

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 **Baseefa11ATEX0027 – Issue 8**  
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **Cub**

5 Manufacturer: **Ion Science Limited**

6 Address: **The Hive, Butts Lane, Fowlmere, Royston, SG8 7SL**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa11ATEX0027** 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.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

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:

**E II 1G Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +55°C)**

SGS Fimko Oy Customer Reference No. **2242**

Project File No. **20/0566**

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**R S SINCLAIR**  
Authorised Signatory for SGS Fimko Oy

13 **Schedule**

14 **Certificate Number Baseefa11ATEX0027 – Issue 8**

15 **Description of Product**

The Cub is a self-contained battery powered hand-held gas detector intended to monitor the concentration of Volatile Organic Compounds (VOC) or various toxic gasses, dependent on which sensor is fitted. It produces alarms (audible, visual and vibrator) if pre-set levels are exceeded. The particular gas being monitored is shown on the display for a short time at switch on.

It is powered by a rechargeable battery, which is recharged by placing the gas detector into a Docking Station located in a non-hazardous area. Whilst in the Data or Calibration Docking Station, data can be transferred to and from other non-hazardous area equipment such as a computer. Whilst in the Charge Docking Station, only recharging is done.

The apparatus must only be recharged when in a non-hazardous area using one of the Ion Science Docking Stations as shown in the drawings listed below.

The VOC sensor is from the Mini PID range covered by Certificates Baseefa07ATEX0060U & IECEx BAS07.0030U & the other sensors are electrochemical cells which do not require individual certification. The sensors must only be changed when in a non-hazardous area.

The apparatus is not designed for use in oxygen enriched atmospheres.

16 **Report Number**

See Certificate History.

17 **Specific Conditions of Use**

None

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
1.4.1	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
<b>Data or Calibration Docking Stations</b>				
CERT0144	1 of 1	3	09 NOV 20	TC Docking Station PCB Track, Component Side
CERT0145	1 of 1	3	09 NOV 20	TC Docking Station PCB Ground Plane Side
<b>Charge Docking Station</b>				
CERT0149	1 of 1	3	09 NOV 20	TC Budget Docking Station PCB Tracking

Current drawings which remain unaffected by this issue:

<b>Number</b>	<b>Sheet</b>	<b>Issue</b>	<b>Date</b>	<b>Description</b>
<b>Tiger Cub</b>				
CERT0136a	1 of 2	4	22,Dec,17	TC Interface Circuit Diagram
CERT0136b	2 of 2	4	20,Dec,17	TC Processor Circuit Diagram
CERT0137	1 of 1	4	20,Dec,17	Tiger Cub PCB Component Layout
CERT0138	1 of 1	5	20,Dec,17	TC PCB Track Side
CERT0139	1 of 1	5	20,Dec,17	TC PCB Gnd Plane Side
CERT0140	1 of 1	4	20,Dec,17	Tiger Cub Critical Components List
CERT0141	1 – 2	9	28/05/2020	Tiger Cub G.A.
CERT0154	1-2	06	07/08/2019	CUB Instrument Approvals Label Details
CERT0155	1	05	07/08/2019	TC Instrument Serial No. Label Details.
CERT0168	1 of 1	1	30,Oct,12	TC PCB With Conformal Coating & Casting
<b>Data or Calibration Docking Stations</b>				
CERT0142	1 of 1	1	02,Feb,12	TC Docking Station Circuit Charging Clamp
CERT0143	1 of 1	2	22,Oct,12	TC Docking Station PCB Component Layout
CERT0146	1 of 1	3	08 Dec 2015	TC Docking Station Critical Components List
<b>Charge Docking Station</b>				
CERT0147	1 of 1	2	12,Mar,13	TC Charge Docking Station Charging Clamp
CERT0148	1 of 1	2	22,Oct,12	TC Budget Docking Station PCB Component Layout
<b>All Docking Stations G A &amp; Labels</b>				
CERT0158	1 of 1	2	29/02/2012	TC Docking Station GA
CERT0156	1 & 2	6	07/01/13	TC Docking Station Label Details
CERT0169	1 of 1	1	31,Aug,12	TC Dock. Station PCB Conformal Coating
CERT0170	1 of 1	1	22,Oct,12	TC Charge Dock. Stat. PCB Conformal Coating

## 20 Certificate History

<b>Certificate No.</b>	<b>Date</b>	<b>Comments</b>
Baseefa11ATEX0027	19 March 2012	The release of the prime certificate. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR10.0259/00.
Baseefa11ATEX0027 Issue 1	12 July 2012	To permit various circuit changes for functional reasons. Intrinsic safety is not affected. The associated assessment is documented in Test Report No. GB/BAS/ExTR12.0183/00.
Baseefa11ATEX0027 Issue 2	30 August 2013	To permit various circuit changes and the use of an alternative rechargeable cell. Text added to section 15 to clarify that the sensors may only be changed in a non-hazardous area. Also, to confirm the equipment complies with EN60079-0:2012 and EN60079-11:2012. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR12.0171/00.
Baseefa11ATEX0027 Issue 3	15 January 2016	To permit various circuit changes which do not adversely affect the original assessment. Also, to confirm the equipment complies with EN60079-0:2012+A11:2013. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR16.0026/00

<b>Certificate No.</b>	<b>Date</b>	<b>Comments</b>
Baseefa11ATEX0027 Issue 4	25 August 2016	To permit the change of operator switch, and associated PCB changes. Intrinsic safety is not affected. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR16.0147/00. Associated Project file. 16/0170.
Baseefa11ATEX0027 Issue 5	25 September 2018	To permit the use of an alternative enclosure material. The associated test and assessment is documented in Test report GB/BAS/ExTR17.0325/00 for Project 16/0982.
Baseefa11ATEX0027 Issue 6	8 August 2019	To confirm that the design satisfies the requirements of EN-IEC-60079-0:2018 and to permit the use of two alternative battery types. Report GB/BAS/ExTR19.0184/00 for Project 19/0361
Baseefa11ATEX0027 Issue 7	04 June 2020	To permit an update to the PCB with minor electrical changes and to permit the use of an alternative over-mould material. The associated testing required to ensure continued compliance to the listed standards is documented in Test Report GB/BAS/ExTR20.0002/00; Project 19/0709.
Baseefa11ATEX0027 Issue 8	15 December 2020	To permit a minor update to the charger PCB not affecting the previous certification. The associated test and assessment is documented in Test report GB/BAS/ExTR20.0189/00 for Project 20/0566.
For drawings applicable to each issue, see original of that issue.		