UK Type Examination Certificate CML 22UKEX2016 Issue 1

United Kingdom Conformity Assessment

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

2 Equipment **Liquid Level Sensor**

3 Manufacturer **SST Sensing Ltd.**

4 Address **5 Hagmill Crescent,**
Shawhead Industrial Estate,
Coatbridge,
ML5 4NS, UK

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.

8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-11:2012

10 The equipment shall be marked with the following:

Ex II 1 G

Ex ia IIC T4 Ga

Ta = -30°C to +80°C

UKAS PRODUCT CERTIFICATION 8175

L A Brisk
Assistant Certification Manager

11 Description

The product is an intrinsically safe liquid detection sensor used to detect the presence or absence of liquid in hazardous areas. It is powered from a 12VDC supply protected by an intrinsically safe barrier.

The product detects liquid using an Infrared LED and phototransistor pair. In air, light from the LED is reflected onto the phototransistor through the tip of the cone shaped sensor tip and this is detected by the microcontroller, which sets the output accordingly. In liquid, light escapes from the sensor tip. The sensor state is indicated by the supply current drawn.

The equipment has the following safety description:

Ui	=	12 VDC
Ii	=	130 mA
Pi	=	85 mW
Ci	=	1.08 µF
Li	=	0

Variation 1

This Variation introduces the following modifications:

i. Changes to schedule drawings and the instruction manual.
ii. Minor modifications to the PCB.

12 Certificate history and evaluation reports

Issue	Date	Associated Report	Notes
0	06 Mar 2023	R14935A/00	Issue of the Prime Certificate.
1	02 Mar 2026	R19527A/00	Introduction of Variation 1

Note: Drawings that describe the equipment are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

14 Specific Conditions of Use

None.

Certificate Annex

Certificate Number	**CML 22UKEX2016**
Equipment	**Liquid Level Sensor**
Manufacturer	**SST Sensing Ltd.**

The following documents describe the equipment defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved Date	Title
LL-FAB-0507	1 to 2	2	06 Mar 2023	LLIS-PCB-0507 Rev2 Fabrication Drawing
LLIS-MRK-0507	1 of 1	3	06 Mar 2023	LLIS Marking Specification
LLIS-XX-XX-XND	1 to 2	1B	06 Mar 2023	ATEX Liquid Level Sensor Assembly
LLIS-SCH-0507	1 of 1	3	06 Mar 2023	Intrinsically Safe Liquid Level Switch Schematic

Issue 1

Drawing No.	Sheets	Rev	Approved Date	Title
LL-FAB-0507	1 to 2	4	02 Mar 2026	LLIS-PCB-0507 Rev4 Fabrication Drawing
LLIS-MRK-0507	1 of 1	4	02 Mar 2026	LLIS Marking Specification
LLIS-XX-XX-ND	1 to 2	5	02 Mar 2026	ATEX Liquid Level Sensor Assembly
LLIS-SCH-0507	1 of 1	4	02 Mar 2026	Intrinsically Safe Liquid Level Switch