

## EC - TYPE EXAMINATION CERTIFICATE

### Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

- 3 EC - Type Examination Certificate Number: **Baseefa11ATEX0027 – Issue 2**
- 4 Equipment or Protective System: **Cub**
- 5 Manufacturer: **Ion Science Limited**
- 6 Address: **The Way, Fowlmere, Cambridgeshire, SG8 7UJ**
- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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's. **GB/BAS/ExTR12.0171/00**
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN60079-0:2012 EN60079-11:2012**
- 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 equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- 12 The marking of the equipment or protective system shall include the following :
- Ⓔ II 1G Ex ia IIC T4 Ga (-20°C ≤Ta ≤+55°C)**

Baseefa Customer Reference No. **2242**

Project File No. **12/0530**

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### SGS Baseefa Limited

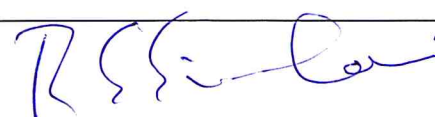
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R S SINCLAIR

GENERAL MANAGER

On behalf of SGS Baseefa Limited

13

## Schedule

14

### Certificate Number Baseefa11ATEX0027 – Issue 2

#### 15 Description of Equipment or Protective System

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 preset 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, and using one of the Ion Science Docking Stations as shown in the drawings listed below.

The VOC sensor is from the MinPID 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

GB/BAS/ExTR12.0171/00

#### 17 Specific Conditions of Use

None.

#### 18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

#### 19 Drawings and Documents

New drawings submitted for this issue of certificate.

Drawings marked \* are unchanged from the original issue of the Certificate, but are included here to show the current complete documentation for the equipment.

Number	Sheet	Issue	Date	Description
CERT0136a	1 of 2	3	22,Oct,12	TC Interface Circuit Diagram
CERT0136b	2 of 2	3	22,Oct,12	TC Processor Circuit Diagram
CERT0137	1 of 1	3	22,Oct,12	Tiger Cub PCB Component Layout
CERT0138	1 of 1	3	22,Oct,12	Tiger Cub PCB Track Side
CERT0139	1 of 1	3	22,Oct,12	Tiger Cub PCB Ground Plane Side
CERT0140	1 of 1	3	22,Oct,12	Tiger Cub Critical Components List
CERT0141	1 & 2	5	13/3/13	Tiger Cub GA
CERT0154	1 & 2	4	14/3/13	Tiger Cub Approvals Label Details
CERT0155	1 & 2	3	7/01/13	Tiger Cub 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



Number	Sheet	Issue	Date	Description
CERT0143	1 of 1	2	22,Oct,12	TC Docking Station PCB Component Layout
CERT0144	1 of 1	2	22,Oct,12	TC Docking Station PCB Track, Component Side
CERT0145	1 of 1	2	22,Oct,12	TC Docking Station PCB Ground Plane Side
CERT0146	1 of 1	2	22 Oct 2012	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
CERT0149	1 of 1	2	22,Oct,12	TC Budget Docking Station PCB Tracking
<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

All drawings are common to and held with IECEx BAS 11.0014.

## 20 Certificate History

Certificate No.	Date	Comments
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.

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