

Declaration of Performance

No: DoP-001-05-22

1. Unique identification code of the product-type:

Optical beam smoke detector: Firebeam Xtra

2. Intended use/es:

Smoke detectors – Line detectors using an optical beam intended for use in fire detection and fire alarm systems installed in buildings

3. Manufacturer:

**The Firebeam Company Limited
Unit 8 Thames Industrial Estate
High Street South, Dunstable
Bedfordshire, LU6 3HL**

4. Authorised representative:

**EU Authorised Representative
Name : Jean-Francois DUHAMEL
Company : Finsecur SA
Address : 62, Ernest Renan, 92000 Nanterre, France**

5. System/s of AVCP:

System 1

6. Harmonised standard:

EN54-12:2015

Notified body/ies::



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**Product certification body No:
0786 VdS Schadenverhütung
GmbH performed type testing
and the initial inspection of
the manufacturing plant and
of the factory production
control with continuous
surveillance assessment and
approval of the factory
production control under
system 1 and issued the
Certificate of constancy of
performance 0786-CPR-20241**



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**UL International (UK) Ltd
Unit 1-3 Horizon
Kingsland Business Park
Basingstoke
Hampshire
RG24 8AH
Approved body number 0843
Certificate number 0843-CPR-1132**

7. European Assessment Document:

Not applicable, see item 6

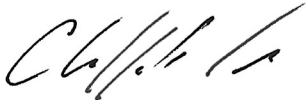
8. Declared performance/s:

| Harmonised technical specification | | EN 54-12:2015 |
|--|---|---------------|
| Essential Characteristics | Performance | Clause |
| Operational reliability | | |
| - Individual alarm indication | Red LED | 4.2.1 |
| - Connection of ancillary devices | Correct operation | 4.2.2 |
| - Manufacturer's adjustments | Special means required | 4.2.3 |
| - On-site adjustment of response value | Special means required | 4.2.4 |
| - Protection against ingress of foreign bodies | Protected (> 1.3mm) | 4.2.5 |
| - Monitoring of detachable detectors and connections | Fault signal released | 4.2.6 |
| - Requirements for software-controlled detectors | Documentation, design and storage correct | 4.2.7 |
| Nominal activation conditions / sensitivity | | |
| - Reproducibility | $C_{min} \geq 0.4\text{dB}$ $C_{max}/C_{rep} \leq 1.33$; $C_{rep}/C_{min} \leq 1.5$ | 4.3.1 |
| - Repeatability | Correct operation $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.3.2 |
| - Tolerance to beam misalignment | Correct operation Maximum angle >0.4° | 4.3.3 |
| - Rapid changes in attenuation | Correct operation | 4.3.4 |
| - Response to slowly developing fires | Correct operation | 4.3.5 |
| - Optical path length dependence | $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.3.6 |
| - Stray light | Correct operation $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.3.7 |
| Tolerance to supply voltage | | |
| - Variation in supply parameters | $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.4 |
| Performance under fire conditions | | |
| - Fire sensitivity | $m_a < 0.7 \text{ dB m}^{-1}$ | 4.5 |
| Durability of nominal activation conditions / sensitivity, temperature resistance | | |
| - Dry heat (operational) | Correct operation $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.1.1 |
| - Cold (operational) | Correct operation $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.1.2 |
| Durability of nominal activation conditions / sensitivity, humidity resistance | | |
| - Damp heat, steady state (operational) | Correct operation $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.2.1 |
| - Damp heat, steady state (endurance) | $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.2.2 |
| Durability of nominal activation conditions / sensitivity, vibration resistance | | |
| - Vibration, (endurance) | $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.3.1 |
| - Impact (operational) | Correct operation $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.3.2 |
| Durability of nominal activation conditions / sensitivity, electrical stability | | |
| - Electromagnetic compatibility (EMC), Immunity tests (operational) | Correct operation $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.4 |
| Durability of operational reliability, Corrosion resistance | | |
| - Sulphur dioxide (SO ₂) corrosion (endurance) | $C_{min} \geq 0.4\text{dB}$; $C_{max}/C_{min} \leq 1.6$ | 4.6.5 |

thefirebeamcompany

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011 and amended (for UK) by Construction Products (Amendment etc.) (EU Exit) Regulations 2019 Construction Products (Amendment etc.) (EU Exit) Regulations 2020, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:



Cliff Key

Managing Director

Dunstable UK – 1st January 2023

The Firebeam Company Ltd.
Unit 8 Thames Industrial Estate
Dunstable Beds LU6 3HL
Co.No.04663703 VAT 838 6622 94
Tel no 01582 608000
sales@thefirebeam.com
Signature:- 
Date:- 12.1.23.