



Product Service

(1) **EU-Type Examination Certificate**

(2) Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 2014/34/EU**



(3) EU-Type Examination Certificate Number:

**TPS 22 ATEX 113979 0001 X Rev. 00**

(4) Equipment or Protective System: Explosion-Proof MR Glass, Model: RX101

(5) Manufacturer: Hangzhou Lingban Technology Co., Ltd.

(6) Address: Room 209-6-263, No.999, Jing Xing Road, Cangqian Street, Yuhang District, Hangzhou PR China

(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) TÜV SÜD Product Service GmbH, Notified Body no. 0123, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports with no. 88.500.20.236.01

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

**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 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 this certificate.

(12) The marking of the product shall include the following:

**II 2G Ex ib IIC T4 Gb**  
**II 2D Ex ib IIIC T130°C Db**

Certification Body,

München, 11.03.2022

Ing. Kristof De Gersem, MSc.



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# Schedule

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EU-Type Examination Certificate no.

TPS 22 ATEX 113979 0001 X Rev. 00

## Certificate History

Revision:	Description:	Report no.:	Issue Date:
Rev. 00	First issue of certificate	88.500.20.236.01	11.03.2022

(15)

### Description of equipment:

X-Craft, Model RX101, is a pair of explosion-proof MR glasses equipped with 5G/WIFI/BT wireless modules and displayed via optical waveguide DMD projectors wearable onto a helmet for smarter and safer industrial inspection and supervision activities by frontline workers while offering expertise guidance remotely in MR (mixed reality) within explosive atmospheres Zone 1 or Zone 21, providing an "ib" Type of Protection.

It is self-contained and battery-powered (LA606090EX-1S2P/7200mAh/3.7V). Main electrical parts are enclosed in four separate cavities: cavity formed by front-end glasses guard and main board modules with a separate LED-indicated camera; left and right side cavities housing button boards controlling channel shuffling and SOS signalling; back-end 5G board cavity where external ports for recharging and headphones etc are reserved and properly ingress-protected per IEC 60529.

A protection circuit for non-hazardous area battery charging ( $U_m = 60V$  DC) is embedded in the X-Craft PCBA.

See the user instructions and special conditions of use for further details.

### Model designation:

R X 101  
1 2 3

- 1: Enterprise code – Rokid
- 2: Product type code – X-Craft, Explosion-proof MR Glasses
- 3: Model configuration code – 5G version

### Model difference:

N/A

Certificates without signature shall not be valid. The Certificates may only be circulated in full including its schedule(s). Extracts or alterations are subject to approval by TÜV SÜD Product Service GmbH. In case of dispute, the German text shall prevail. The document is administrated under the following number: EX5A 113979 0001 Rev. 00

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Document List:

File no.:	Description:	Pages:	Rev:	Date:
EX-RX101-RX103-000	General assembly	1	/	17.12.2021
EX-RX101-RX103-101	Schematic, Main Board interface	17	1	17.12.2021
EX-RX101-RX103-102	Schematic, 5G Board interface	11	1	17.12.2021
EX-RX101-RX103-103	Schematic, MIC FPC interface	1	1	17.12.2021
EX-RX101-RX103-104	Schematic, L/P Sensor FPC interface	1	1	17.12.2021
EX-RX101-RX103-121	LAYOUT, Main Board interface	12	1	17.12.2021
EX-RX101-RX103-122	LAYOUT, 5G Board interface	12	1	17.12.2021
EX-RX101-RX103-123	LAYOUT, MIC FPC interface	5	1	17.12.2021
EX-RX101-RX103-124	LAYOUT, L/P Sensor FPC interface	5	1	17.12.2021
EX-RX101-RX103-131	Encapsulation procedure	2	/	17.12.2021
EX-RX101-RX103-133	SPEC, battery pack	19	/	17.02.2022
EX-RX101-RX103-135	User Manual	28	1	17.12.2021
EX-RX101-RX103-111	BOM, Main Board interface	6	1	07.12.2021
EX-RX101-RX103-112	BOM, 5G Board interface	6	1	07.12.2021
JS-RX101-X00-01	EU Declaration of Conformity (2014/34/EU Directive)	3	Draft	04.01.2022
EX-RX101-RX103-130	LABEL, X-craft interface	2	1	17.12.2021

A copy of the full documentation is kept confidentially at TÜV SÜD.

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Special conditions for safe use:

1. The battery can only be recharged in non-hazardous areas after being connected to a CE-compliant SELV/PELV power adaptor with  $U_m$  of less than 60V DC.
2. The replacement of MicroSIM card and MicroSD card can only take place in non-hazardous areas.
3. The USB Type-C port is reserved for manufacturer-specified non-hazardous area debugging or software downloading/upgrading purposes only, USB 2.0 protocols for communications shall be strictly followed without any power delivery function. It is to be ensured that the above-mentioned operations can only be carried out or authorised by the manufacturer.
4. The 3.5 mm headphone jack can only be used with passive headsets in non-hazardous areas.
5. All ports intended for non-hazardous area external connections shall be secured with rubber plugs before the device is subject to explosive atmospheres.
6. The ambient temperature range for operation is specified from  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ .
7. This device is not allowed to be disassembled or opened in fear that the overall explosion-proof integrity can be invalidated.

(18)

Essential health and safety requirements:

Assured by compliance with standards set out in (9).

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Doc Name: Temp-ExNBG-TPS-EU-Type-Cert Rev. 04

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