



EC - TYPE EXAMINATION CERTIFICATE

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

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- 3 EC - Type Examination Certificate Number: **Baseefa12ATEX0133X**
- 4 Equipment or Protective System: **FBG Interrogator**
- 5 Manufacturer: **Smart Fibres Limited**
- 6 Address: **Bracknell, RG12 9BG**
- 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. **GB/BAS/ExTR12.0170/00**
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
IEC 60079-0:2011 EN60079-28:2007
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 :

Ex II (1)G [Ex op is T4 Ga] IIC T4 (see schedule)

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

Baseefa Customer Reference No. **6837**

Project File No. **11/0635**

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

Baseefa

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R S SINCLAIR

DIRECTOR
On behalf of
Baseefa



Schedule

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Certificate Number Baseefa12ATEX0133X

15 Description of Equipment or Protective System

The FBG Interrogator is designed to send and receive infra-red optical radiation to and from a hazardous area via optical fibres.

Variants named Smartscan FBG Interrogator, Smartscope FBG Interrogator and Smartscan Aero FBG Interrogator exist which use the same laser source.

It comprises a tuneable infra red laser with an optical output that feeds via one or more optical couplers into an optical fibre that sends a signal into a hazardous area, an optical receiver that receives an optical signal from a hazardous area all housed in an enclosure that is situated in a safe area.

The equipment is powered from a nominal 9 to 36 V d.c. power supply.

The ambient temperature range for the optical fibre while in the hazardous area is -20°C to +40°C. The ambient temperature range for the safe area equipment is -40°C to +60°C.

The ambient temperature of the optical fibre while in the safe area may exceed the above limits.

16 Report Number

GB/BAS/ExTR12.0170/00

17 Specific Conditions of Use

1. Each FBG Interrogator contains a single laser source. Fibre outputs from more than one laser source must not be combined in a single multi-core fibre cable.

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
3100-8000	1	G	Jul-26-12	Smartscan / Smartscope Hazardous Area Certification Drawing