



1 **EC - TYPE EXAMINATION CERTIFICATE**

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

3 EC - Type Examination Certificate Number: **Baseefa04ATEX0331X**

4 Equipment or Protective System: **Noise doseBadge CR:110AIS**

5 Manufacturer: **Cirrus Research plc.**

6 Address: **Hunmanby, North Yorkshire, YO14 0PH**

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 (2001) Ltd., 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. **04(C)0680**

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


EN 50014: 1997 + Amd 1 & 2 **EN 50020: 2002** **EN 50303: 2000**

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 :

 **IM1 EEx ia I (-20°C ≤ T_a ≤ +40°C)**

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **4323**

Project File No. **04/0680**

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address

R S SINCLAIR

DIRECTOR
On behalf of
Baseefa (2001) Ltd.

Re-issued 2 September 2005 to replace original



13

Schedule

14

Certificate Number Baseefa04ATEX0331X

15 Description of Equipment or Protective System

The Noise doseBadge CR:110AIS is designed as a portable noise dosimeter unit which measures and records personal noise exposure and is suitable for attaching to any suitable surface.

The Noise doseBadge comprises an electret microphone, analogue and digital electronic circuit boards using surface mounted components and is powered by internal NiMH rechargeable button cells. The circuit boards are mounted within a cast brass enclosure, which is provided with a communications window and a charging socket and is provided with a number of alternative attachment accessories. The enclosure, with the Sealing Base Plate fitted, provides a degree of protection of at least IP54 to the electrical circuit.

Recording the noise dose is started and stopped remotely and the stored data downloaded via infra red Transmitter and Receiver components located behind a communication window in the casing of the Noise doseBadge. This requires the use of unspecified external communication devices and must only be done within a Safe Area, unless the external communication equipment is certified for use within a hazardous area. If the unit is not used for a period of one hour the circuit will shut down, but will restart by shaking.

The Noise doseBadge must only be recharged within a Safe Area.

Communication Window

Unspecified Optical Communication equipment containing $U_M = 250V$

Charging Socket

$U_o = 6.4V$ $U_i = 10V$
 $I_o = 31mA$ $I_i = 30mA$
 $C_i = 0$
 $L_i = 0$

16 Report Number

04(C)0680

17 Special Conditions for Safe Use

1. The Sealing Base Plate must be fitted to the charging socket in service, to ensure that a degree of protection against the ingress of dust and moisture of at least IP54 is maintained.

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

Number	Sheet	Issue	Date	Description
ICD-1137-01-C	1	C	14/02/2005	Circuit Diagram
IPL-1137-01-G	1	C	11/04/2005	Parts List
IPL-1137-01-G	2	C	11/04/2005	Parts List



Number	Sheet	Issue	Date	Description
IPD-1137-01-K	1	B	01/10/2004	Battery Assembly
IPD-1137-01-J	1	B	01/10/2004	Casting
IPD-1137-01-L	1	C	11/05/2005	Constructional Detail
IAW-1137-01-M	1	C	30/08/2005	Certification Label
IPD-1113-01-IH	1	B	01/10/2004	Battery enclosure
IPD-1113-01-IX	1	B	01/10/2004	Case Gasket
IPD-1113-01-JA	1	C	05/04/2004	Sealing Baseplate
IPD-1113-01-JS	1	A	05/04/2005	Sealing Baseplate Label
IPD-1113-01-JB	1	B	01/10/2004	Exploded View
IK-1113-01-IY	1	C	14/02/2005	Track Layout Bottom Copper
IJ-1113-01-IY	1	C	14/02/2005	Track Layout Bottom Inner Copper
IH-1113-01-IY	1	C	14/02/2005	Track Layout Top Inner Copper
IG-1113-01-IY	1	C	14/02/2005	Track Layout Top Copper
IM-1113-01-IY	1	C	14/02/2005	Top Solder Mask
IN-1113-01-IY	1	C	14/02/2005	Bottom Solder Mask
IT-1113-01-IY	1	C	14/02/2005	Component Layout Top
IB-1113-01-IY	1	C	14/02/2005	Component Layout Bottom
ID-1113-01-IY	1	C	14/02/2005	Drill and Routing

The above drawings are common to, and held on, Baseefa04ATEX0330.



1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

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

3 Supplementary EC - Type Examination Certificate Number: Baseefa04ATEX0331X/1

4 Equipment or Protective System: Noise doseBadge CR:110AIS

5 Manufacturer: Cirrus Research plc.

6 Address: Hunmanby, North Yorkshire, YO14 0PH

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa04ATEX0331X to apply to equipment or protective systems 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.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.


Baseefa Customer Reference No. 4323

Project File No. 05/0847

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Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
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R S SINCLAIR
DIRECTOR
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Schedule

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Certificate Number Baseefa04ATEX0331X/1

15 Description of the variation to the Equipment or Protective System

Variation 1.1

To permit various changes, to the construction, components, circuit and associated track work in non critical areas of the Noise doseBadge, to improve the performance. These changes do not affect the original safety assessment.

