



[1]

UNITED KINGDOM CONFORMITY ASSESSMENT  
**UK-TYPE EXAMINATION CERTIFICATE**

[2]

**Product or Protective System Intended for use in Potentially Explosive Atmospheres  
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1**

[3]

UK-Type Examination Certificate No.: **UL22UKEX2659 Rev. 1**

[4]

Product: **Portable Gas Detector G6-\*-#**

[5]

Manufacturer: **Blackline Safety**

[6]

Address: **Suite 100, 803 24th Ave SE, Calgary, Alberta T2G 1P5 Canada**

[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 (UK) Ltd, Approved Body number 0843, in accordance with Regulation 44 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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 Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential report **US/UL/ExTR22.0082/01**.

[9]

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

**EN IEC 60079-0:2018**

**EN 60079-11:2012**

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the Schedule to this certificate.

[11]

This UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations 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 1 G Ex ia IIC T4 Ga**

**Certification Officer**  
Andrew Moffat

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the UKEx Product Certification Program Requirements. This certificate and test results obtained apply only to the product 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 product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Regulations. 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:** 2022-11-24

**Re-issued:** 2023-02-17

**Approved Body**

UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade Road, Basingstoke RG24 8AH, UK  
Phone : +44 (0)1256 312100



[13]

[14]

## Schedule

### UK-TYPE EXAMINATION CERTIFICATE No.

**UL22UKEX2659 Rev. 1**

[15] Description of Product

The G6-\*# is a portable body worn single-gas detection instrument, where:

- '\*' is one alphanumeric character identifying the gas sensor installed
- '#' is an optional up to two alphanumeric characters identifying the cellular carrier (preceding '-' and code may not be present for the default carrier).

The G6-\*# can report information using wireless communication. The device includes momentary switches, an LCD screen, a piezo sounder, LEDs, and a vibration motor for user interaction.

When an alert is triggered, the heightened state of the instrument may be presented to the user through flashing lights, audio, and pertinent information displayed on the LCD screen.

Internally the G6-\*# includes a GNSS receiver, a Bluetooth/WiFi transceiver, a cellular transceiver, powered by a rechargeable lithium polymer battery.

The battery is charged through a proprietary connector, used only for the G6-\*#. Charging shall occur in non-hazardous locations only.

Performance testing

The measuring function of the product for explosion protection, according to Schedule 1 clause 24 of the Regulation 2016 No. 1107 (as amended by UKSI 2019:696) is not covered in this certificate.

Temperature range

The ambient temperature range is -20 °C to +55 °C.

Electrical data

Intrinsically safe specifications:

Single rechargeable Lithium cell, non-user replaceable, Um: 5.625 V

Routine tests

100% of conformally coated version of G6 Daughter Card are subject to the dielectric strength test as detailed in drawing number G6D-06-xx\_PCBA\_CC, Revision 1.2.

[16] Test Report No. (associated with this certificate issue)

The test report no. is provided under item no. [ 8 ] on page 1 of this UK-Type Examination Certificate.

[17] Specific conditions of use:

None

[18] Conditions of certification:

None

[19] Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

Additional information

The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.

[13]

[14]

**Schedule**  
**UK-TYPE EXAMINATION CERTIFICATE No.**  
**UL22UKEX2659 Rev. 1**

[20] Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
G6 IS Label Content (Pages 1-3)	LBL_104319r1	1	2022-10-26
G6 IS Manual Content	MAN_106165r0	0	2022-08-17
Certification Assembly G6 Unit	01967-A24115	B	2023-01-27
Top Shell	104322	S	2023-01-20
Bottom Shell	104323	M	2023-01-20
Custom Metal Clip	104325	D	2022-08-22
Sensor Cap Gasket	104326	F	2022-08-23
IS, Tempered Glass	106447	A	2023-01-20
Assembly Spacing	104328	A	2022-09-09
Potting Fence	104597	I	2022-08-24
Aux Potting Fence	104828	E	2022-08-02
Sensor Cap	104598	D	2022-09-19
Enclosure Gasket	104599	E	2022-08-23
Steel Contact	104600	C	2022-10-13
Potted PCBA Sub-Assembly	104601	A	2022-08-17
Sensor Membrane	104607	F	2023-01-20
G6 PCM Blank (Schematic)	SCH_104524	1	2022-09-15
G6 PCM Blank (PCB Layout)	PCB_104524	1	2022-06-16
G6-04-xx (IS, Schematics)	SCH_104072	4	2022-09-15
G6 Bill of Material (IS)	BOM_104072	5	2022-09-28
G6-04-xx (PCB Layout)	PCB_104071	4	2022-09-15
G6D-07-xx (IS, Schematics) (no conformal coating)	SCH_104201	7	2022-10-04
G6D Bill of Material (IS) (no conformal coating)	BOM_104201	8	2022-10-20
G6D-07-xx (PCB Layout) (no conformal coating)	PCB_104200	7	2022-10-04
G6D-06-xx (IS, Schematics) (conformally coated)	SCH_104201	6	2022-09-15
G6D Bill of Material (IS) (conformally coated)	BOM_104201	7	2022-10-20
G6D-06-xx (PCB Layout) (conformally coated)	PCB_104200	6	2022-09-15
G6D Conformal Coating Procedure	G6D-06-xx_PCBA_CC	1.2	2022-10-06
Battery, G6	104524	H	2022-10-25