

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 **Baseefa11ATEX0123X – Issue 4**
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: **Omni-ID iTAG500 RF Tags**

5 Manufacturer: **Extronics Limited**

6 Address: **1 Dalton Way, Midpoint 18, Middlewich, Cheshire, CW10 0HU**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa11ATEX0123X** 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:

 **See Certificate Schedule**

SGS Fimko Oy Customer Reference No. **3700**

Project File No. **21/0497**

This document is issued by the Company subject to their General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of their intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Fimko Oy
Takomotie 8
FI-00380 Helsinki, Finland
Telephone +358 (0)9 696 361
e-mail sgs.fimko@sgs.com
web site www.sgs.fi

Business ID 0978538-5 Member of the SGS Group (SGA SA)


Tuomas Hänninen
SGS Fimko Oy

13

Schedule

14

Certificate Number Baseefa11ATEX0123X – Issue 4

15 Description of Product

The Omni-ID iTAG500 RF tags are a range of passive radio frequency identification (RFID) tags that consist of a small integrated circuit (IC) and an antenna mounted on a printed circuit board. An optional enclosure may be present.

An RF signal generated by a separate RFID reader/interrogator is intercepted by the Omni-ID iTAG500 RF tag and used to power the IC.

The powered IC can then demodulate/modulate the received RF signal to allow the IC to be programmed by the reader, and to back scatter the intercepted RF signal to the reader. The reader interprets the back scattered signal to allow the tag to be identified.

The equipment is marked using the following product code:

*****-Z-Y-X

where -Z-Y-X determines the applicable marking code as shown below:

Z=	Y=	X=	Gas / Dust Group & EPL	Additional Gas Group & EPL for fixed use only
R or F	E or M	1	Ex ia I Ma Ex ia IIC Ga Ex ia IIIC Db	None
R or F	E or M	2	Ex ia I Ma Ex ia IIB Ga Ex ia IIC Gb Ex ia IIIC Db Note 2	Note 1
R or F	E or M	3	Ex ia I Ma Ex ia IIB Ga Ex ia IIIC Db Note 2	Note 1
R or F	E or M	4	Ex ia I Ma Ex ia IIA Ga Ex ia IIB Gb Ex ia IIIC Db Note 2	Note 1
R or F	E or M	5	Ex ia I Ma Ex ia IIB Gb Ex ia IIIC Db Note 2	Note 1
R or F	E or M	6	Ex ia I Ma Ex ia IIC Ga Note 2 Ex ia IIIC Db Note 2	None
C	E, M or P	1	Ex ia I Ma Ex ia IIC Ga Ex ia IIIC Db	None
C	E, M or P	2	Ex ia I Ma Ex ia IIB Ga Ex ia IIC Gb Ex ia IIIC Db Note 2	Note 1
C	E, M or P	3	Ex ia I Ma Ex ia IIB Ga Ex ia IIIC Db Note 2	Note 1
C	E, M or P	4	Ex ia I Ma Ex ia IIA Ga Ex ia IIB Gb Ex ia IIIC Db Note 2	Note 1
C	E, M or P	5	Ex ia I Ma Ex ia IIB Gb Ex ia IIIC Db Note 2	Note 1

Z=	Y=	X=	Gas / Dust Group & EPL	Additional Gas Group & EPL for fixed use only
C	E, M or P	6	Ex ia I Ma Ex ia IIC Ga Note 2 Ex ia IIIC Db Note 2	None
F	L	1	Ex ia IIC Gb Ex ia IIIC Db	None
F	L	2	Ex ia IIC Gb Ex ia IIIC Db Note 2	None
F	L	3, 4 or 5	Ex ia IIB Gb Ex ia IIIC Db Note 2	None
R	L	1	Ex ia I Ma Ex ia IIC Ga Ex ia IIIC Db	None
R	L	2	Ex ia I Ma Ex ia IIB Ga Ex ia IIC Gb Ex ia IIIC Db Note 2	None
R	L	3	Ex ia I Ma Ex ia IIB Ga Ex ia IIIC Db Note 2	None
R	L	4	Ex ia I Ma Ex ia IIA Ga Ex ia IIB Gb Ex ia IIIC Db Note 2	None
R	L	5	Ex ia I Ma Ex ia IIB Gb Ex ia IIIC Db Note 2	None
R	P	1	Ex ia I Ma Ex ia IIC Ga Ex ia IIIC Db	None
R	P	2	Ex ia I Ma Ex ia IIB Ga Ex ia IIC Gb Ex ia IIIC Db Note 2	Note 1
R	P	3	Ex ia I Ma Ex ia IIB Ga Ex ia IIIC Db Note 2	Note 1
R	P	4	Ex ia I Ma Ex ia IIA Ga Ex ia IIB Gb Ex ia IIIC Db Note 2	Note 1
R	P	5	Ex ia I Ma Ex ia IIB Gb Ex ia IIIC Db Note 2	Note 1
R	P	6	Ex ia I Ma Ex ia IIC Ga Note 2 Ex ia IIIC Db Note 2	None

