED hand lamp

Optional accessory: EX-10W-WKC1YZDA, EX-10W-WKC2YZDA

Type of Protection: Increased safety "ec", intrinsic safety "ic", dust ignition protection by enclosure "tc"

Marking: Ex ec ic IIC T4 Gc

Ex ic tc IIIC T135°C Dc

Approved for issue on behalf of the IECEx Ing. Kristof De Gersem, MSc.

Certification Body:

Position: Technical Certifier

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:

TÜV SÜD Product Service GmbH Ridlerstr. 65 D-80339 Munich Germany





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Manufacturer: Dongguan Pan American Electronics Co., Ltd.

No.175 BeiWang Road Zhongtang Town

DongGuan City, GuangDong Province 523227

China

Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/TPS/ExTR21.0031/00

Quality Assessment Report:

CN/NEP/QAR19.0007/04



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description of equipment:

The LED hand lamp is intended for use in Group II, Zone 2 IIC T4 gas explosive atmospheres and Zone 22 IIIC T135°C dust explosive atmospheres.

The equipment is powered by battery. The on/off switch and two indication LEDs are protected by intrinsic safety "ic", others are protected by increased safety "ec" and ignition protection by enclosure "tc".

Model Explanation:

EX - Explosion-proof products

10W - Product power, 10W

WKC(12) - Product model

Y - Photosensitive type

Z - Colour D - Angle

A - Type of glass

Model difference:

	EX-10W-WKC1YZDA	EX-10W-WKC2YZDA	
Appearance	The shape of the lampshade is a semicircle spherical structure	The shape of the lampshade is semi- ellipsoid structure	
The lampshade material	PC material	Toughened glass material	
Number of cable glands	There are two	None	
Number of beads	54 LED beads	3 LED beads	
Lamp PCB layout	Refer to EX-10W-WKC1YZDA-109 and EX-10W-WKC1YZDA-110	Refer to EX-10W-WKC2YZDA-103	
Switch PCB	Refer to EX-10W-WKC1YZDA-111	Refer to EX-10W-WKC2YZDA-104	

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. Ambient temperature: -10°C to +60°C.
- 2. The battery pack used is not replaceable.
- 3. The equipment shall be charged in a non-hazardous area. Charging adaptor: manufacturer Dongguan Guanjin Electronics Technology Co., Ltd, model K25V120150G, rated input 100-240Va.c., 50/60Hz, 0.6A, rated output 12.0Vd.c., 1.5A.
- 4. The equipment shall be indoor used only.



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Equipment (continued):

Technical data:

Rated power: 10W
Rated voltage: 11.1V
Charging voltage: 12.65V
Rated capacity: 2.6Ah
Beam angle: 120°

Warning label:

WARNING - DO NOT CHARGE IN A HAZARDOUS AREA

WARNING - DO NOT OPEN WHEN ENERGIZED

Installation instruction:

See installation instructions provided by the manufacturer.

Routine test:

100% routine test has to be done by manufacturer.

Dielectric test shall be carried out. An AC voltage of 600V r.m.s shall be applied between electric circuits and enclosure, for a duration of 100ms. There shall be no dielectric breakdown occurs.

Equipment used subjected to separated certificate

Apparatus	Туре	Manufacturer	Ex rating	Certificate no.
Cable gland	MSKE, M12*1.5	WISKA Hoppmann GmbH	Ex eb IIC Gb Ex tb IIIC Db	IECEx PTB 13.0027X