16 Report Number

None

17 Special Conditions for Safe Use

None

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
ICD-1137-01-C	1	D	15/11/2005	Circuit Diagram
IPL-1137-01-G	1	D	17/11/2005	Parts List
IPL-1137-01-G	2	D	17/11/2005	Parts List
IPD-1137-01-K	1	C	05/10/2005	Battery Assembly
IPD-1137-01-J	1	C	05/10/2005	Casting
IAW-1137-01-M	1	D	05/10/2005	Certification Label
IPD-1113-01-IX	1	C	03/10/2005	Case Gasket
IK-1113-01-IY	1	E	15/11/2005	Track Layout Bottom Copper
IJ-1113-01-IY	1	E	15/11/2005	Track Layout Bottom Inner Copper
IH-1113-01-IY	1	E	15/11/2005	Track Layout Top Inner Copper
IG-1113-01-IY	1	E	15/11/2005	Track Layout Top Copper
IM-1113-01-IY	1	E	15/11/2005	Top Solder Mask
IN-1113-01-IY	1	E	15/11/2005	Bottom Solder Mask
IT-1113-01-IY	1	E	15/11/2005	Component Layout Top
IB-1113-01-IY	1	E	15/11/2005	Component Layout Bottom
ID-1113-01-IY	1	E	15/11/2005	Drill and Routing

The above drawings are held with Baseefa04ATEX0330/1.



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

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

3 Supplementary EC - Type Examination Certificate Number: **Baseefa04ATEX0331X/2**

4 Equipment or Protective System: **Noise doseBadge CR:110AIS**

5 Manufacturer: **Cirrus Research plc.**

6 Address: **Hunmanby, North Yorkshire, YO14 0PH**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa04ATEX0331X to apply to equipment or protective systems 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.

This supplementary certificate shall be held with the original certificate.

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Baseefa Customer Reference No. **4323**

Project File No. **06/0465**

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Baseefa
Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
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R S SINCLAIR
DIRECTOR
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Certificate Number Baseefa04ATEX0331X/2

15 Description of the variation to the Equipment or Protective System

Variation 2.1

To permit the use of an alternative Varta NiMH V40H-55604 battery pack within the Noise doseBadge, a modified enclosure and minor changes to the specification of components fitted for ROHS compliance. Also to permit an increase in the maximum ambient temperature limit to 60°C which applies irrespective of which type of battery pack is fitted to the unit. These units may be dual marked with the IECEx certificate number IECEx 06.0083X. Apart from the increase in the maximum ambient temperature limit to 60°C, these changes do not affect the original safety assessment.

16 Report Number

06(C)0465

17 Special Conditions for Safe Use

None in addition to those listed previously.

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
ICD-1137-01-C		E	14/02/06	Circuit Diagram
IPL-1137-01-G	Sht 1	E	01/10/06	Parts List
IPL-1137-01-G	Sht 2	E	01/10/06	Parts List
IPD-1137-01-K		D	14/09/06	Battery Assembly
IPD-1113-01-IV		C	03/10/06	Casting (Alternative)
IPD-1137-01-L		D	03/10/06	Constructional Detail
IAW-1137-01-M		E	18/12/06	Certification Label
IPD-1113-01-LW		A	21/09/06	Battery enclosure (Alternative)
*IPD-1113-01-IX		C	3/10/05	Case Gasket
*IPD-1113-01-JA		C	05/04/04	Sealing Baseplate
*IPD-1113-01-JS		A	05/04/05	Sealing Baseplate Label
IPD-1113-01-JT		E	20/12/06	Baseplate
IPD-1113-01-JB		C	3/10/06	Exploded View
IK-1113-01-IY		F	14/02/06	Track Layout Bottom Copper
IJ-1113-01-IY		F	14/02/06	Track Layout Bottom Inner Copper
IH-1113-01-IY		F	14/02/06	Track Layout Top Inner Copper
IG-1113-01-IY		F	14/02/06	Track Layout Top Copper
IM-1113-01-IY		F	14/02/06	Top Solder Mask



Number	Sheet	Issue	Date	Description
IN-1113-01-IY		F	14/02/06	Bottom Solder Mask
IT-1113-01-IY		F	14/02/06	Component Layout Top
IB-1113-01-IY		F	14/02/06	Component Layout Bottom
ID-1113-01-IY		F	14/02/06	Drill and Routing
IPD-1113-01-LX		A	22/09/06	VARTA V40H Battery Pack

*These drawings are unchanged from those previously listed on certificates Baseefa04ATEX0330 and Baseefa04ATEX0331X, but are included for completeness.

All of the above drawings are held with IECEx Report GB/BAS/ExTR06.0139/00, Certificates IECEx BAS06.0084 and IECEx BAS06.0083X.



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

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

3 Supplementary EC - Type Examination Certificate Number: **Baseefa04ATEX0331X/3**

4 Equipment or Protective System: **Noise doseBadge CR:110AIS**

5 Manufacturer: **Cirrus Research plc.**

6 Address: **Hunmanby, North Yorkshire, YO14 0PH**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa04ATEX0331X to apply to equipment or protective systems 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.

This supplementary certificate shall be held with the original certificate.

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Baseefa Customer Reference No. **4323**

Project File No. **07/0459**

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Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
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Certificate Number Baseefa04ATEX0331X/3

15 **Description of the variation to the Equipment or Protective System**

Variation 3.1

To permit the use of an alternative Certification label and minor changes to the Parts List.

16 **Report Number**

None

17 **Special Conditions for Safe Use**

None

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
IPL-1137-01-G	Sht 1	F	05/06/07	Parts List
IPL-1137-01-G	Sht 2	F	05/06/07	Parts List
IAW-1137-01-MR		A	05/06/07	Alternative Certification Label (for other approvals)

All of the above drawings are common to Certificates IECEX BAS06.0084 and IECEX BAS06.0083X and held with the later.