Note 1 – In addition to the marked EPL and group, the following marking is not present on the equipment but is valid for fixed application only:

⊕ II 1G Ex ia IIC Ga

Under these conditions there may be a potential electrostatic charging hazard. The equipment is not to be mounted in a high airflow dust laden atmosphere and should only be cleaned using a damp cloth.

Note 2 – These variants are suitable for fixed application only. There may be a potential electrostatic charging hazard. The equipment is not to be mounted in a high airflow dust laden atmosphere and should only be cleaned using a damp cloth.

The applicable temperature class as determined by the maximum ambient temperature, the product code and the maximum power from the reader is shown in the Special Conditions for Safe Use.

16 Report Number

See Certificate History

17 Specific Conditions of Use

- For **-R** variants the maximum RF power output from the tag reader to its antenna must not exceed the following:

T _{AMB} (°C)	Group IIC T6 Group IIIC T85 °C	Group IIC T5 Group IIIC T100 °C & Group I	Group IIC T4 Group IIIC T135 °C
-40 to +40	0.25W	0.66W	1.5W
-40 to +50	0.18W	0.59W	1.5W
-40 to +60	0.12W	0.53W	1.5W
-40 to +70	0.06W	0.47W	1.5W
-40 to +80	N/A	0.40W	1.5W

- For **-F** variants the maximum RF power output from the tag reader to its antenna must not exceed the following:

T _{AMB} (°C)	Group IIC T6 Group IIIC T85 °C	Group IIC T5 Group IIIC T100 °C & Group I	Group IIC T4 Group IIIC T135 °C
-40 to +40	0.13W	0.36W	0.79W
-40 to +50	0.10W	0.32W	0.75W
-40 to +60	0.06W	0.29W	0.72W
-40 to +70	0.03W	0.25W	0.68W
-40 to +80	N/A	0.22W	0.65W

- For **-C** variants the maximum RF power output from the tag reader to its antenna must not exceed the following:

T _{AMB} (°C)	Group IIC T6 Group IIIC T85 °C	Group IIC T5 Group IIIC T100 °C & Group I	Group IIC T4 Group IIIC T135 °C
-40 to +40	0.19W	0.50W	1.10W
-40 to +50	0.14W	0.45W	1.05W
-40 to +60	0.09W	0.40W	1.00W
-40 to +70	0.04W	0.35W	0.95W
-40 to +80	N/A	0.31W	0.90W

- Under the conditions listed in the certificate schedule where either note 1 or note 2 apply there may be a potential electrostatic charging hazard. When used in this manner the equipment is not to be mounted in a high airflow dust laden atmosphere and should only be cleaned using a damp cloth.

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

No new drawings were submitted for this issue of certificate.

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
330266	1 to 10	4	18/07/2019	Tag Certification GA

This drawing is common to, and held with, IECEx BAS 11.0081X.

20 Certificate History

Certificate No.	Date	Comments
Baseefa11ATEX0123X	2 August 2011	The release of the prime certificate. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR11.0066/00 & GB/BAS/ExTR11.0067/00.
Baseefa11ATEX0123X Issue 1	25 January 2012	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and permits mechanical changes leading to revised RF power level limits.
Baseefa11ATEX0123X Issue 2	6 February 2012 (Re-issued 5 September 2017)	To permit the introduction of new variants, and a reduction of the marking present on very small tags which now require a supplementary label to be supplied for field installation near to the tags.
Baseefa11ATEX0123X Issue 3	1 August 2019	To permit the use of an alternative RF ID chipset to be used and assess the equipment to the current requirements of the standards originally assessed against. Furthermore, the variation permits the use of the equipment to be used in dust atmospheres by issuance of this certificate. The associated test and assessment is documented in report GB/BAS/ExTR19.025000 for project 18/0536.
Baseefa11ATEX0123X Issue 4	24 November 2021	To permit the use of an alternative RF ID chipset as an alternative construction. The associated test and assessment is documented in report GB/BAS/ExTR21.0209/00 for project 21/0497.

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