



1 EC TYPE-EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 00ATEX1163

4 Equipment: 780 Series IR, IR³ & CCTV Flame Detectors

5 Applicant: Spectrex Inc.

6 Address: Peckman Industrial Park

218 Little Falls Road

Cedar Grove N.J. 07009 USA

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number R51A6988B & R51A13638B.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 50014:1997 Amendments A1 & A2 EN 50018:1994

- If the sign 'X' is placed after the certificate number, it indicates that the equipment 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. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- The marking of the equipment shall include the following:



II 2 G

EEx d IIB+H₂ T5 Amb. Temp. = -20°C to +55°C EEx d IIB+H₂ T5 Amb. Temp. = -40°C to +70°C EEx d IIB+H₂ T5 Amb. Temp. = -40°C to +85°C

Project Number 51A13638

Date 6 February 2002 Latest Issue 1 September 2006

C. Index 18

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330 Email: info@siracertification.com Web: www.siracertification.com

Certification Officer





SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 00ATEX1163

Re-issued 9 December 2002 To permit report number R51A6988A to be replaced by R51A6988B, to allow the correction of minor typographical errors and to include appropriate label drawings with subsequent changes to section 14.

Re-issued 1 September 2006 to recognise the changes described in report number R51A13638B.

13 DESCRIPTION OF EQUIPMENT

The 780 Series IR, IR 3 & CCTV Flame Detectors comprise a two part aluminium alloy enclosure. This consists a main housing assembly and a cover assembly secured by four M6 x 1.0 stainless steel cap head bolts.

The main housing assembly incorporates a sapphire window, mounted to the underside of a conical reflector protected by a permanently fixed guard plate, and contains the differing detection circuitry that distinguishes the variants within the series. The conical reflector fitted to the CCTV variants has a different cross sectional profile from the others.

The cover assembly contains terminals for connection to the supply wiring.

Cable entry is made through two cable entry points of up to a maximum size $\frac{3}{4}$ " x 14 NPT situated on one face of the cover assembly.

Design options:

- Stainless steel as an alternative enclosure material of manufacture
- Metric, up to a maximum size M25 as an alternative cable entry threadform
- PG, up to a maximum size PG16 as an alternative cable entry threadform

Available model numbers

20/20CTIN-C
20/20CTIN-C-ST
- CCTV NTSC IR3 Flame Detector, Aluminium Housing
20/20CTIP-C
20/20CTIP-C
- CCTV PAL IR3 Flame Detector, Aluminium Housing
20/20H-C
- Hydrogen Flame Detector, Aluminium Housing
20/20H-C-ST
- Hydrogen Flame Detector, St.St. Housing
20/20SH-C
- Hydrogen Flame Detector, Aluminium Housing
20/20SH-C-ST
- Hydrogen Flame Detector, St.St. Housing
20/20I-C
- IR3 Flame Detector, Aluminium Housing
20/20I-C-ST
- IR3 Flame Detector, St.St. Housing
20/20FI-C
- Fast IR3 Flame Detector, Aluminium Housing
20/20FI-C-ST
- Single IR Flame Detector, Aluminium Housing
Single IR Flame Detector, Aluminium Housing
- Single IR Flame Detector, Aluminium Housing
- Single IR Flame Detector, Aluminium Housing
- Single IR Flame Detector, St.St. Housing

20/20R-C - Single IR Flame Detector, Aluminium Hou 20/20R-C-ST - Single IR Flame Detector, St.St. Housing 20/20SI-C - IR3 Flame Detector, Aluminium Housing 20/20SI-C-ST - IR3 Flame Detector, St.St. Housing

Date 6 February 2002 Latest Issue 1 September 2006

This certificate and its schedules may only be reproduced in its entirety and without change. Sira Certification Service Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330 Email: info@siracertification.com Web: www.siracertification.com





SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 00ATEX1163

14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Sheet	Rev.	Date (Sira stamp)	Description
	780841	1 of 1	-	20 Oct 02	Label
	780831	1 of 1	F	16 Oct 02	Label
	788831	1 of 1	В	16 Oct 02	Label
	7780541	1 of 1		14 Oct 02	Label
	7788531	1 of 1	В	21 Nov 01	Label
	7780581	1 of 1	A	06 Nov 01	Label

- 14.2 Report number R51A6988B & R51A13638B.
- 14.3 Certificate number Sira 00ATEX1229 last amended 28 April 2006.
- 15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in report number R51A6988B & R51A13638B.

17 CONDITIONS OF CERTIFICATION

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

Date 6 February 2002 Latest Issue 1 September 2006

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330 Email: info@siracertification.com Web: www.siracertification.com