

Declaration of Performance

No: DoP 0786 CPR 20241

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:

Not applicable, see item 3

5. System/s of AVCP:

System 1

6. Harmonised standard:

EN54-12:2015

Notified body/ies::

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

7. European Assessment Document:

Not applicable, see item 6

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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

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Registered in England No. 04663703
VAT Registration No. 838662294

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, 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 August 2019

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