

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres  
Directive 2014/34/EU**

3 EU - Type Examination Certificate Number: **SGS23ATEX0033X – Issue 2**

4 Product: **TEK 880 Tank Level Radar Measurement Equipment**

5 Manufacturer: **Rochester Sensors Europe Limited**

6 Address: **Unit 118 Shannon Industrial Estate, Shannon, Co Clare, Ireland**

7 This re-issued certificate extends EU Type Examination Certificate No. **SGS23ATEX0033X** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, 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 confidential Report No. **See Certificate History**

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 item 18 of the Schedule.

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 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 :

 **See Certificate Schedule**

SGS Fimko Oy Customer Reference No. **7761**

Project File No. **24/0549**

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Tuomas Hänninen  
SGS Fimko Oy

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## Schedule

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### Certificate Number SGS23ATEX0033X – Issue 2

#### 15 Description of Product

The TEK 880 Radar level measurement sensor uses high frequency radar pulses to determine the ullage distance (or headspace) in a tank, by measuring the time of flight from the bottom of the device to the surface of the liquid. The tank % full volume can be inferred from this figure. This sensor has Bluetooth communication module (BLE 5.0) module to provide for easier setup and activation via a cell phone iOS or Android application.

The TEK 880 device is a moulded plastic enclosure with marking labels on the side and the top of the equipment. The TEK 880 enclosure is provided with several fixing screws that join a base and cover together and encloses the electronics and the replaceable battery pack.

The TEK 880 has a 2" threaded opening to allow it to be screwed into an opening of a tank in the traditional invasive way or can be used with an adaptor to allow sensing in a non-invasive manner.

#### Equipment Marking

The equipment may be marked with one of the following marking strings dependent on the target ambient temperature range that the equipment is to be used in:

⊕ II 1 G Ex ia IIB T4 Ga (-25 °C ≤ Tamb ≤ +50 °C)

⊕ II 1 G Ex ia IIB T4 Ga (-30 °C ≤ Tamb ≤ +50 °C)

#### 16 Report Number

See Certificate History.

#### 17 Specific Conditions of Use

1. The plastic enclosure is a potential electrostatic hazard. Clean only with a damp cloth and do not mount in a high velocity dust laden atmosphere.
2. Batteries must be changed in a non-hazardous area or when the hazardous atmosphere is known not to be present.
3. The equipment must only be powered by battery packs supplied by Rochester Sensors Europe Limited specifically those marked 4-5485 and carry the instruction to use on TEK 880.

#### 18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

**19 Drawings and Documents**

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
9-6267	1 to 5	01	---	TEK 880 ATEX Bill of Materials (BOM) Drawing Document
8-6087	1 of 1	01	---	880 Base Enclosure CDMX
8-6086	1 of 1	01	---	880 Lid Enclosure CDMX

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
9-6262	1 of 1	01	17/02/23	TEK 880 Encapsulation and Assembly Drawing
8-5942	1 of 1	01	06/05/2021	TEK 880 Top
8-5951	1 of 1	01	30/06/2021	TEK 880 EU Base Enclosure with no PG Gland Holes
3-5253	1 of 3	00	21/02/2023	TEK 889 Power (Comms Schematic)
3-5253	2 of 3	00	21/02/2023	TEK 889 Power (Comms Schematic)
3-5253	3 of 3	00	21/02/2023	TEK 889 MCU (Comms Schematic)
3-5253	1 of 1	01	24/03/23	TEK 889 Comms PCB (PCB Outline)
3-5253	1 of 1	01	24/03/23	TEK 889 Comms PCB (Top Silk)
3-5253	1 of 1	01	24/03/23	TEK 889 Comms PCB (Top Copper)
3-5253	1 of 1	01	24/03/23	TEK 889 Comms PCB (GND 2 Plane)
3-5253	1 of 1	01	24/03/23	TEK 889 Comms PCB (Signal Layer)
3-5253	1 of 1	01	24/03/23	TEK 889 Comms PCB (Bottom Layer)
3-5253	1 of 1	01	24/03/23	TEK 889 Comms PCB (Bottom Silk)
3-5255	1 of 1	01	10-17-22	TEK 880 Radar Interface Board (Schematic)
3-5255	1 of 1	01	17/09/2021	TEK 880 Level Shift Interface Board (Top Silk)
3-5255	1 of 1	01	17/09/2021	TEK 880 Level Shift Interface Board (Top Soldermask)
3-5255	1 of 1	01	17/09/2021	TEK 880 Level Shift Interface Board (Top Copper)
3-5255	1 of 1	01	17/09/2021	TEK 880 Level Shift Interface Board (Bottom Copper)
3-5255	1 of 1	01	17/09/2021	TEK 880 Level Shift Interface Board (Bottom Soldermask)
3-5255	1 of 1	01	17/09/2021	TEK 880 Level Shift Interface Board (Bottom Silk)
6-6484	1 of 1	01	12/08/22	TEK 889-880 Interconnector Cabling
4-5485	1 of 1	02	10/01/25	TEK 880 EVE Battery Twin Pack – Double A (ER17505) Harness and Plug
9-6268*	1 of 1	02	---	TEK 880 ATEX Side Label
9-6269*	1 of 1	03	---	TEK 880 ATEX Top Label
9-6293*	1 of 1	02	---	TEK 880 ATEX Low Temp Top Label

\*These drawings are common to BAS23UKEX0065X.

All drawings are common to IECEx BAS 23.0030X.

20 Certificate History

Certificate No.	Date	Comments
SGS23ATEX0033X	27 June 2023	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0: 2018 and EN 60079-11: 2012 is documented in IECEx ExTR GB/BAS/ExTR23.0059/00 held with Project No. 20/0330.
SGS23ATEX0033X Issue 1	21 March 2025	To permit the manufacturer name change and the use of an alternative manufacturing facility as detailed in Report Number GB/SGS/ExTR25.0006/00 held with Project Number 24/0071.
SGS23ATEX0033X Issue 2	23 April 2025	To permit minor changes to allow alternative build options for the construction of the equipment as detailed in Report Number GB/SGS/ExTR25.0041/00 held with Project Number 24/0549.

For drawings applicable to each issue, see original of that issue.